State of Michigan Coastal Management Program and Final Environmental Impact Statement

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Office of Coastal Zone Management

978

INFORMATION FOR READERS

PURPOSE

This document is both a final environmental impact statement (FEIS) and a program document on the Michigan Coastal Management Program. It is being circulated by the U.S. Department of Commerce for public and government agency review. Part II is the Program document, and was written by the Michigan Department of Natural Resources, Division of Land Resources Programs. The Summary and Parts I and III were prepared by the U.S. Department of Commerce, Office of Coastal Zone Management. Four new appendices and an attachment have been added to the FEIS. Of particular importance to readers is Appendix D where specific responses have been developed by OCZM to comments by various reviewers of the Draft Environmental Impact Statement (DEIS). These responses in addition to citing where changes have been made in the program document, provide further clarification on specific questions and concerns raised by reviewers of the DEIS. For this reason, Appendix D forms an integral component of the FEIS.

HOW TO USE THIS DOCUMENT:

Readers who are not familiar with the EIS standard format for coastal management programs will want to examine the following pages as aids to the reader:

PAGE

Table of Contents x

Table cross-referencing requirements of the Federal Coastal Zone Management Act with sections of this document 7

Table cross-referencing National Environmental Policy Act (NEPA) requirements with sections of this document 8

Summary of Michigan's proposed program 9

As mentioned in a memorandum to recipients of the DEIS, the appendices in the DEIS are not included in this FEIS. Please use your copy of the DEIS if you need to refer to the following Appendices:*

Appendix A Federal Contributions

Appendix C State Regulatory and Incentive Programs .....

Appendix D Geographic Areas of Particular Concern .....

Appendix E Public Hearing Summary

*NOTE: Appendix B — Local Contributions — was printed in the Michigan public review document dated August, 1977, but was not printed in the DEIS.

WHERE TO ASK QUESTIONS ABOUT THIS DOCUMENT

Informational questions on this FEIS can be handled *in Washington* by Eileen Mulaney, Great Lakes States Regional Manager of the Office of Coastal Zone Management (202/634-4237) and *in Michigan* by Chris Shafer, Program Manager, Michigan Coastal Management Program (517/373-1950).

PRINTED BY AUTHORITY OF PL 92-583

TOTAL NUMBER OF COPIES PRINTED: 25 TOTAL COST: $235.00 COST PER COPY: $9.40

UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Science and Technology
Washington, D.C. 20230
(202) 377-3111

In accordance with the provisions of Section 102(2)(C) of the National Environmental Policy Act of 1969, we are enclosing for your review and consideration the Final Environmental Impact Statement prepared by the Office of Coastal Zone Management on the proposed Michigan Coastal Zone Management Program.

Any written comments you may have should be submitted in duplicate to the person listed below by August 4, 1978.

If you have any questions about the enclosed statement, please feel free to contact:

Elaine Mulaney
Great Lakes Regional Managaer
Office of Coastal Zone Management
3300 Whitehaven Street, N.W.
Washington, D. C. 20235
Phone: 202/634-4237

Thank you for your cooperation in this matter.

Sincerely,

Sidney R. Galler

Sidney R. Galler
Deputy Assistant Secretary
for Environmental Affairs

Enclosures

STATE OF MICHIGAN
OFFICE OF THE GOVERNOR
LANSING

WILLIAM G. MILLIKEN
GOVERNOR

May 19, 1978

Mr. Richard Frank, Administrator
National Oceanic and Atmospheric Administration
U. S. Department of Commerce
Washington, D.C. 20204

Dear Mr. Frank:

I am pleased to submit the final environmental impact statement for Michigan's Coastal Management Program for your review and approval under the provisions of Section 306 of the Coastal Zone Management Act of 1972, as amended. Based upon comments received on the draft environmental impact statement, the program description has been refined and clarified, particularly with respect to program organization and procedures for considering the national interest during program implementation.

I have reviewed the substance of the program and, as Governor, reaffirm my approval of the program. As Chief Executive, I will insure that state agencies will be consistent to the maximum extent practicable with the Coastal Management Program. Coordination and conflict resolution needs will be accomplished through my Cabinet Committee on Environment and Land Use, the Michigan Natural Resources Commission, the Michigan Environmental Review Board and other established forums.

The Coastal Management Program, as presented in the final environmental impact statement, represents state policy for managing Michigan's coastal area, and, as Governor, I reaffirm my commitment that:

(1) The Department of Natural Resources, Division of Land Resource Programs, is the designated lead agency to receive and administer Section 306 program implementation grants; and

(2) Michigan has the authorities and organizational structure required by the Coastal Zone Management Act of 1972, to fully implement the management program and to consider all interests in accomplishing program objectives.

The citizens of Michigan will benefit substantially from implementation of the Coastal Management Program through improved administration of state shoreline statutes and significant provisions of financial and technical assistance to local units of government. I, therefore, request your expeditious review and final approval of this program. I look forward to working with you and your staff to insure its effective administration.

Kind personal regards.

Sincerely,

William G. Milliken

Governor

United States Department of Commerce Combined Coastal Management Program and Final Environmental Impact Statement for the State of Michigan

Prepared by:

Office of Coastal Zone Management
National Oceanic and Atmospheric Administration
3300 Whitehaven Street, N.W.
Washington, D.C. 20235

and

Michigan Coastal Management Program
Division of Land Resource Programs
Michigan Department of Natural Resources
Lansing, Michigan 48909

July 1978

Table of Contents

PAGE

Summary 1

PART I (Prepared by the Office of Coastal Zone Management)

CHAPTER I INTRODUCTION 5

A. The Federal Coastal Zone Management Act 5
B. OCZM Requirements for Program Approval Under Section 306 of the Coastal Zone Management Act 7
C. Requirements of the National Environmental Policy Act 8
D. Summary of the Michigan Coastal Management Program 9

PART II Michigan Coastal Management Program Description (Prepared by the State of Michigan)

CHAPTER II MICHIGAN'S COASTAL AREA AND ITS CHARACTER 15

Character of the Coast 15

Coastal Character — Regional Boundaries 16
Coastal Character — Shoreline Ownership 21
Coastal Character — Use and Development 21
Coastal Character — Geomorphic Shore Types 22

Geographic Extent of Michigan's Coastal Boundary 29

Lakeward Coastal Boundary 29
Landward Coastal Boundary 31

Other Boundary Delineation Considerations 35

CHAPTER III PROGRAM POLICIES AND ACTION PROGRAMS 37

Michigan's Coastal Areas 37

Michigan's Coast — Problems and Program Concern 39
Michigan's Policy Pertaining to All Coastal Areas 40
Action Programs Relating to All Coastal Areas 42

Areas of Natural Hazard to Development 44

Sensitive Areas 51

Areas Fulfilling Recreational or Cultural Needs 59

Areas of Natural Economic Potential 66

Areas of Intensive or Conflicting Use 78

CHAPTER IV COASTAL AREAS OF PARTICULAR CONCERN 85

What are APC's and What Will They Do 85

Two Sources of Areas of Particular Concern 85

Legislated Areas of Particular Concern 85
Nominated Areas of Particular Concern 89

The APC Inventory and Review Process 99

CHAPTER V COASTAL MANAGEMENT PROGRAM ORGANIZATION AND AUTHORITIES 103

Michigan's Coastal Management Program in the Context of State Government 103

Department of Natural Resources 105
Natural Resouces Commission 105
DNR Role in Controlling Direct and Significant Coastal Impacts 109
State Considerations for Uses of Regional Benefit 115
Department Procedures for Administering Authorities 117

Principal Coastal Management Program Division 121

Coastal Coordination and Conflict Resolution Mechanism 122

Program Implementation Roles 130

CHAPTER VI FEDERAL AGENCY PROGRAM ROLES AND CONSIDERATION OF THE NATIONAL INTEREST 139

Federal Agency Consultation and Coordination 139

Federal Consistency 146

Consideration of the National Interest 154

PART III (Prepared by the Office of coastal Zone Management)

CHAPTER VII ENVIRONMENTAL IMPACT STATEMENT 171

APPENDICES

APPENDIX A NATURAL RESOURCE COMMISSION APPROVAL OF THE MICHIGAN COASTAL MANAGEMENT PROGRAM 195

APPENDIX B LETTER FROM THE DIRECTOR OF THE MICHIGAN DEPARTMENT OF NATURAL RESOURCES CONCERNING THE NATIONAL INTEREST 197

APPENDIX C LETTER FROM THE STATE HISTORIC PRESERVATION OFFICER CONCERNING PARTICIPATION IN PROGRAM DEVELOPMENT 199

APPENDIX D (Prepared by the Office of Coastal Zone Management) 201

LIST OF ALL FEDERAL STATE AND LOCAL AGENCIES, GROUPS, AND OTHER PARTIES FROM WHICH COMMENTS WERE REQUESTED ON THE DEIS 201

MAJOR ISSUES RAISED BY REVIEWERS OF THE DEIS 204

RESPONSES TO DETAILED COMMENTS RECEIVED FROM REVIEWERS OF THE DEIS 209

SUMMARY OF PUBLIC HEARING COMMENTS 278

ATTACHMENT I WRITTEN COMMENTS ON THE MICHIGAN COASTAL MANAGEMENT PROGRAM AND DEIS

List of Figures

		PAGE
FIG. II-A	Coastal Regional Agency Boundaries	17
FIG. II-B	Coastal Ownership	23
FIG. II-C	Coastal Use and Development	25
FIG. II-D	Schematic Diagram of the Michigan Coastal Management Program Boundary	30
FIG. IV-A	Sample Nomination Form for Coastal Areas of Particular Concern	90
FIG. IV-B	Guide to Identifying Areas of Particular Concern	92
FIG. V-A	Organization of the Department of Natural Resources	106
FIG V-B	Regional, District and Field Offices of the Michigan Department of Natural Resources	107
FIG. V-C	Promulgation of Administrative Rules	118
FIG. V-D	Due Process Provisions — Permitting Authority	119
FIG. V-E	Application for Construction Permit Process	123
FIG. V-F	Five Basic Steps in the Review of EIS's and NDEIS's	129
FIG. VI-A	Process for Review of Federally Conducted or Supported Activities	148
FIG. VI-B	Process for Review of Federal Domestic Assistance Grants	150
FIG. VI-C	Process for Determining Consistency of Federal Licenses and Permits	153
FIG. VI-D	Michigan's Coastal National Interest Concerns	159

Summary

( ) Draft Environmental Impact Statement
(x) Final Environmental Impact Statement

Department of Commerce, National Oceanic and Atmospheric Administration, Office of Coastal Zone Management. For additional information about this proposed action or this statement, please contact:

Office of Coastal Zone Management
National Oceanic and Atmospheric Administration
Attn: Eileen Mulaney
3300 Whitehaven Street, N.W.
Washington, D.C. 20235
Phone: 202/634-4237

Type of Action

1. Proposed Federal approval of the Michigan Coastal Management Program
   (x) Administrative ( ) Legislative

Brief Description of Proposed Action

2. It is proposed that the Assistant Administrator for Coastal Zone Management approve the Coastal Management Program of Michigan pursuant to P.L. 92-583. Approval would permit implementation of the proposed program, allowing program administration grants to be awarded to the state and require that Federal actions be consistent with the program.

Summary of Environmental Impacts and Adverse Environmental Effects

3. Approval and implementation of the program will restrict or prohibit certain land and water uses in parts of the Michigan coast, while promoting and encouraging development and use activities in other parts. This may affect property values, property tax revenues, and resource extraction and exploration. The program will provide an improved decision-making process for determining coastal land and water uses and siting of facilities and protection of resources of national interest and will lead to increased long-term protection of and benefit from the state's coastal resources.

Alternatives to the Proposed Action

4. All alternatives would involve a decision by the Assistant Administrator to delay or deny approval of the Michigan Coastal Management Program. Delay or denial of program approval could come under the following conditions:

- If the program policies are not specific enough to direct State agencies managing uses, areas and activities in the coastal zone.
- If the organizational arrangements and authorities of the Program are not sufficient to enforce policy and resolve conflicts.
- If the Program does not designate properly geographic areas of particular concern.
- If the Program does not satisfactorily delineate an inland boundary.
- If the Program fails to adequately consider the national interest.
- If the Program fails to include Federal consistency procedures.

State options center on responding to the conditions for delay or denial of program approval. The state, therefore, could:

- accept the decision and do nothing to remedy the deficiencies.
- amend its management program to overcome the deficiencies for Federal approval.
- reject the decision and seek administrative or judicial review of the Assistant Administrator's decision.

5. List of all Federal, State and local agencies and other parties from which comments were requested on the DEIS. The list of comments received and responses to those comments are found in Appendix D.

Draft Environmental Impact Statement Review

6. The Draft Environmental Impact Statement (DEIS) was transmitted to the Council on Environmental Quality, and the Notice of Availability of the DEIS to the public was published in the *Federal Register* on November 18, 1977. The 45-day comment period ended January 2, 1978. At the request of several commentators, the comment period was extended to January 17, 1978.

Final Environmental Impact Statement Review

7. This Final Environmental Impact Statement has been prepared based on oral/written comments made at the public hearings held on December 13, 14, and 15, 1977 and comments submitted in response to the DEIS. A total of twenty-eight interested parties submitted written comments including fifteen Federal Agencies, three regional agencies, one county agency and nine other parties. The commentators are identified in Appendix D.

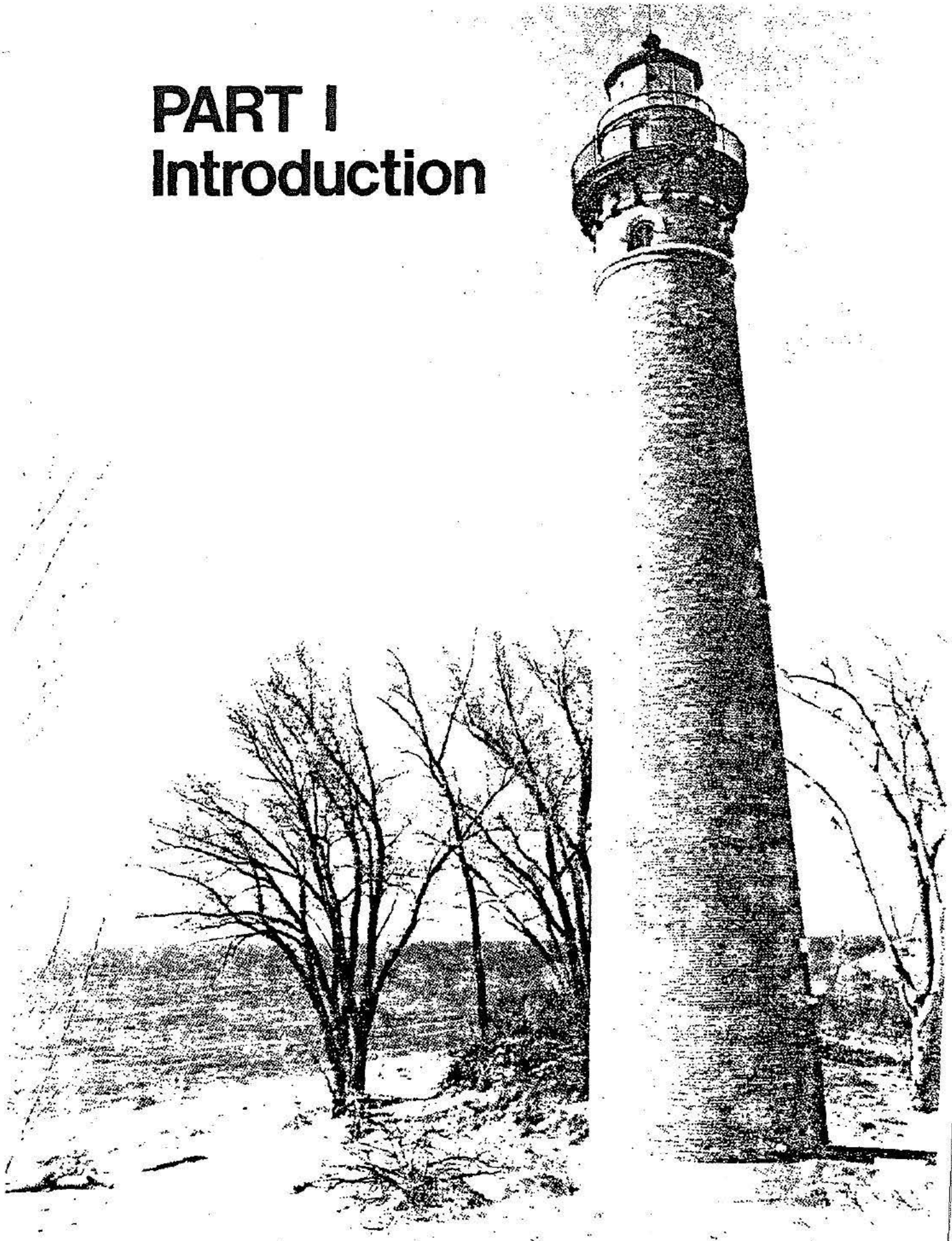
Attachment I is the full text of the written comments received by OCZM. Included in this Attachment is a summary of the public hearings held on the DEIS. This Attachment has been forwarded to individuals and organizations who have made comments on the DEIS, as well as all Federal agencies. Additional copies of the written comments will be distributed by OCZM on request.

The written comments and responses to those comments received on the Michigan Coastal Management Program and Draft Environmental Impact Statement are summarized in Appendix D. Generally, the response to the comments is provided in one or a combination of forms:

- Expansion, clarification, or revision of the Michigan Coastal Management Program document,
- Comments by OCZM in response to similar issues raised by several reviewers, and
- Brief responses by OCZM to detailed comments received from each reviewer.

Responses to these comments have been coordinated between the staff of the Michigan Coastal Management Program and OCZM. No attempt has been made to distinguish between comments made on the DEIS and those made on the management program due to the combined format of the document and the interrelated nature of most comments received.

PART I
Introduction



Chapter I
Introduction

A. THE FEDERAL COASTAL ZONE MANAGEMENT ACT (CZMA)

In response to the intense pressures upon coastal areas of the United States, Congress passed the Coastal Zone Management Act (P.L. 92-583). This Act was signed into law on October 27, 1972. The Act authorized a Federal grant-in-aid program to be administered by the Secretary of Commerce, who in turn delegated this responsibility to the National Oceanic and Atmospheric Administration's (NOAA) Office of Coastal Zone Management (OCZM). The Coastal Zone Management Act of 1972 was substantially amended on July 26, 1976 (P.L. 94-370). The Act and the 1976 amendments affirm a national interest in the effective protection and development of the coastal zone by providing assistance and encouragement to coastal states to develop and implement rational programs for managing their coastal zones.

Broad guidelines and the basic requirements of the CZMA provide the necessary direction for developing these state programs. These guidelines and requirements for program development and approval are contained in 15 CFR Part 923, as revised and published March 1, 1978 in the *Federal Register*. In summary, the requirements for program approval are that a state develop a management program that:

- Identifies and evaluates those coastal resources recognized in the Act that require management or protection by the state;

- Reexamines existing policies or develops new policies to manage these resources. These policies must be specific, comprehensive and enforceable, and must provide an adequate degree of predictability as to how coastal resources will be managed;

- Determines specific uses and special geographic areas that are to be subject to the management program, based on the nature of identified coastal concerns.

  The basis for managing uses (or their impacts) and areas should be based on resource capability and suitability analyses, socio-economic considerations and public preferences;

- Identifies the inland and seaward areas subject to the management program;

- Provides for the consideration of the national interest in the planning for and siting of facilities that meet more than local requirements; and

- Includes sufficient legal authorities and organizational arrangements to implement the program and to insure conformance to it.

In arriving at these substantive aspects of the management program, states are obliged to follow an open process which involves providing information to and considering the interests of the general public, special interest groups, local governments and regional, state, interstate and Federal agencies.

Section 305 of the CZMA authorizes a maximum of four annual grants to states to assist them in development of a coastal management program. After developing a management program, the state may submit it to the Secretary of Commerce fo approval pursuant to Section 306 of the CZMA. If approved, the state is then eligible for annual grants under Section 306 to implement its management program. If a program has deficiencies which need to be remedied or has not received Secretarial approval by the time Section 305 program development grants have expired a state may be eligible for preliminary approval and additional funding under Section 305(d). Section 307 of the Act stipulates that Federal agency actions shall be consistent, to the maximum extent practicable with approved state management programs. Section 307 further provides for mediation by the Secretary of Commerce when a serious disagreement arises between a Federal agency and a coastal state with respect to a Federal consistency issue. Section 308 of the CZMA contains several provisions for grants and loans to coastal states to enable them to plan for and respond to on-shore impacts resulting from coastal energy activities. To be eligible for assistance under Section 308, coastal States must be receiving Section 305 or 306 grants, or, in the Secretary's view, be developing a management program consistent with the policies and objectives contained in Section 303 of the CZMA.

Section 309 allows the Secretary to make grants (90 percent Federal share) to states for developing and administering studies, plans, and implementation activities which are interstate in nature.

Section 310 allows the Secretary to conduct a program of research, study, and training to support state coastal management programs. The Secretary may also make grants (80 percent Federal share) to states to carry out research studies and training required to support their programs.

Section 315 authorizes grants (50 percent Federal share) to states to acquire lands for access to beaches and other public coastal areas of environmental, recreational, historical, aesthetic, ecological, or cultural value, and for the preservation of islands. This is in addition to the estuarine sanctuary program which is established to preserve a representative series of undisturbed estuarine areas for long-term scientific and educational purposes.

B. OCZM REQUIREMENTS FOR PROGRAM APPROVAL UNDER SECTION 306 OF THE COASTAL ZONE MANAGEMENT ACT:

Requirements	Sections of Approval Regulations	Page
Sec. 306(a) which includes the requirements of Sec. 305:		
305(b)(1): Boundaries	923.31, 923.32, 923.33, 923.34	29
305(b)(2): Uses subject to management	923.11, 923.12	109
305(b)(3): Areas of particular concern	923.21, 923.23	85
305(b)(4): Means of control	923.41	105-120
305(b)(5): Guidelines on priorities of uses	923.22	86, 102
305(b)(6): Organizational structure	923.45	103
305(b)(7): Shorefront planning process	923.25 Not required at this time	
305(b)(8): Energy facility planning process	923.14 Not required at this time	
305(b)(9): Erosion planning process	923.26 Not required at this time	
Sec. 306(c) which includes:		
306(c)(1): Notice; full participation; consistent with Sec. 303	923.58, 923.51, 923.55, 923.3	117, 127, 130, 105
306(c)(2)(A): Plan coordination	923.56	122, 172
306(c)(2)(B): Continuing consultation mechanisms	923.57	105, 117, 122, 127, 130
306(c)(3): Public hearings	923.58	139
306(c)(4): Gubernatorial review and approval	923.47	*iv*, 103
306(c)(5): Designation of recipient agency	923.46, 923.47	*iv*, 103
306(c)(6): Organization	923.45, 923.47	103
306(c)(7): Authorities	923.41, 923.47	109
306(c)(8): Adequate consideration of national interests	923.52	154
306(c)(9): Areas for preservation/restoration	923.24	91
Sec. 306(d) which includes:		
306(d)(1): Administer regulations, control development, resolve conflicts	923.41	103
306(d)(2): Powers of acquisition, if necessary	923.41	60
Sec. 306(e) which includes:		
306(e)(1): Technique of control	923.41, 923.42	105-120
306(e)(2): Uses of regional benefit	923.13, 923.41, 923.43	115
Sec. 307 which includes:		
308(b): Adequate consideration of Federal agency views	923.51	139-187
307(f): Incorporation of air and water quality requirements	923.44	114

C. REQUIREMENTS OF THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969

On January 1, 1970, the President signed into law the National Environmental Policy Act (NEPA), which requires each Federal agency to prepare a statement of environmental impact in advance of each major action that may significantly affect the quality of the human environment. An environmental impact statement (EIS) must assess potential environmental impacts of a proposed action in order to disclose environmental consequences of such action.

To comply with NEPA's requirement of preparing an EIS, OCZM has combined the state's coastal management program (which is the proposed action) with a discussion of the environmental impacts. The CZMA is based upon the premise that the environmental aspects of the coastal management program should receive significant consideration in the development of state management programs. Therefore, as you read this EIS, you should be aware that the state CZM Program is the core document included in its entirety supplemented by the requirements of NEPA, Section 102(2)(c). For reviewers more familiar with the NEPA requirements for content of an EIS, below is an index of where you will find this information:

	Pages
Description of the proposed action	15-170
Description of the environment affected	15, 171
Relationship of the proposed action to land use plans, policies, and controls for the affected areas	172
Probable impact of the proposed action on the environment	176
Alternatives to the proposed action	183
Relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity	176
Probable adverse environmental effects which cannot be avoided	176
Irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented	172
Consultation/Coordination with others	117, 130, 139

D. SUMMARY OF THE MICHIGAN COASTAL MANAGEMENT PROGRAM

Stretching from the rugged and undeveloped areas of Lake Superior to the major urban industrial areas such as Detroit, Benton Harbor, and Muskegon there is an incredible variation in the use of Michigan's 3,200 miles of coastline and 39,000 square miles of Great Lakes waters. Not unexpectedly, this diversity of use has resulted in incompatible and conflicting demands being placed upon the State's lands and water resources. In the past Michigan attempted to resolve these conflicts and balance several important State and national concerns in an ad-hoc manner. This piecemeal approach to managing its coastal resources was found to be inadequate. As a result the State elected to develop under the Federal Coastal Zone Management Act a program to comprehensively manage its coastal resources.

Michigan's New Focus on Coastal Lands and Waters

Over the past three years with extensive public involvement, Michigan has developed a management process that relies on specific State policies and objectives that will promote the wise use and protection of the resources contained within the coastal area. In order to implement the state coastal policies, the Governor has directed the Michigan Department of Natural Resources to manage and coordinate the various aspects of the Program. In fulfilling its statutory responsibilities and the gubernatorial charge, the Department of Natural Resources will ensure consistency with the policies of the program.

Components of the Program

1. Areas of Concentration

In addressing the major State and national concerns over the use of coastal areas the specific coastal management policies and action programs have been grouped under five major resource areas:

- Areas of natural hazard to development — including erosion and flood-prone areas;
- Areas sensitive to alteration or disturbance — including ecologically sensitive areas (wetlands), natural areas, sand dunes, and islands;
- Areas fulfilling recreational or cultural needs — which include areas managed to recognize recreational, historic or archaeological values;

- Areas of natural economic potential — including water transportation, mineral and energy, prime industrial and agricultural areas;

- Areas of intensive or conflicting use — which encompass coastal lakes, river mouths, bays and urban areas.

For each of the five areas and the specific policies addressing each of them, the program will concentrate on performing the following functions:

- Improve administration of existing State shoreline statutes (e.g., Shorelands Act, Submerged Lands Act, Sand Dunes Act);

- Improve governmental coordination to reduce time delays, duplication and conflicts in coastal management decision-making; and

- Provide substantial technical and financial assistance to local units of government for creative coastal projects;

2. *Organization*

The Department of Natural Resources is one of 19 operating State agencies; it administers directly or plays a formal role in the administration of all significant State coastal programs and authorities which regulate direct and significant impacts upon the coast. Of the various coastal related legislative enactments that it administers, the following are the most important:

- Shorelands Protection and Management Act;

- Great Lakes Submerged Lands Act;

- Natural Rivers Act;

- Soil Erosion and Sedimentation Control Act;

- Wilderness and Natural Areas Act;

- Farmland and Open Space Preservation Act;

- Inland Lakes and Streams Act.

The Division of Land Resource Programs, located within the Department of Natural Resources, has the day to day responsibility for administering the above statutory authorities and it is the principal division for orchestrating the Coastal Management Program in Michigan.

3. *Coordination and Conflict Resolution*

As a result of the Department of Natural Resources broad based legislative authority to manage those activities which have a direct and significant bearing on coastal resources, the Governor of Michigan determined that the Department was a natural forum for coordinating and resolving conflicts over coastal issues. To formalize this process and to insure consistency and linkages with the program's policies, the following mechanisms will be relied upon:

A. ADOPTION OF THE PROGRAM BY THE NATURAL RESOURCE COMMISSION (NRC):

With the formal adoption of the program by the Natural Resources Commission, the Commission has directed the Department of Natural Resources when carrying out its various statutory responsibilities such as review of permits, granting of licenses, and managing and protecting the natural resources, to act in accordance with the coastal management policies.

B. THE STANDING COMMITTEE ON SHORELANDS AND WATER (SAW) COMMITTEE

The Standing Committee on Shorelands and Water (SAW), which was formed by the DNR and which is comprised of representatives from the DNR's divisions and offices and eight other State agencies, will:

- identify and recommend priority projects and activities for coastal management program consideration;
- evaluate State agency activities for consistency with program goals, objectives, policies and legislated areas of particular concern;
- actively consider the national interest;
- coordinate Federal permit reviews and projects.

C. INTER-DEPARTMENTAL ENVIRONMENTAL REVIEW COMMITTEE AND THE MICHIGAN ENVIRONMENTAL REVIEW BOARD:

The DNR is a member of both the Interdepartmental Environmental Review Committee and the Michigan Environmental Review Board (MERB). The MERB with assistance provided by the Interdepartmental Committee reviews State and Federal EIS's for major actions which have potential for significant impact. It is required, as a result of Executive Order 1974-4 to recommend to the Governor those actions of State agencies that should be suspended or modified.

D. GOVERNOR'S CABINET COMMITTEE ON ENVIRONMENT AND LAND USE:

The Cabinet Committee, which is composed of several representatives from the State agencies including the Department of Natural Resources, reviews ongoing program operations, identifies emerging problems in the implementation of executive policies, and resolves interdepartmental policy and communication differences.

E. THE GOVERNOR:

The Governor as chief executive has the authority under the Michigan constitution to coordinate State policy and resolve conflicts that may not be resolved in the forums discussed above.

F. JUDICIAL RELIEF:

The judicial process also serves as a method for resolving conflicts in Michigan. Under Michigan law there are several avenues available for relief, including two major provisions. The Michigan Environmental Protection Act provides both a procedural and substantive basis for any party in the State to seek judicial relief against any other for any action in order to preserve, protect and enhance the natural resources of the State. Also, under the State Administrative Procedures Act any party aggrieved by a decision, such as the Department of Natural Resources issuing or denying a permit, may seek relief in the circuit courts of Michigan.

4. *Coastal Areas of Particular Concern*

The Michigan Coastal Management Program uses the areas of particular concern (APC's) process to provide an additional vehicle for identifying and addressing coastal areas which need management attention. APC's originate from two sources:

- State-legislated areas of particular concern;
- publicly-nominated areas of particular concern.

The State-legislated APC's are those coastal sites mandated to receive particular attention by State law. The specific sites are determined by the Department of Natural Resources based upon statutory criteria. The priority of uses for these areas are also mandated by State law.

The second group of APC's are those nominated by any person, group or local, regional, State, or Federal agency. These publicly-nominated APC's which become designated as action APC's by the State will be eligible for funding and technical and financial assistance to provide more effective management of these areas in accordance with the program's objectives and policies.

5. *Federal Consistency*

Under the Federal Coastal Zone Management Act, Federal licenses or permits and Federal assistance to State and local governments must be consistent with the Michigan Coastal Management Program, while Federal activities and development projects must be consistent to the maximum extent practicable.

The Coastal Management Program Unit is located within the Land Resources Programs Division of the DNR, and will be responsible for coordinating consistency review in the State.

One of the major objectives of the program is that through Federal consistency there will be an enhanced State-Federal agency cooperation on mutually desirable projects affecting the Michigan coast.

6. *Consideration of the National Interest*

In return for obtaining Federal consistency with the coastal management program, the State of Michigan will provide adequate consideration of the national interest in the siting of facilities and natural resources.

While no national interests are excluded from the lands and waters of Michigan's coastal zone, the specific resources and facilities of national interest that the Michigan program will focus on are:

- national defense and aerospace;
- recreation;
- transportation;
- air and water quality;
- wetlands;
- hazard areas;
- historic and archaeological sites;
- energy.

The Michigan Coastal Management Program provides three major forums for ongoing consideration of the national interest: the Natural Resources Commission; the Michigan Environmental Review Board; and the Michigan Department of Natural Resources in response to the specific charge of its Director (See Director's letter #17, Appendix B). Each of these State entities encourages and provides for public participation in their decision-making in order that the national interests will be adequately considered.

PART II
Michigan Coastal Management Program

Chapter II
Michigan's Coastal Area and Its Character

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

Throughout history, the Great Lakes and the resources they support have been important to Michigan. Fish, furs, fertile land and lumber first attracted settlers who built towns along the coast and used the Great Lakes to transport their harvests to other parts of the growing nation. A century later, loggers chopped their way through virgin timber, floating their logs to boom towns along the coast. Logging and fishing were soon replaced by manufacturing industries which concentrated along the coast to use the lakes for shipping and processing. As the automobile industry flourished, workers traveled away from cities to vacation at coastal beaches and resorts. Improved roads and freeways shortened travel time between industrialized cities and the coast, making it possible for more people to enjoy seasonal or permanent residences on the Great Lakes.

Today, we continue to depend on the coast for our livelihood and recreation. Coastal lands support industry, recreation, residential areas, resorts, forests, farms and orchards, energy and mining facilities. Coastal waters support commercial navigation, fisheries, recreational boating, waste assimilation, industrial and public water supplies.

The following pages of this chapter describe important characteristics of Michigan's coast including coastal use and development, shoreline ownership, and geomorphic shore types. The geographic limit of the coast is then defined, using more specific use and geomorphic ownership patterns. The resulting coastal area boundary defines the focus of Coastal Management Program funding efforts and technical services.

CHARACTER OF THE COAST

The first portion of this chapter describes the important characteristics of Michigan's 3,200 mile coast including: (1) a description of the coastal area by regional boundaries; (2) shoreline ownership; (3) coastal use and development; and (4) geomorphic shore types.

Coastal Character — Regional Boundaries

Following is a description of coastal characteristics for each of Michigan's ten coastal planning and development regions. This discussion demonstrates that coastal uses, developments and physical characteristics vary greatly along our 3,200 mile coast. Figure II-A illustrates the boundaries of Michigan's coastal planning and development regions.

Region 1

In southeast Michigan, officials of numerous state and federal agencies, four counties (Macomb, Monroe, St. Clair and Wayne), and at least 36 minor civil divisions regularly make decisions concerning coastal resource use. The coastal resources over which these public officials exercise their authority have diverse characteristics.

Portions of Lake Erie,* Lake Huron and Lake St. Clair and the Detroit and St. Clair Rivers are resources defined as coastal waters in southeast Michigan. These bodies of water support a variety of fish and wildlife with shallow areas acting as breeding, feeding and nursery areas.

Individuals also rely on these coastal waters. Many communities and industries draw their water supplies and discharge treated wastewater to these lakes and rivers. They are used for transporting raw materials and goods into and out of the region. Finally, these coastal waters are heavily used for recreational purposes.

The Detroit metropolitan area is heavily dependent upon the coast for recreation, shipping, industry and other uses. The entire Wayne County waterfront has been identified as an area of particular concern. Current efforts are being directed toward providing more opportunities along the Detroit waterfront for recreation.

The uses of the region's shorelands are also varied. The shorelands are dominated by homes, with industrial development distributed throughout its length. Commercial and recreational facilities account for a portion of the shorelands in the region as do wetlands that serve as nesting and feeding areas for waterfowl.

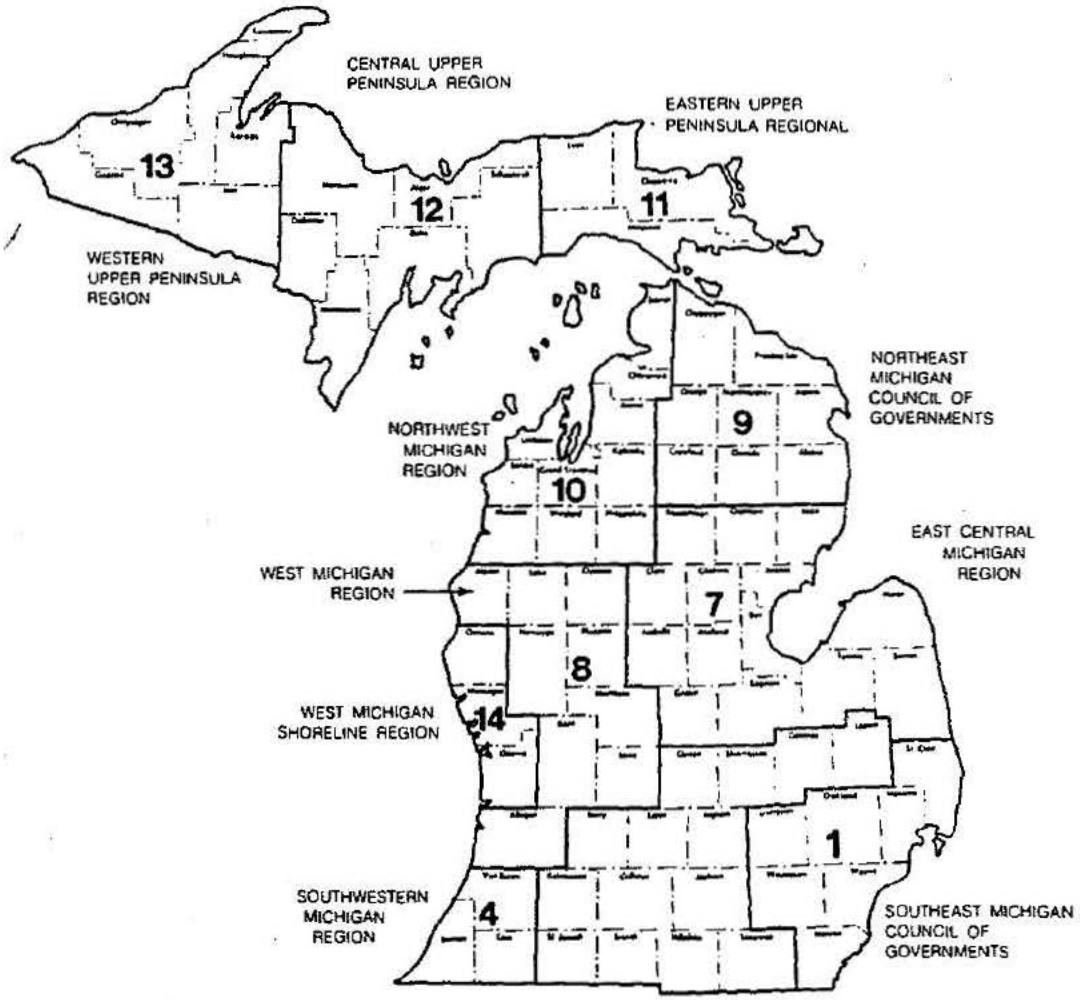
Region 4

Within the southwestern Michigan region, the two counties of Berrien and Van Buren border Lake Michigan. Berrien County's six townships, four cities, and three villages encompass about 42 linear miles of coastline; while Van Buren County's two townships and one city cover approximately 13 linear shore miles. Major urban centers include the cites of New Buffalo, St. Joseph-Benton Harbor and South Haven.

Sand beaches, bordered by clay bluffs and sand dunes are characteristic of the Lake Michigan shoreline in this region. The several hundred acre Grand Mere area,

*Nearly all of Michigan's share of Lake Erie shoreline is located in Monroe County. Shore types of this shoreline vary, but basically consist of wetlands interspersed with artificial shore types in and near the more developed areas. Residential development accounts for 15 miles or about 50 percent of the total shorelands use of the Michigan portion of Lake Erie frontage. About 11 miles, (or 33.8 percent) of Michigan's Lake Erie shorelands are state owned designated recreational and wildlife areas. Agriculture and vacant, undeveloped lands account for about 5.8 miles of shoreline. The Monroe Port area, Erie State Game Area, Sterling State Park, and Erie State Game area islands are some of the many areas of particular concern which have been identified in this important area. (Coastal Zone Management, July 1976, Monroe County Planning Department and Commission).

FIG. II-A
Coastal Regional Agency Boundaries



adjacent to the lake in Berrien County, is one of the region's most valuable assets. The area illustrates a variety of habitats, including woodlands, wetlands, inland lakes, sand dunes, and beach and serves as a valuable nature study area for local and state residents. The Thunder Mountain area in southern Van Buren County is another of the region's major natural resource sand dune areas.

Demands for the use of shore areas continues to increase — particularly demands for recreational and residential uses, and commercial and industrial uses. Historically, there has been little regulation and guidance of often competing, conflicting and sometimes adverse uses of shoreland areas. For example, lack of location and density standards for residential developments along the coast have at times contributed to severe private and public property loss and damage caused by shoreline bluff erosion.

Region 7

The east central Michigan region includes the coastal counties of Iosco, Arenac, Bay, Tuscola, Huron and Sanilac. The larger urban communities in this region include Oscoda, East Tawas-Tawas City and Bay City.

Located within the region are valuable wetlands with significant fishery and wildlife values. The Saginaw Bay area, which borders the majority of the region's coastal area, is one of the most productive habitats for fish, waterfowl and fur bearers on the Great Lakes.

Saginaw Bay has a number of islands. One of the most significant is Charity Island. The island's lighthouse has served as a navigation aid since 1857. It has also served in the past as a place of refuge for the ship-wrecked and storm driven.

The shore of the region is quite different from that of Lake Michigan and Lake Superior. The bay area is characterized by wetlands, while the lower areas of the region are characterized by sandy beaches, backed by low bluffs. One stretch along the eastern shore of Huron County consists of exposed bedrock and rocky shorelands, contributing to the picturesque beauty of the area.

Region 8

The west Michigan region consists of Allegan and Mason counties. Urbanized areas in the region include Ludington, Holland and Saugatuck-Douglas. The shoreline in this two county area is characterized by high clay bluffs and sand dunes, with some excellent swimming beaches. The high rolling dunes with blow-out areas add much to the scenic beauty of the coastline. North of the City of Saugatuck, the rolling dunes are interrupted by the mouth of the Kalamazoo River. The booming lumber town of Singapore was founded near the river mouth in the 1830's and has long since been buried beneath the sand of Lake Michigan.

Region 9

The four Lake Huron counties in the northeast Michigan region consist of Alcona, Alpena, Cheboygan and Presque Isle. The larger shoreline communities include the cities of Alpena, Cheboygan, Harrisville and Rogers City. There are 15 townships and one village along Lake Huron in the region. The northeast Michigan coast is comprised of about one-third sandy beaches, one-third marshy wetlands and one-third rocky outcrops.

Beautiful scenic sites can be found along the US-23 highway which follows the region's shore. Attractions in the coastal area include the Old Presque Isle Lighthouse, Besser Natural Area, Misery Bay, and, of course, the Mackinaw Bridge.

Northeast Michigan has a stable shoreland's economy in quarry operations and cement production. The region has the distinction of having the world's largest cement plant, located north of Alpena, and the world's largest limestone quarry, near Rogers City. Quarry operations, utilizing high quality metallurgical and chemical grade limestone deposits, are located at three sites along the coast between Alpena and Rogers City. There is considerable acreage of proven limestone reserves of similar quality contiguous to the shoreline being held for future development. All of these industrial activities are complemented by Great Lakes shipping and port facilities.

Northeast Michigan also offers many recreational opportunities. Tourism plays an important role in the economic structure of the entire region. The three state parks of Harrisville, P. H. Hoeft and Cheboygan are major recreational facilities located along the shores. In addition, the Thunder Bay bottomlands, off Alpena, have one of the highest concentrations of shipwrecks on the Great Lakes bottomlands.

Region 10

The northwest Michigan region encompasses Emmet, Charlevoix, Antrim, Grand Traverse, Leelanau, Benzie and Manistee counties. The urban areas in the region include Manistee, Frankfort, Traverse City, Charlevoix and Petoskey.

The high recreational value of the Lake Michigan shoreline in this region has resulted in much development oriented toward recreation. The famous Sleeping Bear Dunes area in Leelanau County has been established as a National Lakeshore. Six state parks and numerous county, township and city parks also provide recreational opportunities.

The shoreline of the area is irregular, consisting of several bays and points. The most notable are Grand Traverse Bay, Little Traverse Bay, Big and Little Sable Points, Point Betsie and Waugoshance Point.

Two major island groups are located within the Lake Michigan waters of the region — the North and South Manitou Islands and the Beaver Island group.

Region 11

Chippewa, Luce and Mackinac counties constitute the eastern Upper Peninsula region. The region is bordered by three of the five Great Lakes — Michigan, Huron and Superior, and by the St. Marys River. The Soo Locks at Sault Ste. Marie permit vessels to bypass the shallow rapids of the St. Marys River and handle more water-borne tonnage annually than any other lock system in the world.

The three counties have Great Lakes shorelands encompassing 722 linear miles, including over 300 miles of island shoreline. Larger islands are Neebish and Sugar Island in the St. Marys River, Les Cheneaux Islands, Mackinac Island, Bois Blanc Island and Drummond Island. The 34 Les Cheneaux Islands extend along the north shore of Lake Huron midway between the Straits and the St. Marys River. Drummond Island at the eastern tip of the Upper Peninsula supports a permanent population as well as numerous summer homes and cottages. A dolomite quarry on Drummond Island is the major source of island employment.

Mackinac Island, situated east of the Mackinac Bridge, has played a strategic role in American history as a mission, trading post and military fortress. The island has been restored to its original condition and is now one of the most popular tourist attractions in the midwest.

Region 12

Marquette, Alger, Schoolcraft, Delta and Menominee counties are the five coastal counties of the central Upper Peninsula region. Lakes bounding the region are Lake Superior and Lake Michigan. The principal urban shoreland communities are Manistique, Escanaba, Gladstone, Menominee, Marquette and Munising.

Portions of the shoreline in the region are characterized by high bluffs which possess outstanding aesthetic beauty. Rock outcrops in the vicinity of Seul Choix Pointe and rock bluffs along the Garden Peninsula are especially scenic. The eastern portion of the region is generally underlain by sedimentary rocks as evidenced by the Cambrian sandstones of the Pictured Rocks near Munising.

Extensive sand beaches can be found near the mouth of the Huron River in Marquette County, along a 13-mile reach east of Marquette and along a 12-mile stretch in the Pictured Rocks area. The towering Grand Sable Dunes extend for five miles to the west of Grand Marais and are the largest dune formations in the Upper Peninsula. The marsh shore of Big and Little Bays de Noc provide excellent fish and wildlife habitat and are heavily used for fishing and hunting.

Region 13

The coastal counties of Gogebic, Ontonagon, Houghton, Keweenaw and Baraga encompass the coastal areas of the western Upper Peninsula. The region's shoreland terrain is quite varied, including flat lake plains, steep sloped areas, igneous and sedimentary bedrock. The shoreline is further characterized by rugged, rocky bluffs and sand beaches, and a collection of outcroppings along the tip of the Keweenaw Peninsula.

Isle Royale, situated 48 miles northwest of the Keweenaw Peninsula in Lake Superior, is one of the nation's most unique national parks. It is a living museum of northern animals and forest bounded by rocky coasts.

Region 14

The west Michigan shoreline region includes Oceana, Muskegon and Ottawa counties. The shoreline in the region is characterized by sand dunes — some towering to great heights over Lake Michigan. The large dunes at Silver Lake are a special scenic and recreational attraction.

Oceana, Muskegon and Ottawa counties were at one time rich in timber, consisting largely of white pines. Thus, much early development was located around the dune impounded lakes and the mouths of rivers — the focus of lumbering activities. The lumber industry eventually dissolved,. but the markets which the counties supplied timber remained, and thus were available for the trade of other commodities. Today, major development in the region is centered around these river mouths and lakes, particularly Muskegon Lake, and the mouth of the Grand River at Grand Haven.

Coastal Character — Shoreline Ownership

Figure II-B illustrates ownership characteristics for the Great Lakes and connecting waterways. Ownership of the Great Lakes coastal area varies, although not to the extent that use and development vary. Great Lakes bottomlands are held in public trust. The majority of coastal land areas are in private ownership.

Coastal Character — Use and Development

As shown in Figure II-C., Michigan's coastal use and development differs greatly. *Lake Superior's* 666 miles of shoreland are the most rugged, undeveloped, and inaccessible of all the Great lakes, yet support valuable mining and tourist industries. While recreation facilities are an important development along the Lake Superior shoreline, residential housing remains the most common type of shoreland development. The St. Marys River — a major highway for water-borne traffic — is the connecting waterway between Lake Superior and Lake Huron. Important to this area is commercial and industrial development adjacent to the famous Soo Locks at Sault Ste. Marie.

The 845 miles of *Lake Michigan* shoreline are characterized by heavy residential development in the southern end of the Lower Peninsula and some seasonal housing development in the northern Lower Peninsula and Upper Peninsula. Seventeen state parks with over 47 miles of shoreline, state and national forests, 33 commercial and recreational harbors, and numerous public access sites accommodate intensive recreational use of the lake. Commercial and industrial development is limited directly on Lake Michigan, but is important to communities surrounding coastal lakes such as Muskegon, Manistee and Ludington. More than 165 miles of island shoreland

contribute greatly to the historic, cultural and environmental significance of the Lake Michigan shoreline.

Nearly 50 percent of *Lake Huron's* coast is in forest land, agricultural or undeveloped use. The other predominant type of use is residential development along the lake's 634 miles of coast. Certain shoreland areas, such as those found along Saginaw Bay, Potagannissing Bay, Munuscong Lake and many islands, comprise more than 345 miles of shoreline that are valuable to the preservation of Great Lakes fish and wildlife species.

Lakes Erie, St. Clair and the St. Clair and Detroit Rivers are bordered by 147 miles of highly developed shoreline. Urban-industrial complexes centering in this area have decreased the amount of remaining agricultural and undeveloped lands. Much in demand are recreational facilities which, to date, occupy less than five percent of the shore. Marshlands located along Lake Erie at the mouth of the St. Clair River, and Dickinson and Harsens Island are congregation points for migratory waterfowl.

Coastal Character — Geomorphic Shore Types

Important to the use and development of coastal areas is the unique mix of shore types found on each of the Great Lakes. Clay bluffs and sand beaches and some of the largest sand dunes in the world border Lake Michigan. The incredible beauty of Lake Superior is enhanced by towering rock bluffs, sandstone cliffs and sand beaches. In contrast, the Lake Huron coast is characterized by wetlands and rock beaches, while shoreline alterations along Lakes Erie and St. Clair and the Detroit and St. Clair Rivers characterize the largely flat and low coastal plain of southeast Michigan.

Diverse shore types contribute to the unique quality of the Great Lakes coast. The following shore types can be used to describe Michigan's coast: erodible bluff; nonerodible bluffs; sand dunes; low plains and wetlands.

Erodible Bluffs

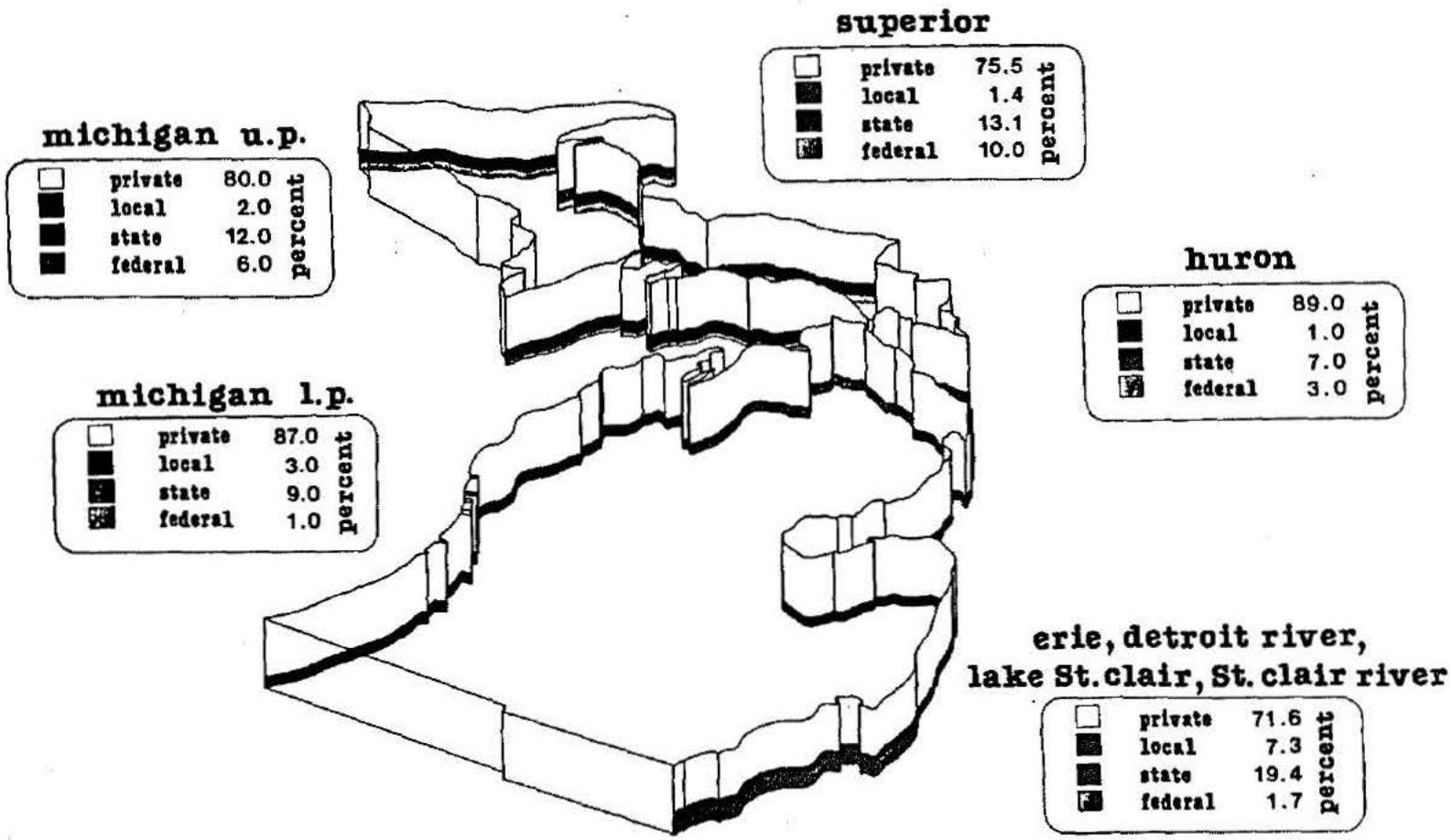
Erodible bluffs comprise 26 percent of Michigan's shoreline. Bluffs are composed of unconsolidated materials, such as sand and gravel, that are highly unstable under wave attack. Along the Great lakes, erodible bluffs range in height from 10 to 300 feet, and in steepness from about 20 degrees to nearly 90 degrees. Due to frequent erosion caused by waves, runoff and wind, the bluff face is usually devegetated, prone to failure, and consequently these areas pose severe hazards for most land uses.

Nonerodible Bluffs

Nonerodible bluffs, by contrast, are extremely stable because they are usually composed of bedrock or rock rubble. This shoreland type is generally steeper than the erodible bluffs, exhibiting a sea cliff form in many places. In addition, the bluff face is usually barren of vegetation. Because of their rocky composition, nonerodible bluffs are the most stable shoreline in the Great Lakes, and, as a whole, the least problematic for residential development. Nonerodible bluffs are found along 13

Michigan's Mainland Great Lakes Coast

FIG. II-B



Ownership

Michigan's Mainland Great Lakes Coast*

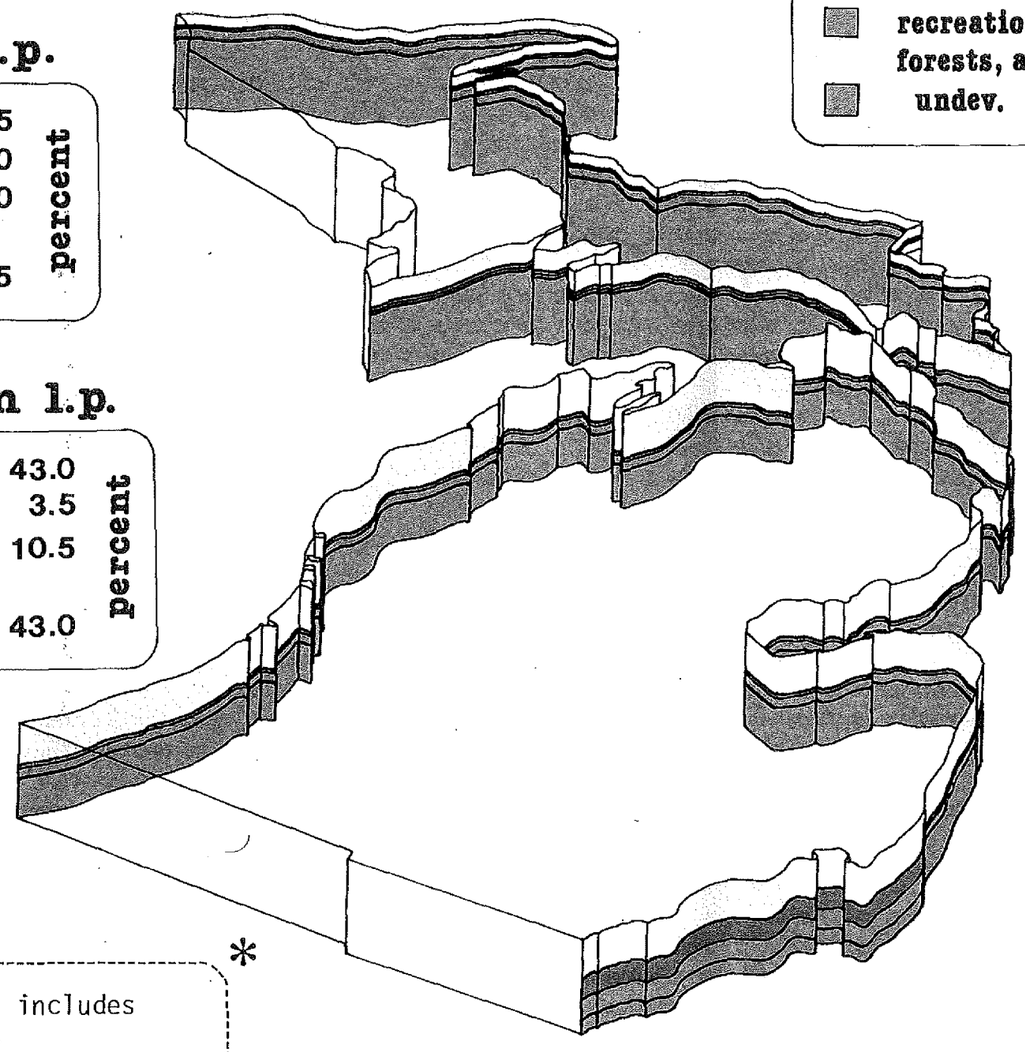
FIG. II-C

superior

		percent
residential	12.5	
ind./comm.	2.5	
recreation	12.0	
forests, ag., undev.	73.0	

michigan u.p.

		percent
residential	22.5	
ind./comm.	3.0	
recreation	3.0	
forests, ag., undev.	71.5	



huron

		percent
residential	39.5	
ind./comm.	3.5	
recreation	10.0	
forests, ag., undev.	47.0	

michigan l.p.

		percent
residential	43.0	
ind./comm.	3.5	
recreation	10.5	
forests, ag., undev.	43.0	

erie, detroit river, lake St.clair, St.clair river

		percent
residential	40.0	
ind./comm.	22.5	
recreation	21.5	
forests, ag., undev.	16.0	

* Industrial and Commercial includes Public Service Facilities

Recreation includes wildlife preserves

Use and Development

percent of the Michigan coast — mostly in the Upper Peninsula.

Low Plains

Low plains are the most common shoreland type, comprising 33 percent of the Michigan shoreline. They are distinguished primarily by relatively low elevations only a few feet above lake level, and flat or gently rolling topography. Low plains may be composed of clay, loose sand, bedrock or manmade landfills. They may, therefore, be described according to their variable erodibility, drainage capacity, and suitability for development as either erodible (sandy, clay, etc.) low plains, nonerodible (rocky) low plains, or manmade low plains such as landfills.

Wetlands

Wetlands are those areas where the water table is at, near or above the land surface for a significant part of most years. The water regime is such that aquatic or hydrophytic vegetation is usually established, although flood plains and some low-lying shoreline areas can be nonvegetated. Wetlands are frequently associated with topographic lows, even in hilly regions. Examples of wetlands include marshes, mud flats, wooded swamps, and floating vegetation situated on the shallow margins of bays, lakes, rivers, ponds, streams and manmade impoundments such as reservoirs. They include wet meadows or perched bogs in hilly areas and seasonally wet or flooded basins or potholes with no surface water outflow.

A Wetlands Value Study, recently conducted by the Coastal Management Program, provided important confirmation about the significant ecological functions and economic values of coastal wetlands. Study results revealed that about 21 percent of the waterfowl harvest, 14 percent of the duck production, 11 percent of the muskrat take, 15 percent of the commercial fish landings, and a large proportion of the sport fishing occurs in coastal wetlands or adjacent shallow waters. A 1972 inventory showed that Michigan has 105,855 acres of coastal wetlands — about 3.5 percent of the state's total wetland acreage. The Wetlands Value Study summarized that coastal wetlands contribute an estimated $489.69 per wetland acre/year, for a total of $51.8 million yearly. This value was derived from analysis of sport fishing, nonconsumptive recreation, waterfowl hunting, trapping of furbearers and commercial fishing uses. Phase II of the study, yet to be conducted, will examine hydrological, chemical and geological characteristics and the primary productivity of coastal wetlands.

Sand Dunes

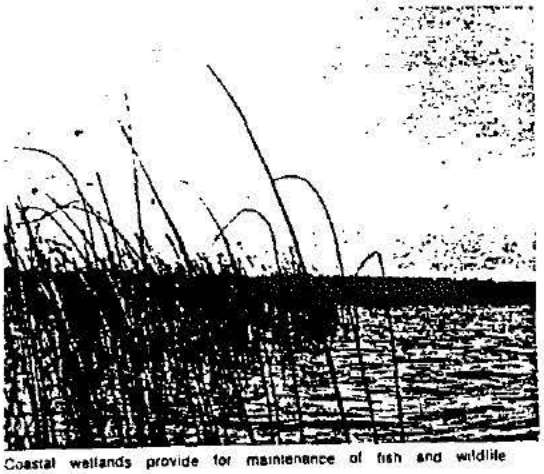
Sand dunes are unstable, windblown formations which lie inland from the shore. In places, dunes may extend inland several hundred yards and reach heights of 400 feet above lake elevations. Usually they are well drained and partially covered by grasses, shrubs and small trees. Due to their attractiveness as building sites, sand dunes are highly prone to development. Dunes also serve as a local catchment source of precipitation and ground-water recharge. As development takes place, dune

GEOMORPHIC SHORE TYPES OF MICHIGAN'S COASTAL AREA

Erodible bluffs are prone to erosion and pose severe development hazards

Nonerodible bluffs are extremely stable and are found primarily along the Upper Peninsula shoreline

Low plains are the most common coastal shoretype



Coastal wetlands provide for maintenance of fish and wildlife populations

Coastal sand dunes are valuable resources for their scenic, recreational and economic qualities

formations and their erosion of deposition activities are often disrupted. Dunes are found along over 12 percent of the Michigan coastline.

GEOGRAPHIC EXTENT OF MICHIGAN'S COASTAL BOUNDARY

Nearly all of Michigan has some coastal interest or dependence. Only a much smaller area, however, has a strictly coastal character. Defining the limits of that coastal boundary describes the lands and waters eligible for Coastal Management Program financial and technical assistance, and the geographic area in which specific regulatory authorities will be enforced to control uses or activities which may have an adverse impact on coastal resources.

Although establishing a coastal boundary is an administrative necessity of the Coastal Management Program, it must also be accomplished within the perceptions of what the coast means to Michigan citizens — in terms of its character, problems, issues or opportunities. The boundary must be easily understood and identified on maps and on the ground.

The Coastal Management Program defines the coastal boundary in terms of lakeward and landward limits, using the ordinary high water mark of the Great Lakes to define the land-lake interface. Lakeward areas of the coastal boundary are easily visualized but the landward boundary involves more complex considerations.

Lakeward Coastal Boundary

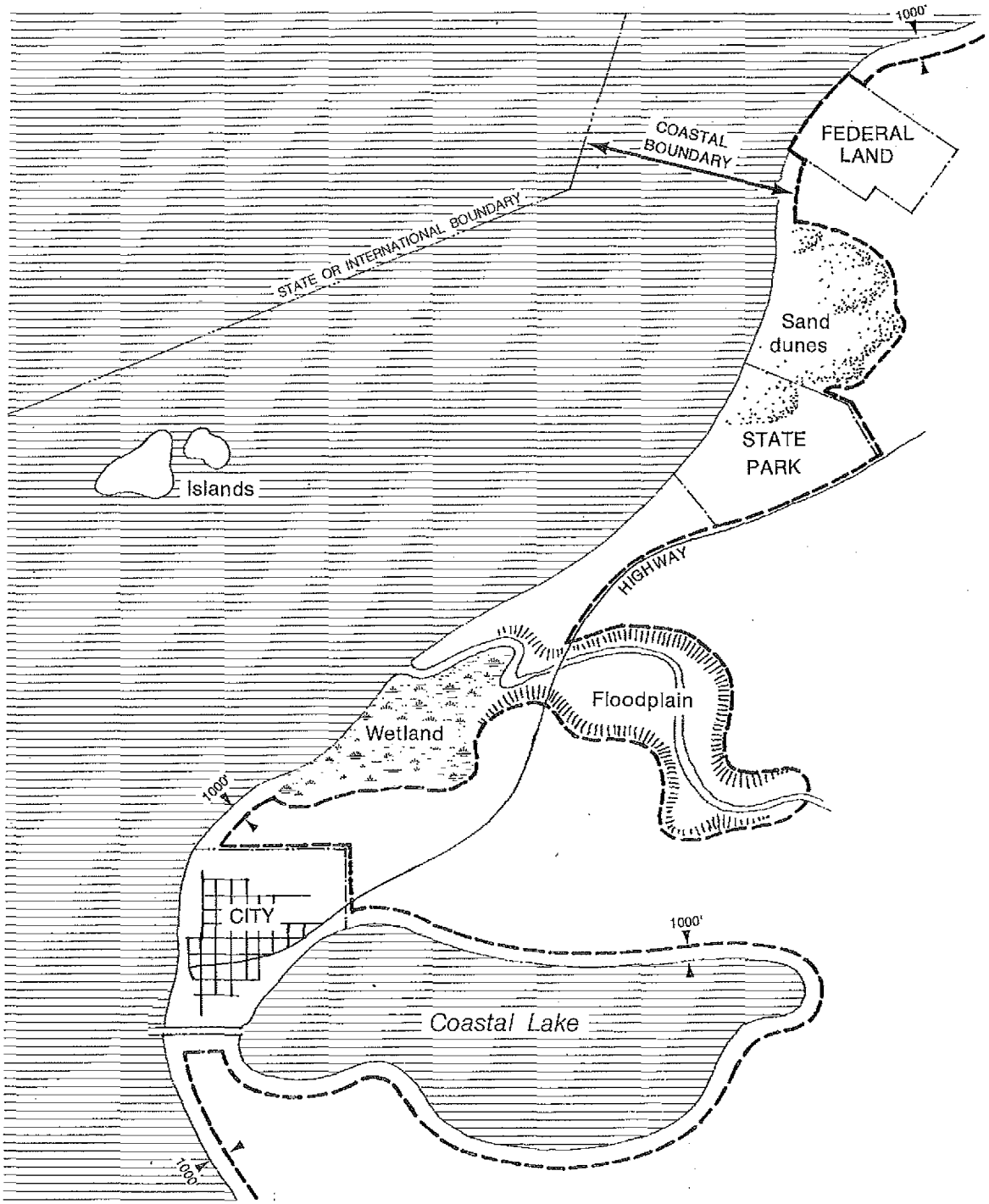
By federal definition, the lakeward coastal area must include all submerged lands, waters and islands of the Great Lakes and connecting waterways, (Keweenaw Waterway, St. Mary's River, Lake St. Clair, St. Clair River and Detroit River), to the state or international boundary in the middle of the lakes. This boundary includes, in their entirety, islands and transitional areas (such as coastal wetlands) lying lakeward of the ordinary high water mark.* Thus, the lakeward coastal boundary is the jurisdictional border Michigan shares with Canada's Province of Ontario and the states of Minnesota, Wisconsin, Illinois, Indiana and Ohio, (see Figure II-D).

*The ordinary high water mark is established by Act No. 247 of the Public Acts of 1955, as amended. The ordinary high water mark means the line between upland and bottomland which persists through successive changes in water levels, and below which the presence and action of the water is so common or recurrent as to mark upon the soil a character, distinct from that which occurs on the upland, as to the soil itself, the configuration of the surface of the soil and vegetation. The ordinary high water mark shall be deemed at the following elevations above sea level, international Great Lakes datum of 1955:

On Lake Superior it is 601.5 feet, on Lakes Michigan-Huron it is 579.8 feet, on Lake St. Clair it is 574.7 feet, and on Lake Erie it is 571.6 feet.

The ordinary high water mark of inland waters is determined under the authority of the Inland Lakes and Streams Act, Act No. 346 of the Public Acts of 1972, as amended. Elevations for connecting waters linking the Great Lakes are interpolated from established ordinary high water marks for the adjoining lands. Actual location of the ordinary high water mark for the Great Lakes and connecting waterways is determined by field survey.

FIG. II-D
Schematic Diagram of the
Michigan Coastal Management
Program Boundary



Landward Coastal Boundary

The landward coastal area extends inland to encompass resources and resource using activities which influence or are influenced by the coastal area in both a direct and significant fashion. These resources and activities involve lands which have a demonstrable interaction with coastal waters in physical, biological, chemical, thermal or other terms. Analysis of these relationships indicates the Michigan's landward coastal boundary includes: (1) lands abutting the ordinary high water mark of Great Lakes and their connecting waterways; (2) lands abutting other water bodies which are directly affected by water levels of the Great Lakes and their connecting waters such as floodplains 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 intense use pressure related to coastal waters such as recreation areas, urban areas, etc.

Several alternatives were considered by the Coastal Management Program in delineating the landward boundary. One alternative approach might have been based on political borders, encompassing whole cities, townships, etc. Although this option could have some administrative advantages, it was deemed more efficient to focus attention on territory, needs and problems of truly coastal character. Using natural features such as watershed boundaries or cultural features such as service areas for water supply or wastewater treatment encompassed virtually all of the state and was considered impractical.

A compromise solution was selected from mandates contained in one of the most definitive descriptions of land-lake interactions and the resultant boundary in state legislation — Michigan's Shorelands Protection and Management Act (Act No. 245 of the Public Acts of 1970, as amended). This Act and other state statutes, such as the Great Lakes Submerged Lands Act, Inland Lakes and Streams Act, and the Sand Dunes Protection and Management Act use the state-legislated ordinary high water mark as the definition of Michigan's Great Lakes shoreline. Landward from that line, Act No. 245, for example, considers certain coastal areas of statewide concern in terms of their resources and impacts of resource-using activities. Geographically, however, Act No. 245's authority is limited to a maximum of 1,000 feet landward from the ordinary high water mark.

Though the area affected by Act No. 245, and the other acts referred to above, is too limited to satisfy the boundary requirements of the Coastal Management Program, their boundary concepts provides a valuable precedent.

Michigan's Coastal Management Program accordingly adapted a similar approach which delineates an inland boundary extending in most cases a minimum of 1,000 feet from the ordinary high water mark. The boundary also has inland extensions or bulges around areas containing resources or uses which have a physical, chemical, biological or other demonstrable impact upon the Great Lakes. Areas which are included by extending the boundary further inland from that baseline include the following coastal areas as illustrated in Figure II-D and described in the following text. To provide for ease of identification, the coastal boundary is often simplified on maps and on the ground using physical or cultural features, which approximate the 1,000 foot distance from the ordinary high water mark. Thus, the coastal boundary adopts such recognizable features as roadways, section lines, electrical power lines, political

boundaries, rail lines where such features provide reasonable approximation for meeting boundary criteria.

- Coastal lakes, river mouths and bays
- Floodplains
- Wetlands
- Great Lakes sand dune areas
- Public park, recreation and natural areas
- Urban areas

Coastal Lakes

Chemical, biological and hydrologic properties diffuse freely throughout a lake. Such interchange may also take place between a Great Lake and a coastal lake, particularly where they are connected by a channel. Coastal lakes are also affected by uses of their shores, (e.g., industrial plants, marinas, etc.). The influence of the Great Lake on a coastal lake may be minimized where the coastal lake is impounded above its natural level.

Thus, the coastal boundary includes in its entirety any lake within 1,000 feet of the shore of a Great Lake or connecting waterbody. In addition to the entire coastal lake, a minimum 1,000-foot buffer around the lake is included to account for effects of shore uses. Lakes further inland which are connected by channels to a Great Lake or connecting water body are treated as river mouth areas.

Coastal River Mouths

There are important relationships between tributary mouths and Great Lakes waters. Free flow of water from one to the other results in sharing of chemical and biological properties. Stream flow from tributaries replenishes the Great Lakes, and river mouth areas are subject to flooding from high Great Lakes water levels. Lake freighters dock and load at sheltered and convenient river mouth locations. Similarly, river mouths provide desirable locations for Great Lakes pleasure craft marinas. Anadromous Great Lakes fish travel far upstream to spawn. However, extending the coastal area too far upstream may include an unreasonable amount of territory which would dilute the coastal focus of this program.

For the purpose of coastal boundary delineation, tributary river mouths are treated as coastal water in the same manner as open coast. There is a landward boundary consisting of a 1,000-foot strip on both sides of the tributary. These 1,000-foot strips are enlarged by bulges for uses and resources which have a demonstrable land-lake interaction. The inland point to which the coastal boundary extends up a tributary is: (1) the point at which the tributary bed's elevation is higher than the nearest Great Lakes 100-year flood level; or (2) the upstream limit to which the U.S. Army Corp of Engineers maintains a deep draft navigation channel, whichever is further inland.

Flood Plains

Areas subject to flooding from Great Lakes influences deserve consideration in coastal management. Surveyed contours are a stable and logical tool for identifying such lands and have been mapped for almost the entire Michigan coast. The Corps of Engineers' report on Great Lakes Open-Coast Flood Levels, (1977, termed Phase I of the two phase study), identifies 10-year, 50-year, 100-year, and 500-year flood elevations for open coast on Lakes Superior, Michigan, Huron, Erie and St. Clair. These calculated elevations have not been made for bays (including Saginaw Bay), other inlets, coastal lakes, or the Great Lakes connecting streams.

Thus, the 1,000-foot strip landward boundary is extended to encompass areas adjacent to the shore and bounded by the U.S. Geological Survey contour line which is: (1) closest to the 100-year flood elevation, (depending upon contour intervals which vary, depending upon the map available for boundary delineation), established for the nearest reach of Great Lake; or (2) encompassed in existing FIA flood hazard maps or Flood Insurance Rate Maps prepared by Federal Insurance Administration, (not including rough maps printed for review purposes without dates).

For all bays and inlets in which the 100-year flood elevations has not been determined, the contour level established as the 100-year flood elevation is used to develop the boundary. Floodplain estimates of the Great Lakes connecting waterways are based on elevations derived under Phase II of the Corps of Engineers studies. The boundary in these areas may be extended landward in areas where communities have elected to develop local floodplain zoning ordinances, in anticipation of the Federal Flood Insurance Administration guidelines, in lieu of elevations derived under Phase II of the Corps study.

Wetlands

Coastal wetlands are important transitional areas with special biological and hydrologic value. Many have been destroyed by urban development and others are similarly threatened. The location and extent of the state's coastal wetlands vary with Great Lakes water levels. A coastal floodplain, based on geologic contours, is a fairly stable measurement which correlates with characteristics which create wetlands.

Therefore, the 100-year floodplain is used as an approximation of the area where coastal influences create wetlands. In addition, areas beginning within 1,000 feet of the Great Lakes ordinary high water mark, which have been identified by airphotos or otherwise as being wetlands over extended periods of time are also included in the boundary in their entirety.

Great Lakes Sand Dunes

Dunes have scientific and scenic value, and their sands are valuable to industry. Dunes are fragile and unstable if vegetative cover is disturbed. Some support unusual vegetation types. Dune formations may extend as much as a mile or more inland. Vegetated dunes are difficult to identify from air-photos, and inland sand hills may

require inspection to determine whether they consist of wind-and-water-processed dune sand or not. The state has proposed delineations of dunes according to mandates of Act No. 222 of the Public Acts of 1976 for the first seven areas to be designated under this Act.

The coastal boundary incorporates designated sand dune formations in their entirety to the extent they have been identified.

The coastal boundary will be refined in the future to incorporate additional designated sand dune areas in administering the state's Sand Dune Protection and Management Act. Since the coastal boundary will include entire dune formations, no buffer zone is added.

Public Park, Recreation and Natural Areas

The Coastal Management Program will seek to improve the wise use of recreational areas and the protection of coastal natural areas. The degree of use and development fostered in such public open areas partly determines whether recreation will have any destructive impacts on the coastal environment, although some recreational areas may contain portions so far inland that coastal relationships are minimal.

The coastal boundary, therefore, includes, in their entirety, publicly owned park, recreation or other natural areas which fall anywhere within 1,000 feet of the ordinary high water mark which have been designated by a public agency and administered for the preservation of natural values.

Urban areas

Some coastal activities and some effects on coastal waters depend, directly or indirectly, on activities and conditions elsewhere in an urban area. The original terrain in some urban areas may have been altered by leveling and filling to the point where true contours and hence floodplains are not discernible. Uses of heavily built-up land are fairly well fixed and less easily influenced by coastal management actions than other lands.

For *moderately urbanized* areas — where the first 1,000 feet of shore may contain a mixture of urban uses and undeveloped land — the basic 1,000-foot strip, augmented by extensions for features defined above, is retained. For *heavily urbanized* areas, the boundary is, in most cases, the first major roadway along the shore, with the provisions that: (1) river mouths are treated as coastal waters; (2) publicly owned and administered parks, recreation areas and natural areas within 1,000 feet of the shore are included within the coastal boundary in their entirety; and (3) where the Federal Insurance Administration has identified a 100-year floodplain beginning within 1,000 feet of the ordinary high water mark, the coastal boundary is extended landward to include the entire floodplain;and (4) areas designated pursuant to Act No. 245 of the Public Acts of 1970, as amended, the Shorelands Protection and Management Act are included in the boundary, (Act No. 245's authority extends 1,000 feet from the ordinary high water mark).

Other Boundary Delineation Considerations

Excluded Lands

All lands owned, leased, held in trust or otherwise legally subject to the sole discretion of federal agencies in their use are specifically excluded from the state Coastal Management Program boundary by the federal Coastal Zone Management Act. Although federally owned lands are excluded from the boundary, federal activities on these lands must be shown to be consistent "to the maximum extent practicable" with the Coastal Management Program (as described further in Chapter VI). An inventory of federally owned lands has been conducted. An ongoing process to assure accurate identification of these lands will continue. A description of these lands is contained in Appendix A of "State of Michigan Coastal Management Program and Draft Environmental Impact Statement".

Indian trust lands are eligible for assistance as regional entities although such lands are excluded from the boundary.

Private inholdings which are presently located in such areas as national forests and lakeshores have been identified from analysis of plat books and will be included in the coastal boundary and are subject to policies of the Coastal Management Program. As additional lands are acquired by federal agencies as national forests, lakeshores, etc., these federally owned lands will be excluded from the boundary. In addition, many of these inholdings are subject to specific requirements established by federal agencies which administer the adjacent federally owned lands.

Interstate Coordination

To avoid conflicts with coastal boundaries defined by neighboring states' coastal management programs, this program will employ ongoing interstate coordination efforts (most notably through the Great Lakes Basin Commission) in making its boundaries conceptually and cartographically compatible with other states' efforts.

Boundary Revisions

The coastal boundary may be revised as necessary based upon criteria which include: (1) additional sand dune areas as designated under the Sand Dune Protection and Management Act (Act No. 222 of the Public Acts of 1976); (2) floodplain elevation contours as completed; (3) additional public recreation, park or natural areas as established; (4) existing or future state legislation or revised regulations issued pursuant to existing legislation which identifies areas with a strong relationship to the coast which merit special management attention; (5) areas of particular concern as nominated which demonstrate land-lake relationships for such areas as scenic access, etc.; and (6) other areas as their relationship to coastal impacts or resources becomes more evident, (e.g., extent of tributary pollution loadings). In cases where boundary is revised, the Office of Coastal Zone Management will determine if the revision is an amendment or a refinement to the program.

Availability of Boundary Maps

Michigan's ten coastal planning and development regional agencies provided draft boundary maps which have been finalized by the state to insure that boundary lines at regional agency borders are compatible and to incorporate recently designated sand dune areas, (designated under Act No. 222 of the Public Acts of 1976). This mapping effort consists of over 230 separate quadrangles, primarily at 7½ or 15 minute topographic scales. Due to the poor reproductive capability of many maps and the high degree of variability in existing map scales, it is, at present, extremely time consuming and costly to provide a reproducible set of boundary maps. Individuals of agencies may, however, consult coastal boundary maps at either the office of the Coastal Management Program, 7th floor, Stevens T. Mason Building, Lansing, Michigan; or at the office of coastal regional planning and development agencies. Xerox copies of coastal boundary maps may currently be provided by the Coastal Management Program at a cost which will vary according to the number of maps requested and the size of the map(s) which must be reproduced.

In an attempt to assess the usefulness of other mapping documents, the Coastal Management Program conducted a demonstration project with the Michigan Department of State Highways and Transportation to identify land use/land cover and the coastal boundary for 23 Michigan ports. In the near future, a second demonstration project will map land use cover and the coastal boundary for the coastline from Manistique to Escanaba, along the northern Lake Michigan shore. As a result of this activity, computer reproductions of both land use/land cover and the boundary will be available for the pilot areas at virtually any map scale requested. During implementation, this program will determine the feasibility of expanding this project statewide along the coast.

Boundary Field Inspection

If it should become necessary to ascertain whether or not certain land areas are located in the coastal boundary, field checks will be made within two to three weeks of the request by either the Department of Natural Resources or participating planning and development regional agencies.

SUMMARY

Michigan's coastal character is varied with magnificent resources, worthy of protection and management. The coastal boundary provides a focus for Coastal Management Program implementation activities to protect coastal resources and solve coastal problems.

Chapter III
Program Policies and Action Programs

Michigan's Coastal Management Program fully addresses the range of issues envisioned by the United States Congress as reflected in Sections 302 and 303 of P.L. 92-583, as amended, including ecological concerns (e.g., fisheries management, wetlands protection, habitat management, water quality), cultural resources, (e.g., recreational opportunities, historic and archaeological values), commercial importance (e.g., energy facility siting, mineral extraction, commercial harbors, prime agricultural lands), and hazard area management (erosion and flood prone areas).

The central focus of program implementation is to: (1) improve administration of existing state shoreline statutes (e.g., Shorelands Act, Submerged Lands Act, Sand Dunes Act); (2) provide substantial technical and financial assistance to local units of government for creative coastal projects; and (3) to improve governmental coordination to reduce time delays, duplication and conflicts in coastal management decision-making.

The following text describes specific policies and action programs that Michigan will implement in response to state and national mandates to protect our valuable coastal resources and solve serious coastal problems.

MICHIGAN'S COASTAL AREAS

Michigan's coast is a complex resource — both in terms of its biologic and physical nature and its uses and developments. For example, our shorelands encompass such uses as industrial complexes, ports and harbors, intensively used parks and beaches, agricultural, energy and residential areas, as well as undisturbed duneland, beaches and wetlands.

In making decisions to assure proper management and wise use of Michigan's vast coastal area, the Coastal Management Program will direct efforts to achieve the following broad goals:

- Coordinate the operation of federal, state, regional and local programs that influence activity and impacts in Michigan's coastal area.

- Develop a partnership with citizens to promote an awareness of the value and sensitivity of the coastal area and the wise use of resources.

- Encourage and support local units of government to carry out coastal management responsibilities in an effective and efficient manner.

- Protect coastal land, water and air resources from detrimental uses and activities for the public health, safety and welfare.

- Assist in the implementation of programs which lead to wise use of the coastal area.

To clearly describe state policy and action programs which pertain to Michigan's coast, the coastal area will be discussed in this chapter under the heading of five resource areas:

- AREAS OF NATURAL HAZARD TO DEVELOPMENT
  These include erosion and flood prone areas.

- AREAS SENSITIVE TO ALTERATION OR DISTURBANCE
  These include ecologically sensitive areas (wetlands), natural areas, sand dunes, and islands.

- AREAS FULFILLING RECREATIONAL OR CULTURAL NEEDS
  These include areas managed to recognize recreational, historic or archaeological values.

- AREAS OF NATURAL ECONOMIC POTENTIAL
  These include water transportation, mineral and energy, prime industrial and agricultural areas.

- AREAS OF INTENSIVE OR CONFLICTING USE
  These encompass coastal lakes, river mouths, bays and urban areas.

Following is a description of problems and program concerns, state policies and action programs which are common to all five of these coastal areas. This discussion is followed by a description of problems and program concerns, state policies and action programs for each individual type of coastal area.

The purpose of this text is to describe policies and programs which will be utilized and accelerated to address coastal problems and opportunities for Michigan's coastal areas. Statements of policy are derived from state statutes and rules, formal policies of the Michigan Natural Resources Commission, Executive Orders and Directives of the Governor and federal laws and regulations, (e.g. Public Law 92-500).

Michigan's Coast — Problems and Program Concerns

Michigan's shoreland resources present bright opportunities as well as pressing problems. Exceeding coastal resource tolerances typically results in property loss and damage, pollution, economic loss and/or social costs. If not carefully planned and managed, the rising demands for benefits afforded by our coast will result in increased and, in many cases, unanticipated impacts. Such complex and often competitive demands complicate the objective of making effective management decisions.

Michigan's Coastal Management Program fully recognizes the need to protect, preserve, restore and enhance the coastal area in accordance with the mandate of P.L. 92-583. The program policies and action programs provide for resource protection, preservation and restoration, while providing opportunities for recreational and commercial development which are located and designed in an environmentally responsible manner. The Coastal Management Program will encourage, and in some cases support, specific restoration activities (e.g. historic lighthouses) and commercial development (e.g. commercial harbors), in addition to enforcing statutes designed to protect essential resources (e.g. wetlands, sand dunes) and preventing hazardous development in erosion or flood prone areas.

In the past, the state's approach toward coastal management is illustrated by statutes which address, in piecemeal fashion, either specific resources, activities and/or impacts. This ad-hoc approach toward decision making has often resulted in conflicts among federal, state and local governments and citizens while, at the same time, created secondary, unanticipated impacts upon the resource which result in either temporary or permanent resource loss.

Michigan's Coastal Managment Program provides the opportunity to substantially improve and accelerate regulatory, technical and financial assistance programs and intergovernmental coordination and cooperation efforts to protect coastal resources and solve coastal problems. The program's effectiveness was greatly enhanced through approval of Michigan's Coastal Management Program by Governor William G. Milliken, and the Michigan Natural Resources Commission.

Since the Michigan Natural Resources Commission is the policy formation body for the Michigan Department of Natural Resources, their approval of this program significantly strengthens Michigan's approach of integrating existing authorities to accomplish coastal management objectives. Currently, the Department of Natural Resources either directly administers or plays a formal role in the administration of coastal regulatory authorities and state programs which provide financial and technical assistance relative to coastal management. More significant, programs addressing shore erosion, coastal flooding, coastal wetland protection, soil erosion and sedimentation, natural rivers, inland lakes and streams, natural areas, and regulation of the Great Lakes submerged lands are administered by the principal administering Coastal Management Program division — the Division of Land Resource Programs in the Department of Natural Resources. Thus, the statutes which support the following policy statements and Natural Resources Commission adoption of this program insures that Michigan will effeictively implement its Coastal Management Program..

Michigan has established several commissions and advisory councils to provide forums for citizen input and mechanisms to resolve state agency and/or citizen

conflicts when necessary. As described in Chapter V, the Natural Resources Commission, the Michigan Environmental Review Board, the Standing Committee on Shorelands and Water Coordination and other public bodies serve to mediate and resolve conflicts involving coastal management.

Coastal Management Program concerns pertaining to all of Michigan's coastal areas include:

- In order to insure protection of valuable coastal resources and developments, there is a need to improve the monitoring and enforcement of coastal regulatory programs, as well as streamlining the time required for processing various permits.

- The Coastal Management Program must develop and maintain a program which includes objectives, guidelines, standards and technical assistance to guide and assist federal, state, local and private efforts to accommodate planned growth and natural resource allocation consistent with the protection and wise management of our natural resources for the benefit of present and future generations.

- There is a need to provide more certainty in coastal policies, programs and procedures, that activities of the federal government fully consider state and local concerns before they are carried out, that activities of local government do not preclude larger-than-local benefits, and to consider the national interests in coastal management.

- There is a need to coordinate coastal management functions with units of government at all levels and citizens in order to reduce potential program delays, overlap or duplication, and to increase program accountability.

Michigan Policy Pertaining to All Coastal Areas*

In addressing coastal issues, resolving conflicts, and to consider the national, state and local interests in coastal management, the State of Michigan will utilize: (1) the Michigan Environmental Protection Act; (2) the Michigan Natural Resources Commission; (3) the A-95 Review Process; (4) the Michigan Environmental Review Board; (5) the Governor's Cabinet Committee on Environment and Land Use; and (6) other policies emanating from state statutes and rules, Executive Orders of the

*Individual state regulatory and incentive policies which address concerns of the Coastal Management Program are described further in Appendix C — the State Regulatory and Incentive Programs Appendix of "State of Michigan Coastal Management Program and Draft Environmental Impact Statement". Regulatory Programs include state mandates for zoning or licensing and permits while Incentive Programs include state authorities for technical assistance, cooperative and coordination incentives and others.

Governor, formal policies of the Michigan Natural Resources Commission, and federal laws and regulations, (e.g. P.L. 92-500).

It is the policy of the State of Michigan to protect the air, water and other natural resources and the public trust therein from pollution, impairment or destruction unless it can be demonstrated that there is no feasible and prudent alternative to the polluting, impairing or destroying conduct and that such conduct is consistent with the promotion of the public health, safety and welfare in light of the state's paramount concern for the protection of its natural resources; and to provide for declaratory and equitable relief for the protection of such resources, (Act No. 127 of the Public Acts of 1970; and Highway Comm. v. Vanderkloot, 392 Mich 159).

It is state policy to provide for the protection and conservation of the natural resources of the state; to create a 7-member Natural Resources Commission in which the powers and duties of the Michigan Department of Natural Resources shall be vested, (Act 17 of the Public Acts of 1921); that, by way of executive direction, statutory and constitutional authority, the Department shall, by example, by positive programs and by other actions, promote the wise use and reuse of our land resource within its natural capability and in recognition of its relationship to water and air resources. Further, the Department will not, in any way, abet any new use of land and associated water and air resources which has the potential to cause major irreversible damage to Michigan's environment. Public as well as private projects, within the purview of the Department, must meet this test. Where specific authority is lacking to halt or control development judged to be harmful, all other means — persuasion, publicity, moral force — will be employed to prevent or mitigate environmental damage, (Natural Resources Commission Policy No. 5501).

It is state policy to utilize a network of state and areawide clearinghouses for the purpose of reviewing and commenting on notices of intent to apply for federal assistance (A-95 Review) to provide for federal cooperation with state and local governments in the evaluation, review and coordination of federal and federally assisted programs and projects, (Title IV, Section 403, Intergovernmental Cooperation Act of 1968).

It is the policy of the State of Michigan to require that environmental impact statements be reviewed by the Michigan Environmental Review Board for major activities of state or federal agencies, or private parties related to state permits and licenses, which may have a significant impact on the environment or human life; and to accept written and oral public comments for consideration in determining whether or not actions should be modified or suspended; and that the Board provide the Governor with policy recommendations which will assist in conserving and developing the natural resources of the state, (Executive Order 1974-4).

It is state policy to utilize the Governor's Cabinet Committee on Environment and Land Use to review ongoing program operations, to identify emerging problems in the implementation of Executive Office policies, to assure interdepartmental communication and cooperation and to involve state department directors in the formulation of Executive Office policies to a high degree; that these subcabinets serve as a mechanism for resolving policy conflicts among state agencies and the Governor of Michigan, (Executive Directive, October 1, 1975).

It is also state policy to implement mandates established in state statutes, and rules, Executive Orders of the Governor, and formal policies of the Michigan Natural Resources Commission as directed by Article 4 of the Constitution of the State of Michigan of 1963 which declared that the conservation and development of the natural resources of the state are of paramount public concern in the interest of the health, safety and general welfare of the people.

Action Programs Relating to All Coastal Areas

In concert with Michigan policy and the goals of Michigan's Coastal Management Program, following is a description of action programs which will be conducted by the Coastal Management Program to address coastal issues inherent in all of Michigan's coastal areas.

- IMPLEMENT FEDERAL CONSISTENCY AND NATIONAL INTEREST REQUIREMENTS AND IMPROVE COORDINATION AND COOPERATION WITH LOCAL, STATE, FEDERAL AND INTERNATIONAL INTERESTS WHICH HAVE PLANS OR PROGRAMS FOR THE COAST.

  This effort will be accomplished through direct contact and involvement in environmental review processes, planning processes, and coordination with entities such as the Michigan Natural Resources Commission, Great Lakes Basin Commission, International Joint Commission, Citizens Shorelands Advisory Council, regional planning and development agencies and local governmental units in the coastal area.

  This activity will help assure consistency of plans and projects with Michigan's Coastal Management Program through consideration of national, state and local interests.

- IMPROVE THE REGULATORY AND ENFORCEMENT CAPABILITY OF THE STATE OVER ACTIONS HAVING DIRECT AND SIGNIFICANT IMPACTS UPON THE COAST.

  This activity will ensure that, through more effective monitoring, the present laws and regulations will be more fully utilized and enforced.

- EXPEDITE THE ISSUING AND MONITORING OF COASTAL PERMITS.

  Coordination of procedures, base data, plans and ordinances in effect and other permit information should shorten permit processing time while ensuring resource protection. This effort could include establishment of a base data center providing information such as: (1) a computer storage tracking and retrieval system for licenses and permits which have major impact on the coastal area; (2) maps of publicly owned coastal

areas; (3) inventories of geographic areas of particular concern in Michigan's coast; and (4) land capability information pertaining to the coastal area.

- MONITOR THE LEGISLATION AND RULE MAKING PROCESSES FOR ACTIONS AFFECTING THE COASTAL AREA.

  This project would involve close communication between state and federal agencies to assure that coastal management concerns are registered and included in legislative and rule making activities.

  Being informed of legislation and rules which affect the coast should provide for: (1) equitable rules and regulations in the coastal area; (2) additional incentives for property owners to protect and manage coastal resources; and (3) encouraging local unit adoption and administration of responsibilities delegated by state and federal authorities.

- PROVIDE TECHNICAL AND FINANCIAL ASSISTANCE TO LOCAL GOVERNMENTAL UNITS (COUNTIES, TOWNSHIPS, CITIES OR VILLAGES), COASTAL PLANNING AND DEVELOPMENT REGIONAL AGENCIES, AND STATE AGENCIES FOR CREATIVE COASTAL RESOURCE MANAGEMENT ACTIVITIES.

  Activities such as feasibility studies and preliminary engineering reports to address priority areas of local concern, establishing local regulations in conformance with state guidance for local unit administration of certain state delegated authorities, commercial port and harbor studies and others will be eligible for funding consideration by the Coastal Management Program.

  In particular, this activity will improve the capabilities of local units of government to manage their coastal resources, and solve their specific coastal problems, in cooperation with the state's Coastal Management Program.

The remaining portion of this chapter discusses the problems, policies and action programs related to each of the five resource categories.

AREAS OF NATURAL HAZARD TO DEVELOPMENT

Coastal areas which present natural hazards to development include: (1) shoreland erosion areas; (2) earth change sedimentation and erosion areas; and (3) flood risk areas.

In making decisions to assist in properly managing areas of natural hazard to development, the Coastal Management Program will direct efforts to achieve the following goal:

- Encourage the management of properties so as to minimize environmental and property damage resulting from natural and man-induced erosion and flooding.

Following is a description of problems, general program concerns and state policies relative to each of the three coastal areas which present hazards to development, followed by a list of action programs which will be conducted during implementation of Michigan's Coastal Management Program.

Shoreland Erosion Areas — Problems and Program Concerns

Damage from shore erosion in Michigan reaches into the hundreds of thousands of dollars each year. Over 80 homes have been destroyed in the last four years by erosion, while an additional 800 homes are in immediate danger of damage or destruction. Department of Natural Resources' surveys demonstrate that over 500 miles of shoreline are subject to critical erosion problems. During periods of high water levels on the Great Lakes, recession of the bluffline is accelerated, causing increased damages to both private and public properties.

Specific concerns of the Coastal Management Program relative to shoreland erosion areas include:

- Continued damages to inappropriately sited structural development indicates a need for increased information and education efforts about the hazards of erosion as well as more uniform and efficient enforcement programs.

- Improper protective devices may accelerate erosion on neighboring property and may become nuisances to other shoreline users. In addition, the cost of shore protection is prohibitive. New and innovative techniques of shore protection, including beach nourishment and group and/or reach concepts for erosion control need to be developed and applied.

- Property appraisals in high risk erosion areas often fail to fully consider the natural limits of the site. Property appraisals should reflect natural hazards to development to reduce economic hardship.

- Structural damages may occur due to the lack of awareness by individuals buying a piece of property regarding its hazard to erosion. Property owners should be notified of erosion hazards, especially prior to purchases of property prone to erosion to minimize excessive personal losses through deed declarations or other means.

- The use of offshore, deep water sources of material for beach nourishment have been discussed. Studies show that substantial deposits of suitable material exists offshore. Thus, a need exists to develop and evaluate methods for removal, transportation and placement of this material.

- Lake level control works on the Great Lakes are a prime concern of many riparian owners, especially those on Lake Superior. Full opportunity for citizen input and sound justification is needed for actions which partially regulate levels of the Great Lakes.

Michigan Policy in Shoreland Erosion Areas

In accord with Act No. 245 of the Public Acts of 1970, as amended, it is the policy of the State of Michigan to determine the location of high risk erosion areas and determine the types of protection best suited for areas of the shorelands which are both undeveloped and unplatted and require protection from erosion*; to provide technical assistance to persons owning shore property in erosion areas by demonstrating and evaluating erosion control projects, (Act No. 14 of the Public Acts of 1973); to enable the establishment of special assessment districts for erosion control to provide for a uniform, continuous approach to control erosion, (Act No. 148 of the Public Acts of 1976); and to exempt erosion control structures from taxation, (Act No. 165 of the Public Acts of 1976).

The state requires that new structural developments in areas designated as high risk erosion comply with construction setbacks from the bluffline which are enforced either through local zoning ordinances, approved by the state in accord with Act No. 245, or state permit. These structural setbacks are calculated by the state for areas of the shore that are eroding at long-term average annual rates of one foot or greater. The state assists local governmental units in developing zoning ordinances which comply with structural setback requirements so that local governmental units may effectively administer mandates of Act No. 245 of the Public Acts of 1970, as amended, which pertain to high risk erosion areas.

* Michigan is currently proposing rules which would extend the authority of Act No. 245 of the Public Acts of 1970, as amended, to developed and platted shoreland areas. Currently, rules for the Act only apply to undeveloped and unplatted shoreland areas.

In such high risk erosion areas, the state will not issue permits for, or engage in, uses or activities where it can be determined that the use or activity will likely be damaged by shoreline bluff erosion. In other areas prone to bluff erosion, the state will not issue permits for, or engage in, uses or activities where it can be determined that the use or activity will likely be damaged by shoreline erosion, so long as there is a feasible and prudent alternative, consistent with reasonable requirements of the public health, safety and welfare, (Act No. 127 of the Public Acts of 1970).

It is also the policy of the state to participate on the International Joint Commission's Great Lakes Levels Board and provide input into decisions affecting Great Lakes water levels. (Michigan's role in the regulation of Great Lakes water levels will be more completely described in a document entitled: "Michigan's Shoreline Erosion Planning Process", which will be developed in accord with Section 305(b) of the Coastal Zone Management Act. Public hearings will be conducted on this planning process during 1978 to receive comments.)

Earth Change Sedimentation and Erosion — Problems and Program Concerns

Michigan's diverse topography, geology, climate and population distribution have long contributed to serious erosion problems. Soil by volume is Michigan's greatest pollutant. Sediments degrade water quality, destroy plant growth, transport nutrients and decrease the water carrying capacity of water courses. New structural developments will continue to be a major contributor to erosion problems.

Specific concerns of the Coastal Management Program relative to earth change sedimentation and erosion include:

- To reduce soil losses, new and innovative techniques of erosion control such as vegetative methods, need to be developed and applied.

- The character of Michigan's coast will continue to attract an increasing number and variety of new earth changing uses which increase the potential for sedimentation and erosion to coastal waters. Such earth changes will continue to require regulation at the state and local levels through authorities which control such soil losses.

- To reduce soil losses from agricultural and other open space uses, there is a need to develop and apply best management practices through the medium of soil and water conservation plans.

Michigan Policy in Areas of Earth Change Sedimentation and Erosion

As mandated by Act No. 347 of the Public Acts of 1972, the Soil Erosion and Sedimentation Control Act, it is state policy to provide for the control of soil erosion and to protect the waters of the state from sedimentation; that controls be based upon construction plan review and approval by: (1) a permit program approved by the Department of Natural Resources and administered by a county or municipal enforcing agency; (2) state approval of an authorized public agency, exempt from permit requirements but subject to other controls of the Act; and (3) a permit program administered by the Department of Natural Resources in the event of overlapping jurisdiction, local enforcing agency violation, or violations of an authorized public agency. Earth changes which may result in, or contribute to, soil erosion or sedimentation of waters of the state are regulated if the earth change is connected with land use activities which disturb one acre or more of land, or if the earth change is within 500 feet of a lake or stream of the state. All Department of Natural Resources planning, design, construction and maintenance activities shall consider earth change and sedimentation control as part of routine operations, (Natural Resources Commission Policy No. 4602).

Technical assistance is provided to persons proposing earth changes and to local agencies who administer the soil erosion and sedimentation control program. It is state policy that local erosion control ordinances be reviewed and approved by the Michigan Department of Natural Resources. Through permit approval requirements, it is state policy that earth changes be designed, constructed and completed so as to limit the exposed areas of disturbed land to as short a time span as possible, or include other measures which reduce soil losses both during and after construction, (Act No. 347 of the Public Acts of 1972).

Flood Risk Areas — Problems and Program Concerns

Damage from flooding in Michigan reaches into the tens of millions of dollars annually. Approximately 50,000 acres of Michigan's shorelands are susceptible to flooding, with the coastal areas of Saginaw Bay, Lake Erie and Lake St. Clair being the most vulnerable. Flooding occurred in 33 out of 41 Michigan coastal counties in a period from November of 1972 to June of 1973 and has occurred periodically in several areas. Problems resulting from flooding along the Great Lakes range from nuisance conditions to major property destruction. Flooding that occurred from 1972 to 1973 resulted in personal property losses estimated at $8 million and forced expenditure of $47 million by governmental agencies. Flooding also impacts biological resources adjacent to the Great Lakes. Long-term inundation can effect marshes, change vegetative patterns, increase turbidity and disrupt valuable fish and wildlife habitats.

Specific concerns of the Coastal Management Program relative to coastal flood risk areas include:

- To help protect coastal properties from damages to future structures, flood plain delineations need to be completed.

- Flood protection devices may be prohibitively expensive for coastal property owners. Innovative low cost protective techniques, including nonstructural measures, need to be developed and applied.

- Property appraisals in flood hazard areas often fail to fully consider the natural limits of the site. Property appraisals should reflect the natural hazards of flooding to minimize economic hardships.

- Continued flood-related damages (especially during periods of high Great Lakes water levels) indicate a need for increased information and education efforts about the hazards of flooding.

Michigan Policy in Coastal Flood Risk Areas

It is state policy to provide for the protection and management of shorelands affected by flooding; to determine flood risk areas based upon studies and surveys of shorelands subject to flooding from effects of levels of the Great Lakes, (Act No. 245 of the Public Acts of 1970, as amended); to have control over the alteration of the watercourses and the flood plain of all rivers and streams; to prohibit the obstruction of the floodways of the rivers and streams of the state; to assure that the channels and the portions of flood plains that are floodways are not inhabited and are kept free and clear of interference or obstruction which will cause any undue restriction of the capacity of the floodway, (Act No. 167 of the Public Acts of 1968).

It is also state policy that state agencies directly responsible for construction shall preclude the uneconomic, hazardous or unnecessary use of flood plains in connection with facilities; and that encroachments within the floodway of a stream that would result in any increase in flood stage shall be prohibited unless approved by the Department of Natural Resources; that all new construction and substantial improvements shall have the lowest floor elevated to or above the base flood level; that all flood hazard evaluations shall be based upon a base flood that has a one percent chance of being equaled or exceeded in any given year. In areas where regulation of flood plains cause financial hardship, the state will attempt to identify sources of low cost financial assistance to the landowner. Where the state will not have a delineation of the 100-year flood plain available to comply with these policies, the state will, as needed and upon request, identify and develop procedures for on-site determination of the 100-year flood plain according to standard acceptable engineering practices, (Executive Order of the Governor, 1977-4).

It is the policy of the State of Michigan to not finance, engage in, or issue permits for new structural developments proposed within the 100-year flood plain which are inadequately elevated or flood proofed. Existing public facilities shall receive flood proof measures wherever practical and feasible. All state agencies responsible for the disposal of state lands or properties shall evaluate flood hazards in connection with lands or properties proposed for disposal as may be desirable in order to minimize

future public expenditures for flood protection and flood disaster relief and as far as practicable, shall attach appropriate restrictions with respect to uses of the lands or properties by the purchaser and his successors and may withhold such land or properties from disposal. It is also state policy to assist in creating public awareness of the knowledge about flood hazards, (Executive Order of the Governor, 1977-4).

It is state policy that approval of preliminary and final plats shall be conditioned upon compliance with rules of the Department of Natural Resources, adopted for the determination and establishment of flood plain areas or rivers, streams, creeks or lakes, (Act No. 288 of the Public Acts of 1967).

To provide relief and increased information about flood hazards, Michigan also participates in the National Flood Insurance Program and is cognizant of the President's Executive Order of May 24, 1977 related to flood plain management. The state will make every effort to effect federal, state and local agency's decisions in order to discourage unwise development in floodplains.

Action Programs in Areas of Natural Hazard to Development

In concert with state policy and the goals of Michigan's Coastal Management Program, following is a description of some action programs which will be conducted to address concerns and issues in coastal areas presenting hazards to development.

- ACCELERATE DELINEATION AND REGULATION OF FLOOD AND EROSION AREAS.

  This effort will include analysis of aerial photographs to determine rates of bluffline recession in high risk erosion areas and analysis of topographic maps and engineering surveys to determine flood plain boundaries. These tasks will assist in developing structural location requirements, enforced by state permit or zoning in erosion and flood areas. Through local enforcement and management of erosion and flood areas, damages to developments may be significantly decreased.

- PROVIDE TECHNICAL ASSISTANCE RELATED TO EROSION AND FLOOD CONTROL.

  Public information programs, including training programs and informational materials will provide advice to riparian owners on technically sound and feasible alternatives for shore protection. Monitoring of demonstration erosion control sites will assist this technical assistance effort.

- INVESTIGATE VARIOUS MEANS TO PROVIDE TAX RELIEF OR OTHER FINANCIAL RELIEF TO OWNERS OF PROPERTY DESTROYED OR DAMAGED BY SHORE EROSION.

  The state will assist in the development and implementation of federal programs which expand insurance coverage to

structures damaged by nonstorm related shore erosion and for financial assistance for structural flood-proofing. Technical assistance will be provided to citizens and local governmental units to assist them in qualifying for the federal flood insurance program. In addition, studies may be conducted relative to the feasibility of relocating certain public service facilities in erosion and flood prone areas.

- INVESTIGATE THE FEASIBILITY OF REQUIRING THAT FLOOD HAZARD OR EROSION RISK DECLARATIONS BE RECORDED FOR BUYER PROTECTION.

  Such declarations would protect property owners by forewarning potential purchasers of shoreland properties located in flood or erosion areas about development hazards.

- INVESTIGATE FEE TITLE PURCHASE OR LESS THAN FEE SIMPLE PURCHASE OF SPECIFIC COASTAL AREAS WHICH HAVE DAMAGE HISTORY.

  Public acquisition of areas prone to flooding or erosion may serve two objectives: (1) assure that development will not occur in certain hazard areas; and (2) provide opportunity for certain recreation uses by acquiring flood or erosion areas with recreation potential.

- PROVIDE TECHNICAL AND FINANCIAL ASSISTANCE TO REGIONAL AND LOCAL UNITS OF GOVERNMENT TO PROMOTE PUBLIC AWARENESS OF EROSION AND FLOOD HAZARDS.

  During periods of low Great Lakes water levels, hazards to development may not be readily apparent, but must be accounted for in development activities. Public meetings, publications and brochures should be continued during low water periods to provide a medium for exchange of this information.

- ASSIST IN ADDRESSING AND REDUCING CURRENT HEALTH HAZARDS IN FLOOD PRONE AREAS SUCH AS CONTAMINATED OR UNPROTECTED WATER SUPPLIES, SEWAGE DISPOSAL FAILURES, AND OTHERS.

SENSITIVE AREAS

Michigan's coast has many areas that are sensitive to alteration or disturbance. Types of sensitive areas include: (1) ecologically sensitive areas*; (2) natural areas; (3) sand dunes; and (4) islands.

In making decisions to assure wise management of these sensitive areas, the Coastal Management Program will direct efforts to achieve the following goals:

- Protect and enhance Michigan's coastal ecosystem and its diverse array of plants, fish and wildlife.
- Protect, maintain and enhance the cultural, historic and aesthetic values of the coastal area.
- Ensure the wise use and development of silica resources in the coastal area.
- Promote tourism and provide increased recreation opportunity through management which makes the best use of coastal resources.
- Protect land, water and air resources from detrimental uses and activities for the public health, safety and welfare.

Following is a description of program concerns, policies and action programs relative to Michigan's four types of sensitive coastal areas.

Ecologically Sensitive Areas — Problems and Program Concerns

Many coastal wetland areas which once provided essential breeding, nesting, feeding, resting and predator-escape cover for fish and wildlife are now sites for homes, industries and highways. As such valuable habitats disappear, the urgency for management attention increases. The most critical area for maintenance of a viable fishery extends from inland shallow wetlands to lakeward depths of 120 feet. Shallow waters and nearshore lands and transitional areas are subject to bottomland alteration, changes in water quality and interference from human activities.

Specific concerns of Michigan's Coastal Management Program relative to ecologically sensitive areas include:

- Actions such as navigation dredging, spoil disposal, marine construction, sanitary landfills, construction of recreational facilities, intense urbanization, drainage and other actions have

*Ecologically sensitive areas are coastal areas where waterfowl, marsh birds, shore birds, aquatic mammals, fish and other aquatic animals are concentrated during nesting, spawning, rearing of young, feeding, protection or resting or during migration. Areas containing unique or endangered plant or animal communities are of special interest. Wetlands may be considered the major type of coastal ecologically sensitive area.

resulted in habitat loss in many wetland areas. Continued review and regulation of such actions is necessary to avoid unnecessary and unretrievable losses in ecologically sensitive coastal wetlands.

- The failure to recognize the value of coastal ecosystems for fish and wildlife habitat, life support processes, water quality water storage, flood control and others has resulted in environmental loss. The value of such ecosystems needs to be determined to document the need for protection and wise use of these resources.

- There is little public attention to the life-support functions performed by wetlands and, as a result, wetlands are considered by many to be wastelands. An intensive public agency education effort, detailing the primary productivity, energy flow, nutrient cycle and water purification values of a wetland needs to be undertaken.

- To properly manage coastal wetlands, regulatory programs at the state and local levels, including permitting authorities and zoning ordinances must be thoroughly administered and developed.

Michigan Policy in Ecologically Sensitive Areas

In accord with Act No. 245 of the Public Acts of 1970, as amended, it is policy of the state to provide for the protection and management of undeveloped and unplatted shorelands which, on the basis of studies and surveys, are areas determined to be necessary for the preservation and maintenance of fish and wildlife.

On such areas, designated as environmental areas, it is state policy to regulate filling, grading or other alterations of the soils, activities which may contribute to soil erosion and sedimentation, alteration of natural drainage, not including the reasonable care and maintenance of previously established public drainage improvement works, the cutting and removing of trees and other native vegetation on lands not subject to forest management plans, and the placement of all structures within the area of designation.

For all designated environmental areas, the state prepares management plans, composed of a map, a description of boundaries and regulations necessary for protection of the area. Regulations may be enforced either through local zoning ordinances or by state permit. The state provides technical assistance to local governmental units so that they may effectively administer the environmental area provisions of Act No. 245 of the Public Acts of 1970, as amended, in compliance with state guidelines.

It is state policy that environmental areas, designated under Act 245 of the Public Acts of 1970, as amended, be eligible to be entered into a development rights easement with the state and that, in return for maintaining the land as open space, the

landowner is entitled to certain income or property tax benefits. (Act No. 116 of the Public Acts of 1974).

It is state policy to protect riparian rights and the public trust in navigable inland lakes and streams, including the St. Marys, St. Clair and Detroit rivers; and to require permits for all dredging, placing of spoils or other materials, filling, or operating a marina on bottomland; or erecting, or extending a commercial or industrial pier on bottomland in areas under the authority of Act No. 346 of the Public Acts of 1972.

It is state policy to protect the interest of the general public in all of the unpatented lake bottomlands and unpatented made lands in the Great Lakes, including bays and harbors belonging to the state or held in trust by the state, including those lands which have been artificially filled; to provide for the sale, lease, exchange or disposition of these lands whenever it is determined by the Department of Natural Resources that the private or public use of such lands and waters will not substantially affect the public use thereof; and to control all indiscriminate acts of filling and dredging along the shores of the Great Lakes, including Lake St. Clair to protect the public trust, (Act No. 247 of the Public Acts of 1955).

It is the policy of the State of Michigan to provide for the protection and conservation of the natural resources of the state, (Act No. 17 of the Public Acts of 1921) that by way of Executive direction, statutory and constitutional authority, the Department of Natural Resources shall, by example, by positive programs and by other actions, promote the wise use and reuse of our land resources within its natural capability and in recognition of its relationship to water and air resources; that the Department will not, in any way, abet new uses of land and associated water and air resources which has the potential to cause major irreversible damage to Michigan's environment, (Natural Resources Commission Policy No. 5501).

It is state policy to effectively coordinate review and to eliminate duplication of effort on permit applications made under the River and Harbor Act of 1899 and the Federal Water Pollution Control Act, 1972 amendments, with respect to the United States Army Corps of Engineers, and Act No. 247 of the Public Acts of 1955, as amended, and Act 346 of the Public Acts of 1972, with respect to the State of Michigan by utilizing a joint permit application form for activities falling under the authority of these authorities and by coordinating review of such permit applications, (Memorandum of Understanding, July 28, 1977).

Natural Areas — Problems and Program Concerns

Natural areas along the shores of the Great Lakes provide a variety of opportunities for enrichment, research and solitude. Bottomlands, swamps, bogs, forests and woodlots are examples of the types of biotic communities found in coastal areas. These areas display wilderness, scenic, aesthetic, geologic, historic or scientific qualities. These natural areas are irreplaceable and should be protected from destruction for the enjoyment and cultural heritage of present and future generations.

Specific concerns of the Coastal Management Program relative to coastal natural areas include:

- To provide for the protection, preservation and enhancement of natural coastal areas, there is a need to consider reasonable alternatives to actions causing the deterioration, modification and destruction of coastal areas having cultural, educational and research values relating to unique, outstanding or representative natural areas, scenic vistas, unique land forms, historic and archaeological sites.

- Competing coastal activities cause a continuing loss of land and water habitats harboring rare and endangered species of plants and animals. These areas should be identified and plans made for future use and protection.

Michigan Policy Relative to Natural Areas

It is state policy to authorize the establishment of a system of designated wild, scenic and recreational rivers; to fund necessary studies and comprehensive planning for the establishment of the system; to provide for planning, zoning, and cooperation with local units of government; to authorize local units of government and the Natural Resources Commission to establish zoning districts in which certain uses of rivers and related lands may be encouraged, regulated or prohibited; to provide for limitations on uses of land and their natural resources and on the platting of land; and to provide that assessing officers shall take cognizance of the effect of zoning on true cash value, (Act No. 231 of the Public Acts of 1970).

It is state policy to provide for the conservation, management, enhancement and protection of fish, plant life, and wildlife species endangered or threatened with extinction; and to provide for enforcement authority, (Act No. 203 of the Public Acts of 1974).

It is policy of Michigan to provide for the protection and management of undeveloped and unplatted shorelands which, on the basis of studies and surveys, are areas determined to be necessary for the preservation and maintenance of fish and wildlife, (Act No. 245 of the Public Acts of 1970, as amended).

It is policy of the State of Michigan to create and regulate wilderness areas, wild areas and natural areas based upon recommendations from a wilderness and natural areas advisory board, consisting of seven citizen representatives; that on such designated areas the following activities be prohibited: removing, cutting, picking or otherwise altering vegetation; granting of easement for any purpose; exploration for or extraction of minerals; a commercial enterprise, utility or permanent road; a temporary road, landing of aircraft, use of motor vehicles, motorboats, or other form of mechanical transport, or any structure or installation, except as necessary to meet minimum emergency repairs for administration as a wilderness area, wild area or natural area. Private land or land under the control of other governmental units may be designated in the same way as wilderness, wild and natural areas by the Natural

Resources Commission and administered by the Department of Natural Resources under a cooperative agreement between the owner and the Natural Resources Commission, (Act No. 241 of the Public Acts of 1972).

Activities which cannot satisfy these statutory mandates must be modified or suspended. Moreover, in such natural areas, the state will not issue permits for or engage in, activities where it can be demonstrated that the activity is likely to pollute, impair or destroy identified natural areas or their attributes, consistent with reasonable requirements of the public health, safety and welfare, (Act No. 127 of the Public Acts of 1970).

Sand Dunes — Problems and Program Concerns

Michigan's sand dunes are among the largest and most extensive landforms of this type in the country. Sand dunes along the shores of the Great Lakes are unique natural areas, offering a variety of opportunities. The industrial, aesthetic, scenic, educational and recreational qualities of coastal dunes make them among the most impressive of all land resources. As a sensitive resource, dunes are subject to degradation by sand extraction activities, intensive recreational use and other developments. Removal of vegetation in sand dune areas activates the movement of a once stable dune, creating blowouts and increasing the migration of sand. Man's activities, as well as wave attack, are largely responsible for damage to vegetative cover. Sand dunes are among the most erodible of Michigan's shoreland types; eroding the bluff surface in some locations at rates as high as four feet or more per year.

Specific concerns of the Coastal Management Program pertaining to sand dune areas include:

- Competition for recreational opportunity results in irreversible impacts of fragile dune areas. There is a need to manage dune areas having a low capacity to absorb the impacts of some high density recreation use activities.

- Conflicts between economic and environmental interests are often the result of poor land practices and lack of sequential land use planning. Implementation of sound management practices will help protect the resources and avoid unnecessary conflict.

- There is a need for cooperative and coordinated efforts between the government and private sector in regulating sand dune mining to achieve understanding and apply best management practices. Much of this need can be accomplished in the implementation of the recently enacted Great Lakes Sand Dune Protection and Management Act.

Michigan Policy in Sand Dune Areas

In accord with Act No. 222 of the Public Acts of 1976, it is policy of the State of Michigan to provide for study, protection, management and reclamation of Great Lakes sand dunes; to inventory Great Lakes dunes to determine current and projected sand dune mining practices; amount of sand reserves; areas that would contain sufficient reserves and have properties suitable for use as foundry core and molding sands or other uses of sand; sand dune areas that, for environmental or other reasons, should be protected through purchase; the location of barrier dunes along the shoreline; methods for recycling or reusing sand for industrial and commercial purposes; and recommendations for the protection and management of sand dune areas for uses other than sand mining.

It is state policy that a person or operator shall not engage in sand dune mining within the Great Lakes sand dune areas without first obtaining a permit from the Department of Natural Resources. Prior to receiving a permit, a person or operator shall submit: (1) a permit application; (2) an environmental impact statement; (3) a progressive cell-unit mining and reclamation plan; and (4) a 15-year mining plan. The Department of Natural Resources shall deny a permit if, upon review of the environmental impact statement, it determines that the proposed sand mining operation would have an irreparable harmful effect on the environment.

Islands — Problems and Program Concerns

Michigan's Great Lakes waters contain over 150 islands of 10 acres or larger in size. Two hundred and eighteen islands, some no larger than a city lot, have recently been inventoried by the United States Bureau of Land Management, while over 500 are listed in various almanacs. Many islands are ecologically sensitive or display wilderness or natural characteristics. Some islands may be of considerable historic significance, containing remnants of previous habitation. Recent years have seen a growing interest in islands for wilderness oriented recreational activities. Development pressures are also increasing in some island areas complicating the delivery of public services such as water supply and sewerage system.

Specific concerns of the Coastal Management Program relative to Great Lakes islands include:

- To determine adequate measures for protection and enhancement, and to determine land capability, there is a need for comprehensive inventories of the physical and biological characteristics of Michigan's Great Lakes islands.

- Many islands which have shallow soils and poor drainage often support unique and scarce breeding grounds for fish and wildlife. Attempts to develop these areas need to be carefully considered to reduce environmental loss and economic hardship.

- Access to inhabited islands may be interrupted or halted by disruptions of ferry service due to winter navigation. The effects of winter navigation upon ferry service must be evaluated and corrective measures prescribed.

- To protect the historic and archaeological qualities of many Great Lakes islands, funding sources and technical assistance need to be developed and implemented.

- The quality and quantity of drinking water supply is a concern of some island residents. There is a need to investigate and determine alternative sources of water supplies to provide continuously safe and adequate amounts of drinking water.

- Ecological imbalances resulting from past independent experimentation cause reduced carrying capacity and corresponding resource losses. Mechanisms for assigning responsibility for abandoned ventures and projects should be developed and implemented.

- Many islands have bedrock characteristics that are unsuitable for septic fields and sanitary landfills. Creative solutions to past development problems and alternatives to present future problems must be developed.

Michigan Policy Relative to Great Lakes Islands

Michigan currently has no regulatory policies which specifically address the problems and program concerns on Great Lakes islands. Where applicable, policies stated through this chapter will be implemented on Great Lakes islands. These policies may relate to wetland protection, air and water quality, etc. A detailed description of policies which may be applied to coastal island areas is contained in Appendix C of "State of Michigan Coastal Management Program and Draft Environmental Impact Statement".

Action Programs for Coastal Sensitive Areas

In concert with state policy and goals of the Coastal Management Program, following is a list of action programs that will be conducted to assist in properly managing sensitive coastal areas.

- PROVIDE TECHNICAL AND FINANCIAL ASSISTANCE IN EFFORTS FOR GREAT LAKES SAND DUNE PROTECTION AND SAND RESOURCE UTILIZATION AS AUTHORIZED UNDER THE SAND DUNE PROTECTION AND MANAGEMENT ACT.

This activity will include: (1) economic studies of industrial needs and alternative sources; (2) identification of environmental areas requiring protection by acquisition; (3) priority list of lands for public acquisition; (4) identification of methods for recycling or reuse of sand for industrial or commercial purposes; (5) identification of barrier dunes and their value; and (6) recommendations for protection and management of dune areas for uses other than sand mining.

- EVALUATE METHODS FOR ACQUIRING CERTAIN SENSITIVE COASTAL AREAS HAVING UNIQUE LONG-TERM ENVIRONMENTAL, EDUCATION OR ECONOMIC VALUE.

  In some cases, techniques of less than fee simple acquisition, resale or lease back arrangements may be sufficient to achieve accepted public objectives for these areas, including proper management and increased recreation opportunity. Existing and potential sources of funding in federal programs for acquisition of sensitive areas need to be explored.

- ACCELERATE ONGOING REGULATORY AND ASSISTANCE EFFORTS TO PROVIDE FOR THE IDENTIFICATION, APPRECIATION AND WISE MANAGEMENT OF COASTAL WETLANDS AND OTHER NATURAL AREAS.

  Efforts need to be directed toward developing a state, local, property owner relationship for the identification and best management of sensitive fish and wildlife habitats along the Great Lakes shorelands.

- DEVELOP AND TEST INNOVATIVE TECHNIQUES FOR RESTORING OVER-USED OR DEGRADED NATURAL OR ECOLOGICALLY SENSITIVE AREAS.

  Restoration of these important areas will increase habitat resources and provide additional opportunities for natural areas education/appreciation programs.

- ASSIST IN THE DEVELOMENT AND TESTING OF INNOVATIVE FISHERIES STOCKING PROJECTS, PARTICULARLY WITH RESPECT TO ESTABLISHING A NATURALLY REPRODUCING LAKE TROUT POPULATION.

  This activity will provide additional fishing opportunities as well as restoring the natural ecological predator/prey relationship in the Great Lakes.

- DEVELOP AND TEST INNOVATIVE TECHNIQUES FOR THE PROPER DISPOSAL OF SANITARY AND SOLID WASTES ON ISLANDS WHERE GEOLOGIC CONDITIONS CONSTRAIN DEVELOPMENT.

AREAS FULFILLING RECREATIONAL OR CULTURAL NEEDS

Areas fulfilling recreational or cultural needs are separated into two areas: (1) recreation areas; and (2) historic and archaeological areas. In making decisions to assure wise use and proper management of areas which fulfill recreational or cultural needs, the Coastal Management Program will direct efforts to achieve the following goals.

- Encourage tourism and provide increased recreation opportunity through management which makes the best use of coastal resources.

- Protect the cultural, historic and aesthetic values of the coastal area.

Following is a discussion of the program concerns, policies and action programs for the two types of areas fulfilling recreational or cultural needs.

Recreation Areas — Problems and Program Concerns

The Great Lakes coastal areas have long provided recreational opportunities for both Michigan residents and visitors from other states. Michigan's 3,200 miles of coastline offers a variety of recreational and scenic attractions. People seek out coastal waters for boating, fishing, water skiing, scuba diving and swimming. They go to the shore to view the rock cliffs of Lake Superior; to hunt or observe wildlife and vegetation in the wetlands of Saginaw Bay, Lake St. Clair and Lake Erie; to camp near the majestic sand dunes which tower over Lake Michigan; or to travel back into the well-preserved past of Mackinac Island. The demand for outdoor recreation and increased access* is increasing steadily with population growth, personal income and leisure time. The growth of nonrecreational uses competing for coastal areas also continues; generating concern that timely consideration be given to recreational capabilities of land and water areas before irreversible coastal land use choices are made.

In 1972, some 300,000 Michigan sport fishermen expended over two million angler days participating in their recreation. They creeled over two million trout and salmon. Studies indicate that the value of this fishery in Michigan alone approaches $30 million annually. The Great Lakes fisheries will continue to prosper and provide recreation and tremendous economic benefits so long as critical management measures are continued. These include control programs for sea lamprey, maintaining effective and direct control over commercial harvest; continued planting of trout and salmon to check populations of alewife; and improving and protecting the quality of the environment.

*In accord with Section 305(b)(7) of the Coastal Zone Management Act, Michigan is developing a planning process for the protection of and access to public beaches and other public coastal areas. Public hearings on this planning process will be conducted in 1978.

Specific concerns of the Coastal Management Program relative to recreation areas along the coast include:

- To avoid environmental loss and degradation, there is a need to determine the capability of fragile coastal lands to absorb the impacts of various types of recreation use.

- As the demand for recreational opportunities increases, the need to improve the accessibility of coastal land and water to the widest range of recreation users, consistent with resource capability, becomes more urgent. Expanded recreation use through various types of acquisition is especially vital in and around Detroit and other urbanized areas of the coast.

- To avoid program duplication and conflict, recreation planning in Michigan's coastal area should be consistent with the provisions of the *Michigan Recreation Plan*, (S.C.O.R.P.).

- To assure that agency decision-making considers all interests of the state, there is a need to encourage the expansion of public and agency identification of potential sites for recreation through the area of particular concern process.

- To provide for economic stability, there is a need to continue and expand promotional efforts related to tourism in the coastal area.

Michigan Policy for Recreation Areas

It is policy of the State of Michigan to provide and develop facilities for outdoor recreation, (Act No. 17 of the Public Acts of 1921); to protect and preserve public right-of-way which lead to frontage on lakes, streams, or the Great Lakes, (Natural Resources Commission Policy No. 3201); that state-owned lands other than state parks and recreation areas shall be managed for purposes for which they are best suited and in a manner which will benefit the general public in the most prudent and accommodating manner, (Natural Resources Commission Policy No. 2604); that state parks and recreation areas shall be managed to afford optimum opportunities to enjoy a variety of recreational pursuits by the general public, (Natural Resources Commission Policy No. 2605); to serve the public interest for recreational trails by expanding, as possible, facilities on state lands and by providing the leadership in planning and coordinating statewide trails systems for each of the major trails sports, (Natural Resources Commission Policy No. 2504); that wildlife management, habitat improvement and public hunting be carried on in all parts of the recreation areas where such operations do not conflict with intensive use areas, (Natural Resources Commission Policy No. 2108); and to provide interpretive services in state parks, (Natural Resources Commission Policy No. 2403).

It is policy of the Natural Resources Commission that the Department of Natural

Resources shall establish priorities for fisheries management on waters of the state primarily on the basis of need, expected public benefits, and the desire for a balanced program. Riparian ownership and the level of public access of any particular water should have a bearing on the management priority decision, but should not transcend the first consideration, (Natural Resources Commission Policy No. 3110).

It is state policy that the commercial harvest of salmon be restricted to contracts issued by the Department of Natural Resources in designated areas to be determined annually and to prohibit an open water commercial fishery on salmon by restricting the commerical harvest to state-owned wiers operated by the Department of Natural Resources (Natural Resources Commission Policy No. 3101); and to propogate and plant hatchery fish, construct, maintain and operate artificial spawning areas; transfer wild fish, introduce nonindigenous species, and authorize certain private plants in order to create and maintain a high quality and productive fishery, (Natural Resources Commission Policy No. 3108).

It is also state policy to provide for the making of reciprocal agreements with adjoining states to cover the taking of fish from inland waters and the Great Lakes that lie on the common boundary and to provide a penalty for the violation of any such reciprocal agreements, (Act No. 158 of the Public Acts of 1949).

It is state policy to create a state recreational land acquisition trust fund to be funded by the sale of oil, gas and mineral leases in the Pigeon River State Forest and in certain other land and from the royalties accruing from the oil, gas and mineral leases sold in the Pigeon River Country State Forest and in certain other land; to create the state recreational land acquisition trust fund board; and to provide for the administration and uses of the fund, (Act No. 204 of the Public Acts of 1976).

It is policy of the State of Michigan to improve the accessibility of state land and water resources to the wildest possible range of socio-economic classes consistent with environmental protection and public safety needs; to respond to changing trends in demand for recreational pursuits while minimizing conflicting use through management policies consistent with carrying capacity principles; to acquire, manage and regulate recreational and cultural areas for preservation of natural beauty; to provide management incentives and regulatory controls for land and water resources of the state to ensure continued recreational use as well as the survival of fish and wildlife populations; to develop protective measures for sites and objects having aesthetic, geologic, archaeologic, natural or scientific values through various state controls; and to increase recreational opportunities through an extension of state programs, (1974 Michigan Recreation Plan).

It is state policy to provide for the registration and regulation of off-road vehicles which are defined as being capable of cross-country travel without benefit of a road or trail on or immediately over land, snow, ice, marsh, swampland, or other natural terrain, (Act No. 319 of the Public Acts of 1975, as amended).

It is Michigan policy to regulate trespass upon any lands, to prohibit the possession of a loaded firearm or discharge of a firearm within the limits of the right-of-way of any public highway adjoining certain lands; prohibit the posting or enclosing of lands except by the owner or leasee of lands or by his authorized agency, (Act No. 323 of the Public Acts of 1976).

It is policy of the State of Michigan to authorize participation by the state and its

subdivisions in programs of federal assistance relating to the planning and development of outdoor recreation resources and facilities; that the Department of Natural Resources be authorized to prepare, maintain and keep up-to-date a comprehensive plan for the development of the outdoor recreation resources of the state, (Act No. 316 of the Public Acts of 1965).

It is state policy that the Michigan Waterways commission provide for the acquisition, construction, and maintenance of harbors and channels; to provide for the regulation and control of boating within the boundaries of this state; and to provide for state participation in certain federal programs, (Act No. 320 of the Public Acts of 1974).

Historic and Archaeologic Areas — Problems and Program Concerns

Michigan's Great Lakes shorelands present a rich chronicle of the historic development of both the state and nation. The Great Lakes shorelands corridor has served as an invaluable transportation system for both historic and prehistoric people, providing impetus for settlement and cultural development. Michigan's Great Lakes coastal areas contain heavy concentrations of records and artifacts of the state's 13,000 year history of human habitation. If properly preserved, these sites could yield valuable information about our past. Unfortunately, the pressures of development which have resulted in the loss or destruction of many such resources continue to threaten many existing sites.

Coastal Management Program specific concerns with respect to historic and archaeologic sites include:

- To afford greater opportunities for historical preservation, research and education, there is a need to provide for economic viability and future public use of historic and archaeological sites through acquisition, restoration and preservation.

- To avoid program duplication and conflict, historic planning in Michigan's coastal area should be consistent with provisions of the *Michigan Historic Preservation Plan.*

Michigan Policy Relating to Historic and Archaeologic Areas

It is the policy of the State of Michigan to encourage the establishment of historic districts; to provide for the acquisition of land and structures for historic purposes; to provide for preservation of historic sites and structures; to provide for the creation of historic district commissions; and to provide for the maintenance of publicly owned historic sites and structures by local units, (Act No. 169 of the Public Acts of 1970).

It is state policy to maintain a state register of historic sites which may involve state agencies in environmental review proceedings, (Act No. 10 of the Public Acts of 1955 and Executive Order 1974-4); to designate natural rivers for the purpose of preserving and enhancing its values for water conservation, its free flowing condition

and its fish, wildlife, boating, scenic, aesthetic, flood plain, ecologic, historic and recreational values and uses, (Act No. 231 of the Public Acts of 1970); and to provide for the preservation of farmland and open spaces through agreements or easements with the state or with local governing bodies in which the two parties jointly hold the right to develop the land or in which the owner relinquishes the right to develop the property either in a term of years or in perpetuity. (Included in the definition of open space is "Any undeveloped site included in a national registry of historic places or designated as a historic site pursuant to state or federal law."), (Act No. 116 of the Public Acts of 1974).

The director of the Michigan History Division, Department of State, acts as state historic preservation officer, authorized under the National Historic Preservation Act of 1966, (Public Law 89-665). This statute directs the Secretary of the Interior to establish a National Register of Historic Places. Properties are nominated at the state level by the History Division and evaluated by federal agencies. Section 106 of this Act authorizes procedures which federal agencies must follow in cases where a federally funded or licensed undertaking may affect property listed under the National Register of Historic Places. The Advisory Council on Historic Preservation assesses federally funded or licensed projects which impact cultural resources. Executive Order 11593 of May 13, 1971 directs all federal agencies to inventory historic and archaeological properties under their ownership or control.

It is also state policy that environmental impact statements be prepared for major state activities which may result in the alteration or destruction of a significant element of the human, natural, amenity or historic resources of the state, (Executive Order 1974-4).

Action Programs for Areas Fulfilling Recreational and Cultural Needs

In concert with state policy and the goals of the Coastal Management Program, and in support of the coastal access planning element, following is a list of action programs which will be conducted to assist in properly managing areas fulfilling recreational and cultural needs.

- PROVIDE ASSISTANCE TO PROJECT SUPPLY AND DEMAND FOR RECREATION USE AND IDENTIFY AREAS ACCORDING TO THEIR SUITABILITY AND AVAILABILITY FOR ADDITIONAL COASTAL PUBLIC RECREATION USE.

  This activity would include inventories and mapping of coastal areas of: (1) high recreation value; (2) recreation supply; (3) recreation demand; and (4) recreation potential.

- DEVELOP PROGRAMS FOR MEETING PROJECTED DEMANDS AND OBTAINING PUBLIC ACCESS TO HIGH VALUE RECREATION AREAS.

  This activity could include: (1) evaluating the feasibility of establishing a state revolving fund for the purchase of scenic

easements; (2) identify funding sources and techniques for acquisition and development of coastal areas suitable for recreation; (3) use of less than fee simple acquisition techniques; (4) use of applicable federal funds and programs to acquire beach areas; and (5) closer local, state and federal coordination on actions which would have detrimental resource or long-range economic and social impacts.

- SUGGEST PRIORITIES FOR USE OF SENSITIVE OR UNIQUE AREAS WHERE THERE IS RECREATION POTENTIAL.

  Development of a system of use priorities for areas of recreation potential would help specify those types of recreational activities which should occur or be limited in relation to natural capability or tolerance of sensitive coastal lands.

- PROVIDE TECHNICAL AND FINANCIAL ASSISTANCE TO LOCAL GOVERNMENTS TO ANTICIPATE AND MEET PROJECTED DEMANDS UPON PUBLIC SERVICES AND FACILITIES CAUSED BY INCREASED USE DURING SEASONAL PERIODS, INCLUDING SPECIFICALLY POLICING AND LITTER CONTROL.

  Public agencies responsible for maintaining and providing recreation services will benefit from information which addresses problems of overcrowding and conflict during peak recreation use periods. Such assistance will help guard against misuse of facilities and damages to natural features in recreation areas.

- REFINE A PLANNING PROCESS THAT CAN IDENTIFY PUBLIC SHOREFRONT AREAS APPROPRIATE FOR INCREASED ACCESS AND/OR PROTECTION.

  This activity will result in providing increased access for citizens to enjoy public shorefront areas.

- PROVIDE FINANCIAL ASSISTANCE TO LOCAL UNITS OF GOVERNMENT FOR CAPITAL IMPROVEMENT PLANNING, PROGRAMMING AND ENGINEERING DESIGN FOR THE PROTECTION OF PUBLIC PROPERTY.

- EXPLORE TAX OR OTHER ECONOMIC INCENTIVES FOR PROTECTION OF HISTORIC AND ARCHAEOLOGIC SITES.

  The investigation of means to provide property owners of historic and archaeologic sites certain tax incentives contingent upon agreements that incompatible uses will not be permitted. Further, investigate techniques to promote preservation and assist in maintaining such structures or sites as economic assets to the community.

- COOPERATE WITH THE STATE HISTORIC PRESERVATION OFFICER TO EXPLORE AND DOCUMENT EXISTING AND POTENTIAL FEDERAL, STATE OR LOCAL FUNDING SOURCES FOR PRESERVATION AND RESTORATION OF HISTORIC AND ARCHAEOLOGICAL SITES.

  The Michigan History Division reports that the current level of funding for historic preservation is inadequate. Potential sources of funding such as state grants; state administered federal grants, revenue sharing funds through local government; community development block grants; special state appropriations; private foundations; local businesses, clubs and community organizations; revolving loan funds; and individual donations should be assessed.

AREAS OF NATURAL ECONOMIC POTENTIAL

Areas of natural economic potential may be separated into four groups: (1) mineral and energy resource areas; (2) agricultural and forest resource areas; (3) prime industrial areas; and (4) water transportation areas.

In making decisions which facilitate orderly and proper management of such areas, the Coastal Management Program will direct efforts to achieve the following goals:

- Ensure the wise use and development of mineral and energy resources in the coastal area.
- Recognize the economic value of agricultural, energy, industry, transportation, mining, tourism and other economic interest in Michigan's coastal areas in regional, national and worldwide commerce.

Following is a description of program concerns, policies and action programs for each of the four types of coastal areas of natural economic potential.

Mineral and Energy Areas — Problems and Program Concerns

Expanding energy and mineral resource supplies to meet increasing domestic and industrial needs will place new demands on the lands and waters along our nation's shores. These coastal areas are highly regarded for environmental, recreational and economic values, and competition for the use of resources is increasing substantially.

Michigan's shorelands have a diversified resource base. Minerals found in counties bordering the Great Lakes include sand, limestone, gypsum, calcite, dolomite, salt, copper, iron, petroleum and natural gas with potential production of uranium, phosphates, coal and others. Large copper reserves are found offshore from the Keweenaw Peninsula. Minerals currently extracted from the bottomlands of the Great Lakes are limited to sand and salt.

Before the end of the century, demand for energy resources is expected to more than triple. National domestic production of energy has not matched consumption and known domestic reserves are being rapidly depleted. Michigan, like the nation, depends mainly on oil, natural gas and coal for its energy. Traditionally, Michigan is a resource-poor state which must import 100% of its coal, 100% of its uranium; about 92% of its oil, and 90% of its natural gas. Meeting future demands will require long-term planning to develop necessary energy and mineral resources in an economically wise and environmentally responsible manner.

Specific concerns of the Coastal Management Program relative to mineral and

energy resource areas* include:

- A statewide energy plan is needed to assure an adequate energy supply which is environmentally acceptable and socially desirable.

- To prevent or reduce social, economic and environmental impacts related to energy development, management guidelines are needed to assess site suitability, and to anticipate and manage impacts.

- To insure environmentally sound development of all energy and mineral resources, there is a need to anticipate and evaluate possible impacts resulting from development of new sources of energy.

- Financial assistance is needed in planning for, and ameliorating, the effects of energy and mineral development to help prepare for consequences of these activities in coastal areas.

- Sequential use guidelines are needed to enhance land subjected to mineral or energy extraction.

Michigan Policy in Mineral and Energy Resource Areas

It is policy of the State of Michigan to formulate, recommend and implement energy conservation programs to facilitate better utilization of our limited energy resources; that the State Energy Administration coordinate state agency action relating to energy planning, and serve as the liaison for the state with the federal government, other states and local units of government on such matters. The Energy Administration shall gather and coordinate all information available to the state in dealing with energy policy and planning related problems, and cooperate and assist the Executive Office of the Governor in energy policy and planning matters and in preparing energy, conservation, plans and programs; that the Energy Administration shall be the state office responsible for assisting the federal government in the implementation of the Federal Mandatory Petroleum Allocation Program in Michigan, (Executive Directive of the Governor, 1976-2).

It is also the policy of the state to encourage the conservation of natural resources through the promotion or development of systems to collect, separate, reclaim and recycle metals, glass, paper, and other materials of value from waste for energy

*An energy facility planning process, which will fulfill Section 305(b)(8) of the Coastal Zone Management Act of 1972 (P.L. 92-583) will be developed during 1978. The process will include all energy facilities likely to be located in, or which may significantly affect the coastal area.

Full opportunity will be provided for review of this planning process. It is anticipated that public hearings will be held in late summer or early fall, 1978.

production uses and to provide a coordinated statewide waste management and resource recovery program. (Act No. 366 of the Public Acts of 1974).

It is state policy to provide for a supervisor of wells: and to provide for the prevention of waste and for the control over certain matters, persons and things relating to the conservation of oil and gas, (Act No. 61 of the Public Acts of 1939).

It is state policy that a drilling permit for oil or gas shall be denied when the Supervisor of Wells (Director of Department of Natural Resources) finds that oil and gas operations cannot be conducted without causing or threatening to cause serious or unnecessary damage or destruction of the surface soils, animals, fish or aquatic life or property of the state. If a permit is granted, it shall be the responsibility of the Supervisor of Wells to specify the permit restrictions and conditions under which the oil and gas operation will be conducted, that will result in minimum damage to the land and related natural resources. In reviewing applications, the following factors shall be considered: (1) will the drilling operation cause unnecessary destruction of the surface soils, wildlife, fish or aquatic life; (2) will the drilling operation unreasonably molest, spoil or destroy state-owned lands; and (3) all related activities shall be considered such as improvements or widening of existing roadways, new roads, installation of pipelines and other structures necessary to serve the well, (Natural Resources Commission Policy No. 2303).

It is policy of the state that drilling permits for oil and gas wells shall not be issued in the International boundary waters comprising Lake Huron, the St. Clair River, Lake St. Clair and the Detroit River to its mouth in Lake Erie; that drilling permits for oil and gas wells may be granted on the uplands bordering these waters and upon islands therein, both in the Province of Ontario and the State of Michigan provided that they are not within 350 feet of the water's edge. Permits for wells closer than 350 feet may be granted only after individual inspection and subsequent approval by the Ontario Lieutenant Governor in Council or the Supervisor of Wells of Michigan. Before such permits are to be granted by either the State of Michigan or the Province of Ontario, at least 30 days notice will be given to the other governmental jurisdiction, (Natural Resources Commission Policy No. 2304).

It is the policy of the State of Michigan that the Supervisor of Wells shall be responsible for the prevention and control of all water pollution resulting from oil and gas field operations, including the drilling, operation, maintenance and abandonment of oil and gas wells, and the operation, maintenance and abandonment of all lease collection pipelines, lease crude-oil storage, including central tank facilities, and all handling and disposal of oil-field brines. The Water Resources Commission shall be responsible for the prevention and control of water pollution resulting from the transportation, processing, refining and storage of oil or oil products beyond lease storage, tanks, oil-field operations or refineries including pipelines, truck transportation, vessel transport, railroad transport, and other overland or overwater means. (Act No. 244 of the Public Acts of 1929, as amended; Act 61 of the Public Acts of 1939, as amended; Natural Resources Commission Policy No. 2305).

It is state policy that oil drilling activities on Michigan's Great Lakes bottomlands be forbidden until such time as a national emergency exists, and offshore drilling technology can insure safeguards to prevent environmental degradation. (Natural Resources Commission Policy No. 2310).

It is state policy that any person, firm or corporation, in order to remove marl,

stone, sand, gravel, etc., from or under the beds of any of the Great Lakes and bays and harbors connected therewith within the jurisdiction of the State of Michigan must first obtain a written lease from the Michigan Department of Natural Resources. (Act No. 326 of the Public Acts of 1913, as amended; Natural Resources Commission Policy No. 2301).

It is state policy that there shall be no permits issued to prospect or mine concentrations of manganese nodules in Green Bay which are located in both Wisconsin and Michigan waters. Permission may be granted to sample these deposits by conventional oceanographic techniques provided that anti-pollution laws are not violated. If geologic and economic data reveal that the deposits are of commercial grade and could be mined without degrading the environment, the Michigan and Wisconsin Departments of Natural Resources shall develop a joint recommendation which can be presented to the respective natural resources commissions for a final determination of overall policy, (Natural Resources Commission Policy No. 2302).

It is state policy to provide for the reclamation of lands subjected to the mining of minerals; to control possible adverse environmental effects of mining; to preserve natural resources; to encourage the planning of future land use; and to promote the orderly development of mining, the encouragement of good mining practices, and the recognition and identification of the beneficial aspects of mining, (Act No. 92 of the Public Acts of 1970, as amended).

It is also state policy to provide for the regulation and control of public utilities and other services affected with a public interest within this state; that the Michigan Public Service Commission shall have power and jurisdiction to regulate all public utilities in the state except any municipally owned utility and except as otherwise restricted by law. The Commission is vested power and jurisdiction to regulate all rates, fares, fees, charges, services, rules, conditions of service and all other matters pertaining to the formation, operation or direction of such public utilities. The Public Service Commission is granted the power and jurisdiction to hear and pass upon all matters pertaining to or necessary or incident to such regulation of all public utilities, including electric light and power companies, whether private, corporate, motor carriers and all public transportation and communication agencies other than railroads and railroad companies. The Commission may make reasonable rules and regulations to provide for the protection of the public in the construction and operation of facilities by public utilities rendering gas service and by companies operating a pipeline or lines for the transportation of gas, or any petroleum products that are gases at normal atmospheric temperatures and pressures; provided, however, that such power and jurisdiction shall not extend to field gathering lines in either gas producing fields or gas storage fields except as such lines may cross state trunkline highways or railroads, (Act No. 3 of the Public Acts of 1939). In making rate determinations, the Public Service Commission utilizes information provided by the Mid-American Interpool Network (MAIN) and the East Central Area Reliability Coordination Agreement (ECAR) which assist in energy planning to assure that regional needs are met in energy production. MAIN serves a portion of upper Michigan, Illinois, Missouri, Iowa, Minnesota, and Wisconsin and other minor portions of eight other states. ECAR coordinates energy planning needs for lower Michigan, Indiana, Ohio, Kentucky, West Virginia, Virginia, Maryland and Pennsylvania. ECAR and MAIN function to coordinate

power needs to assure reliability in energy production.

It is also policy of the State of Michigan that, by way of Executive direction, statutory and constitutional authority, the Department shall, by way of example, by positive programs and by other actions, promote the wise use and reuse of our land resources within its natural capability and in recognition of its relationship to water and air resources. Further, the Department of Natural Resources will not, in any way, abet any new use of land and associated water and air resources which has the potential to cause major irreversible damage to Michigan's environment. Public as well as private projects, within the purview of the Department, must meet this test, (Natural Resources Commission Policy No. 5501).

This policy also applies to actions which fail to meet federal standards and criteria with respect to controlling air and water pollution.

In the siting of facilities, including energy related facilities, it is state policy to conserve natural resource values, including fish and wildlife habitat, along the state's inland lakes and streams from harmful, exploitative and unwise development.

The authority does not extend the right to halt waterfront development in general, but rather is limited to those situations where natural resource values are being unduly damaged or destroyed without equal or greater compensation of public benefits. Permits that are issued shall specify conditions that will protect the public interest accordingly, in accord with policies cited elsewhere in this chapter, (Natural Resources Commission Policy No. 4503; Act No. 346 of the Public Acts of 1972).

It is state policy that the Michigan Department of Natural Resources be responsible for certifying that proposed uses of Coastal Energy Impact Program assistance are compatible with the state Coastal Management Program and that the Michigan Energy Administration serve as the agency responsible for allocating Michigan's share of grants and credit assistance among state agencies and local governments within the state and for submitting applications for the CEIP assistance to insure adequate consideration of both environmental and energy concerns. Currently, five oil and gas storage facilities, four nuclear generating units, one oil/gas transportation facility, and six fossil fuel electric generating units are proposed along Michigan's coast.

Agricultural and Forest Resource Areas — Problems and Program Concerns

The portion of land within Michigan's coastal area devoted to agricultural use is small but extremely significant in economic and environmental terms. The prime fruit belt growing areas along the shores of Grand Traverse Bay, the fruit belt extending along the Lake Michigan shore of the Lower Peninsula and other productive parcels of coastal farmland are unique and important to the state's agricultural economy. Preserving our remaining agricultural land will contribute to a sensible balance between open space and high intensity shoreland development, to maintain adequate levels of agricultural production to meet state, national and world food demands, and support the economy, overall character and identity of agricultural regions.

Forests predominate along much of the coast and contribute greatly to its desirability as a place to live, work, and play. Unfortunately, they are often used as a

pool of available land for conversion to more intensive uses. Improving the forest's competitive ability as a land use in these areas will help to maintain the coastal environment. Assistance and incentives to encourage the development of the known natural economic potential of managed forests are needed.

Specific concerns of the Coastal Management Program relative to agricultural and forest resource areas include:

- Michigan's unique and valuable agricultural and forest lands are being irrevocably converted to other uses at an alarming rate. There is a need for a long-range plan for coastal resource management based on scientific soil surveys, local recognition of lands with high potential for agricultural and forestry use and continued research and development to insure future productivity meets increasing population demands.

Michigan Policy in Agricultural and Forest Resource Areas

It is the policy of the State of Michigan to provide for farmland development rights agreements and open space development rights easements to alleviate rapid and premature conversion of land uniquely suited for agricultural and open space to more intensive uses; to use these agreements to ensure that the land remains in a particular use or uses for an agreed upon time period; that, in return for maintaining the land in a particular use, the landowner be entitled to certain income or property tax benefits, (Act No. 116 of the Public Acts of 1974).

Under Act No. 116, two general classes are eligible: (1) farmland — a farm of 40 or more acres, a farm of from five to 40 acres with a minimum per acre income of $200.00 per year, or a specialty farm with gross annual income of $2,000.00 or more; and (2) open space land — certain historic, riverfront or shoreland areas or areas which conserve natural or scenic resources, enhance recreation opportunities, preserve historic sites and idle potential farmland of not less than 40 acres.

It is state policy to provide for the conservation of the soil and soil resources of the state and for the control and prevention of soil erosion. Soil Conservation Districts were created as entities of state government to develop and carry out programs to reduce erosion, protect water quality and encourage wise land management, (Act No. 297 of the Public Acts of 1937). It is state policy to establish drainage districts, consolidate drainage districts, construct and maintain drains, sewers, pumping equipment, bridges, culverts, fords and such structures and mechanical devices as will probably purify the flow of such drains; to provide for flood control projects; to provide for water management, water management districts and subdistricts and for flood control and drainage projects within such districts; and to provide for the assessment and collection of taxes, (Act No. 40 of the Public Acts of 1956).

It is state policy to assure proper management of the state forests for the public good, it is the declared policy of the Michigan Department of Natural Resources to manage the state forests to yield that combination of products and services which best meets the recreational, spiritual, and physical needs of all the people now and in the future. In the application of this multiple-use policy, it will be the objective to identify

the management opportunities in each forest area and then manage for that combination of products and services which will be of greatest public benefit. Timber and wildlife are the two major products from the forest requiring intensive land management. Recognizing that the multiple-use objectives of forest management are directed toward the greatest good for all Michigan citizens and that the production of timber products is an important physical need, it will be the Department's goal to use commercial harvests whenever possible to manage the forest growth and by so doing maximize timber and wildlife production on a sustained yield basis.

Prime Industrial Areas — Problems and Program Concerns

To encourage the development and growth of a healthy economy, coastal-dependent industrial development must be anticipated along the coast. Shoreland areas which are suitable for industrial development must be identified to minimize resource conflicts and reduce environmental degradation. Noncoastal dependent industries should consider locations other than coastal sites. Capital improvements for existing shoreland industries can greatly improve the aesthetic and environmental image of these facilities. Structural compatibility with the site can be promoted through engineering design studies for new facilities.

Coastal Management Program specific concerns relative to prime industrial areas include:

- With the increasing demand for various types of coastal uses and developments, it is essential that prime sites for coastally dependent industrial uses be identified to promote a prosperous economy and to guard against environmental loss or degradation.

Michigan Policy Pertaining to Prime Industrial Areas

It is state policy for the establishment of plant rehabilitation districts and industrial development districts in local governmental units, (Act No. 198 of the Public Acts of 1974); and to guard against occupational air contaminants and physical agents, (Act No. 61 of the Public Acts of 1954).

Although Michigan does not have additional policies which apply only to industrial urban areas, policies related to air and water quality, and plans adopted pursuant to the state implementation of the federal Clean Air and Water Acts, resource recovery and authority to enable local zoning and planning are applied uniformly, throughout Michigan's coastal area.

Water Transportation Areas — Problems and Program Concerns

The Great Lakes, their connecting waters, and the St. Lawrence River constitute a 2,340 mile network of Michigan's three deepwater and thirty active commercial harbors with other regions and continents. This vast transportation system has been an important factor in Michigan's economic development and still offers further growth potentials. The traditional nine month navigation season involves some 40 shipping lines having considerable interface with land facilities. Typical cargos include raw materials such as iron ore, coal, chemicals, grain, minerals and petroleum or manufactured goods such as containerized foods and fabricated metal products. However, from 1972 to 1975, annual cargo tonnage more than tripled. Energy and economic conditions indicate that this cargo load will continue its strong increase. To remain competitive under those same conditions, some shipping lines have consolidated and several have begun to build new, larger vessels. As demonstrated by the United States Army Corps of Engineers, these trends have resulted in new demands for public investment in channel maintenance; updated harbor facilities; efficient interface with other transportation systems; extending the navigation season; and in deep draft harbors and ancilliary facilities capable of handling deep draft vessels in the 1,000 foot class. Nearly all of these new demands have also aroused controversies over economic and social considerations and over the increased potential for negative environmental impacts.

Specific concerns of the Coastal Management Program relative to coastal water transportation areas include:

- To avoid environmental and economic loss, careful planning and analysis is needed to determine the impacts of future port development.

- To serve the future needs of development in the coastal area, there is a need to establish a comprehensive transportation planning mechanism.

- Recent efforts to extend the navigation season, the trends to larger vessels requiring increased water depths for passage and increased channel and harbor maintenance requirements pose formidable challenges to the state's water transportation system. Comprehensive transportation planning must fully consider all impacts of vessel movement upon the coastal area.

Michigan Policy Relating to Water Transportation Areas

It is state policy to conditionally support the concept of winter navigation on the Great Lakes which includes the participation of state government in the development and operational planning of winter navigation programs; to include state participation in the determination of routes and operational procedures to assure special problems with winter vessel movement are adequately considered. It is Michigan policy that

directly attributable primary and secondary costs, such as ferry operations, shore damages, etc., of winter navigation be included and funded as part of the relevant federal agencies operative budget; that winter navigation programs fully evaluate procedures to assure that social, economic and environmental impacts are monitored on a continuing basis; that a favorable overall benefit to cost ratio be maintained to minimize impacts associated with winter navigation; to participate on a Winter Navigation Board composed of state and federal agencies to assure that the state's interests are represented; and to establish a mechanism to provide for the resolution of claims in an equitable manner to assure that there is a process short of litigation to resolve payment for legitimate damages, (Governor's Policy on Winter Navigation, 1975).

It is policy of the state that political subdivisions be authorized to acquire, establish, construct, maintain, improve and operate harbors, channels and other navigational facilities, (Act No. 66 of the Public Acts of 1952); to find that the public trust in the waters will not be impaired or substantially affected by dredge and fill activities, (Act No. 245 of the Public Acts of 1955); to authorize the dredging and removal of undesirable materials from lakes, (Act No. 345 of the Public Acts of 1966); and to authorize the creation of port districts which have powers to acquire, improve, enlarge, extend, operate, maintain and finance various projects, (Act No. 234 of the Public Acts of 1925).

It is state policy to regulate the disposal of oil and sewage from watercraft and to prohibit the littering of waterways, (Act No. 167 of the Public Acts of 1970); to require persons engaging in removing liquid industrial wastes from the premises of other persons to be licensed and bonded; to provide for the control of disposal of wastes, (Act No. 136 of the Public Acts of 1969); to prohibit the pollution of any waters of the state and the Great Lakes, (Act No. 245 of the Public Acts of 1929); and to regulate dredge disposal and alteration of watercourses, (Act No. 247 of the Public Acts of 1955; Act No. 346 of the Public Acts of 1972).

It is state policy that any person who discharges, dumps, deposits or throws or causes or permits the discharging, depositing or throwing of any garbage, except that which has passed through a disposal unit of a type approved by the United States public health service, or oil or rubbish from a vessel or watercraft of 25 or more feet in length into a river or inland lake within this state, or within three miles of the shoreline of any part of the Great Lakes or connecting waters thereof within this state is guilty of a misdemeanor, (Act No. 132 of the Public Acts of 1964). It is also state policy that a person owning, operating or otherwise concerned in the operation, navigation or management of watercraft having a marine toilet shall not own, use or permit the use of such toilet on the waters of this state unless the toilet is equipped with one of the following pollution control devices: (a) a holding tank of self contained marine toilet which will retain all sewage produced on the watercraft for subsequent disposal at approved dockside or onshore collection and treatment facilities; (b) an incinerating device which will reduce to ash all sewage produced on the watercraft. All marinas operating on the bottomland of the Great Lakes if selling marine fuel or otherwise providing a dockside service center shall provide pump-out facilities approved by the Department of Public Health for marine holding tanks on pleasure craft (Act No. 167 of the Public Acts of 1970).

It is state policy to participate on an inter-agency dredge spoil committee, composed of state and federal agencies to select sites for disposal of dredge polluted material.

Action Programs for Areas of Natural Economic Potential

In concert with state policy and the goals of the Coastal Management Program, following is a list of action programs which will be conducted to assure proper management and wise use of areas of natural economic potential.

- ASSIST THE ENERGY ADMINISTRATION AND OTHER APPROPRIATE AGENCIES IN THE DEVELOPMENT OF A STATEWIDE ENERGY PLAN TO DEVELOP AND MAINTAIN AN ENERGY SUPPLY WHICH IS ADEQUATE, YET ENVIRONMENTALLY ACCEPTABLE AND SOCIALLY DESIRABLE.

- PARTICIPATE ON THE COASTAL ENERGY IMPACT PROGRAM ALLOCATION BOARD TO PROVIDE FINANCIAL ASSISTANCE TO ASSURE THAT COASTAL COMMUNITIES HAVE THE OPPORTUNITY TO ACCOMMODATE ENERGY-RELATED DEVELOPMENT IN A PLANNED AND ENVIRONMENTALLY RESPONSIBLE MANNER.

- FINANCIAL ASSISTANCE TO LOCAL COMMUNITIES FOR THE MANAGEMENT OF ENERGY-RELATED FACILITIES WILL ALLOW LOCAL INTERESTS TO BE INVOLVED IN DECISIONS WHICH MAY AFFECT THEIR COAST, AND TO HELP PREPARE FOR THE CONSEQUENCES OF NEW OR EXPANDED ENERGY ACTIVITY.

  Additional financial assistance will be available for public works projects during construction of certain energy facilities to help alleviate social impacts of the projects. Assistance is also available to help prevent, reduce or repair damage to or loss of valuable environmental or recreational resources directly attributable to the development of energy facilities.

- ASSIST THE ENERGY ADMINISTRATION IN DETERMINING POSSIBLE ENVIRONMENTAL IMPACTS WHICH WOULD RESULT FROM DEVELOPMENT OF NEW SOURCES OF ENERGY.

  In predicting possible environmental impacts resulting from the development of new energy sources, trade-off factors can be evaluated before damage or possible loss of valuable environmental resources is incurred.

- DEVELOP GUIDELINES TO ASSESS SITE SUITABILITY AND ANTICIPATE AND MANAGE IMPACTS FOR PLANNED ENERGY

FACILITIES.

Site suitability criteria will assist industry, governmental agencies, and local communities in minimizing adverse impacts while planning for energy-related facilities. Anticipating and managing impacts resulting from energy development will assure that essential coastal environments are not destroyed or degraded.

- DEVELOP GUIDELINES FOR SEQUENTIAL USE IN MINERAL AND ENERGY EXTRACTIVE AREAS ALONG THE COAST.

  In areas where necessary extraction of mineral or energy resources takes place, sequential use planning can insure that the land will return to a productive use.

- DEVELOP AND TEST INNOVATIVE TECHNIQUES TO MITIGATE ADVERSE ENVIRONMENTAL IMPACTS RESULTING FROM MINERAL EXTRACTION OR ENERGY DEVELOPMENT IN THE COASTAL AREA.

  Innovative site design and construction management techniques will minimize adverse impacts and will accelerate the recovery of damaged resource areas.

- ASSIST IN THE DEVELOPMENT OF A COMPREHENSIVE TRANSPORTATION HIGHWAY AND TRANSIT PLANNING MECHANISM TO SERVE THE FUTURE NEEDS OF DEVELOPMENT IN THE COASTAL AREA.

  Development of criteria for new or expanded coastal transit systems to aid in locating alternatives to maximize scenic and recreational values of coastal-related transportation.

- INVENTORY AND MONITOR CONVERSION OF UNIQUE AGRICULTURAL LANDS IN COOPERATION WITH LOCAL, STATE AND NATIONAL SOIL CONSERVATION PROGRAMS.

  Information will assist in local planning and evaluation efforts. Resulting information will assist state and national decision makers in the continued analysis of the balance of supply and demand including the possible implications relating to world trade.

- PROVIDE FINANCIAL ASSISTANCE TO EXPLORE NEW AND INNOVATIVE PROGRAMS THAT WILL ENCOURAGE CONTINUED INTEREST IN FRUIT AND HORTICULTURAL FARMING AS AN ECONOMIC ENTERPRISE.

  Evaluate existing and study new methods of tax incentives to keep people in agricultural production and encourage new interests. Develop programs to assist and encourage farmers to save unique coastal farmlands.

- SUPPORT LOCAL AND STATE EFFORTS TO COMPLETE NEEDED SOIL AND ECOLOGICAL SURVEYS AND LAND RESOURCE INVENTORY.

  Provide a resource data base for use by all interests to help in making future decisions and determining management needs for long-range social and economic benefit.

- DEVELOP AND TEST INNOVATIVE LANDSCAPE AND SITE DESIGN TECHNIQUES TO MINIMIZE NEGATIVE AESTHETIC IMPACTS RELATED TO COASTAL INDUSTRIAL FACILITIES.

- ACTIVELY PARTICIPATE ON AND PROVIDE INPUT TO REGIONAL COMMERCIAL NAVIGATION PLANNING EFFORTS, INCLUDING SPECIFICALLY THE WINTER NAVIGATION BOARD.

- PROVIDE TECHNICAL AND FINANCIAL ASSISTANCE TO PORT DISTRICTS AND OTHER LOCAL UNITS OF GOVERNMENT FOR THE PROGRAMMING, PLANNING AND DESIGN OF FACILITIES AND CAPITAL IMPROVEMENTS FOR PORTS AND COMMERCIAL/INDUSTRIAL AREA REHABILITATION OR DEVELOPMENT.

- PROVIDE TECHNICAL FORESTRY PLANNING ASSISTANCE TO REGIONAL AND LOCAL LAND USE AND DEVELOPMENT GROUPS.

  Most regional and local planning efforts lack expertise in the area of forest resource management. They are frequently unaware of the economic opportunities available to them. By improving the forest sector capability of such planning efforts, multiple benefits should accrue to the coast.

AREAS OF INTENSIVE OR CONFLICTING USE

Areas of intensive or conflicting use may be separated into two more specific areas: (1) urban areas; and (2) coastal lakes, river mouths and bays.

In making decisions to assure proper management of such areas, the Coastal Management Program will direct efforts to achieve the following goals:

- Recognize the values of Michigan's coastal urban areas and to protect coastal urban resources, coastal lakes, river mouths and bays, including land, water and air resources from detrimental uses and activities, and to enhance or restore overused or degraded urban waterfronts.

- Protect and enhance Michigan's unique coastal ecosystem and its diverse array of plants, fish and wildlife.

- Encourage the management of shoreland properties so as to minimize environmental and property damages resulting from erosion and flooding.

Urban Areas — Problems and Program Concerns

Urban waterfronts are complex areas. Though coastal areas usually support activities found in inland communities, they also support uses that are primarily influenced by or dependent upon the coastal waterfront.

The general economy of most coastal cities is directly related to waterfront port and harbor facilities, tourist attractions or water-related commercial development. Waterfronts are also the focus of recreational activities such as fishing, waterfront festivals, swimming, picnicking or sunbathing. Type and location of waterfront uses are influenced by a variety of factors, such as the community's general economic climate, waterfront property values, air and water quality, and the presence of other high value uses. Maintaining the accessibility and attractiveness of the waterfront for a variety of urban land and water uses while maximizing the full potential of urban coastal areas are complicated endeavors. Many areas have become deteriorated and aesthetically unpleasing. Careful planning is needed to maintain and revitalize highly developed coastal areas.

Specific concerns of the Coastal Management Program pertaining to coastal urban areas include:

- Visual barriers on the lake front, abandoned structures and limited access indicate a need for engineering and feasibility studies to accelerate corrective measures for such problems.

- Water quality problems may be more prevalent in urban areas, indicating the need for continued and expanded water quality management.

- Increasing competition for coastal areas indicates a need to determine the capability and suitability of coastal lands and waters to accommodate various uses in urban areas to resolve conflicts and assist in the implementation of engineering and feasibility studies to encourage provisions for increased recreation opportunity.

- Coastal urban blight and decay indicate a need to identify mechanisms to provide for renovation and restoration.

- The historical heritage of a number of coastal communities has been lost or depreciated due to structural changes. Many of these structures and sites attract important recreational, educational and cultural interest. There is a need to identify such areas and provide for restoration and preservation in order to continue or expand their viable economic use.

Michigan Policy in Urban Areas

It is the policy of the State of Michigan to authorize counties, cities, villages and townships of Michigan to adopt plans for the rehabilitation of blighted areas; to authorize assistance in carrying out such plans by the acquisition of real property and the disposal of real property in such areas, (Act No. 344 of the Public Acts of 1945).

It is state policy to provide for regional planning: the creation, organization, powers and duties of regional planning commissions, (Act No. 281 of the Public Acts of 1945); to provide for city, village and municipal planning: the creation, organization, powers and duties of planning commissions, (Act No. 285 of the Public Acts of 1931); to enable planning commissions of cities and villages, after adoption of a master plan, to certify plats of precise portions thereof to the legislative body, and enabling cities and villages to adopt such certified plats showing the future outside lines of streets, ways, places, parks, playgrounds and other public grounds, and to regulate buildings within such lines, (Act No. 222 of the Public Acts of 1943); to provide for county planning: the creation, organization, powers and duties of county planning commissions, (Act No. 282 of the Public Acts of 1945).

It is state policy to provide for the establishment in portions of counties lying outside the limits of incorporated cities and villages of zoning districts within which the proper use of land and natural resources may be encouraged or regulated by ordinance, and within which districts provisions may also be adopted designating the location of, the size of, the uses that may be made of, the minimim open spaces, sanitary, safety and protective measures that shall be required for, and the maximum number of families that may be housed in dwellings, buildings and structures that may hereafter be erected or altered; to provide for a method for the adoption of ordinances and amendments thereto; to provide for emergency interim ordinances; to provide for the administration of ordinances adoption; to provide for conflicts with other acts, ordinances or regulations to; provide penalties for violations; to provide for the assessment, levy and collection of taxes; and to provide for referenda, appeals and

repeal of acts in conflict therewith, (Act No. 183 of the Public Acts of 1943).

It is state policy to provide for the establishment in the unincorporated portions of organized townships of zoning districts within which the proper use of land and natural resources may be encouraged or regulated by ordinance, (Act No. 184 of the Public Acts of 1943); to provide for township planning commissions and for the regulation and subdivision of land, (Act No. 168 of the Public Acts of 1959).

It is also policy of the State of Michigan to promote the health, safety and welfare of the people by regulating the light and ventilation, sanitation, fire protection, maintenance, alteration and improvement of dwellings, (Act No. 167 of the Public Acts of 1917).

It is state policy to provide for the establishment in cities and villages of districts or zones within which the use of land and structures, the height, the area, the size and location of buildings may be regulated by ordinance, (Act No. 207 of the Public Acts of 1921).

It is state policy to provide for the establishment of condominium and condominium projects; to define apartments and common elements in such projects; to define and provide for the identification and description of condominium apartment for purposes of ownership, mortgaging, taxation, possession, sale and other juridic acts; to provide for review and approval of proposed condominium projects and the sale of apartments therein, (Act No. 229 of the Public Acts of 1963); to regulate the subdivision of land; to promote the public health, safety and general welfare; to further the orderly layout and use of land; to require that the land be suitable for building sites and public improvements and that there be adequate drainage thereof; to provide for proper ingress and egress to lots; to promote proper surveying and monumenting of land subdivided and conveyed by accurate legal descriptions; to provide for the approvals to be obtained by subdividers prior to the recording and filing of plats; to establish the procedure by vacating, correcting and revising plats; to control residential building development within floodplain areas; to provide for reserving easements for utilities in vacated streets and alleys; to provide for the filing of amended plats; to provide for the making of assessors plats, (Act No. 288 of the Public Acts of 1967).

Coastal Lakes, River Mouths and Bays — Problems and Program Concerns

Coastal lakes, river mouths and bays are often subject to intensive and conflicting use. Waters near the shore in coastal lakes, river mouths and bays must support a greater number and variety of uses than open water areas. Such water uses include commercial navigation, recreational boating, waste assimilation, fish and wildlife use, industrial water use, public drinking water supplies and aesthetic appreciation. As focal points for commercial and recreational navigation, these waters link ports and docking facilities and receive concentrations of effluent discharges. Most of these waters are relatively shallow and hydrologically inactive compared to open water areas. Their shallow basins and long retention periods tend to collect nutrients from open waters, onshore activities and tributaries. These same waters are also used by fish and wildlife. Since nearly all Great Lakes fish species utilize shallow water areas

during some phase of their life cycle, embayments and river mouths are especially critical to the Great Lakes fishery. Embayments are equally critical to waterfowl in their life cycles. Multiple demands for water for fishing, recreational boating, port developments, wildlife uses or waste assimilation indicate that coastal lakes, river mouths and bays will likely continue to experience use conflicts.

Specific concerns of the Coastal Management Program which relate to coastal lakes, river mouths and bays include:

- The continuing demand for more economical transportation of bulk cargo has lead to increased vessel size on the Great Lakes resulting in the need to enlarge canals, channels and the expansion of harbor facilities. Conflicts between these activities and other coastal dependent uses need to be anticipated and provisions made for avoiding impacts where possible, and mitigating unavoidable property, recreation and environmental losses.

- Coastal lakes, river mouths and bays provide attractive and needed public access often leading to serious impacts from overcrowding, inadequate uses and conflicting uses, indicating a need for management of these critical areas.

Michigan Policy Relating to Coastal Lakes, River Mouths and Bays

Michigan currently has no enforceable policies which relate only to coastal lakes, river mouths and bays. Authorities relating to air and water quality, resource recovery, flood plain management, regulation of activities on bottomlands and others are enforced statewide, within the area defined by individual statutes, executive orders, etc. As with urban areas, these resources are often subject to more intensive use and will be one focus of efforts by the Coastal Management Program to identify and reduce conflicts relating to overcrowding, water pollution, vessel movement, and the promotion of boating safety, etc.

(For a more complete description of the scope and mandates of enforceable policy relating to coastal lakes, river mouths and bays, refer to Appendix C of "State of Michigan Coastal Management Program and Draft Environmental Impact Statement".)

Action Programs for Areas of Intensive or Conflicting Use

In concert with state policy and the goals of the Coastal Management Program, following is a list of action programs which will be conducted to assist in the management of coastal areas of intensive or conflicting use.

- PROVIDE FINANCIAL ASSISTANCE FOR LOCAL GOVERNMENTS TO EVALUATE DENSITY CONFLICTS IN COASTAL URBAN AREAS, LAKES, RIVER MOUTHS AND BAYS IN ORDER TO IDENTIFY AND EXPLORE MECHANISMS FOR CORRECTIVE ACTION.

  Activities have been suggested to: (1) identify areas of waterfront blight problems or redevelopment potental; (2) identify areas through the coastal planning access element where needed public waterfront access could be provided by projects using relatively small land requirements such as boardwalks, footpaths and bulkheads; and (3) identify areas where increased recreational opportunities, such as urban fishing opportunities from the shore or structures could be provided.

- COOPERATE WITH STATE AND FEDERAL AGENCIES SUCH AS THE NATIONAL HERITAGE CONSERVATION AND RECREATION SERVICE TO PROVIDE TECHNICAL AND FINANCIAL ASSISTANCE TO LOCAL UNITS OF GOVERNMENT IN DEVELOPING MUTUALLY DESIRABLE PROJECTS AND PROGRAMS SUCH AS ENGINEERING AND FEASIBILITY STUDIES, PILOT PROGRAMS AND MODEL LOCAL ORDINANCES, (E.G., CITY OF DETROIT, ST. IGNACE, MARQUETTE).

- COOPERATE WITH STATE AND FEDERAL AGENCIES TO PROVIDE TECHNICAL AND FINANCIAL ASSISTANCE TO LOCAL UNITS OF GOVERNMENT IN DEVELOPING MUTUALLY DESIRABLE PROJECTS AND PROGRAMS SUCH AS ENGINEERING AND FEASIBILITY STUDIES, PILOT PROGRAMS AND MODEL LOCAL ORDINANCES.

  Local interests have expressed the need for guidelines or model performance standards to: (1) identify coastally dependent use activities; (2) develop model guidelines for new structural developments in terms of their mass, setback and height; (3) encourage multiple use of waterfront parcels; (4) develop management tools such as model guidelines for local open water areas receiving heavy boating use; and (5) increase public access to the shoreline.

- EXPLORE FUNDING SOURCES AND ASSIST IN OBTAINING FUNDS FOR THE ACQUISITION OF OPEN SPACE IN AREAS

IDENTIFIED AS INTENSIVE OR CONFLICTING USE.

Funding should be provided for the purchase of strategic open space lands along the shoreline, in areas where purchases would reduce conflicts while providing waterfront renewal or redevelopment, public access or recreation use.

- PROVIDE FINANCIAL ASSISTANCE TO LOCAL COMMUNITIES FOR ENGINEERING AND FEASIBILITY STUDIES FOR RESTORATION IN AREAS WHICH ARE AESTHETICALLY DEGRADED.

- SUPPORT CONTINUING EFFORTS TO MONITOR AND CONTROL WATER QUALITY PROBLEMS, ESPECIALLY IN AREAS OF CONFLICTING USE WHERE THEY MAY BE MORE SEVERE.

  Continuous monitoring of water quality will identify problems which can be corrected before they become severe. Efforts to control water quality problems must continue in order to prevent irretrievable loss of resources.

- EXPLORE SOURCES OF FUNDING FOR RESTORATION AND PRESERVATION OF VALUABLE HISTORIC AREAS IN AREAS OF CONFLICTING OR INTENSIVE USE.

- PROVIDE TECHNICAL AND FINANCIAL ASSISTANCE TO PORT AUTHORITIES AND/OR HARBOR COMMISSIONS, AND CONSULT AND COORDINATE WITH AGENCIES WITH SPECIAL EXPERTISE IN THESE AREAS SUCH AS MARITIME ADMINISTRATION AND THE UNITED STATES CORPS OF ENGINEERS TO PLAN AND DESIGN HARBOR FACILITIES TO MINIMIZE CONFLICTS BETWEEN COMMERCIAL NAVIGATION AND RECREATIONAL BOATING.

Chapter IV
Coastal Areas of Particular Concern

One important element of Michigan's Coastal Management Program is the identification of specific lands and waters which experience problems or offer opportunities. These areas — termed Areas of Particular Concern (APC's) — merit special attention in the actions and concerns of citizens and local, state and federal governments. As areas of particular concern are identified, the Coastal Management Program refers the areas and their management recommendations to agencies and groups which have the ability to take responsive actions. A limited number of priority areas of particular concern will be addressed directly through funds provided by the Coastal Management Program. This chapter describes the process Michigan will use to inventory and review areas of particular concern for the purpose of assuring that these areas are considered in decisions affecting our coast.

WHAT ARE APC'S AND WHAT WILL THEY DO?

An Area of Particular Concern (APC) is a statement of interest or concern for a specific coastal site which recommends a course of action to protect or enhance the site's special value or characteristics. The Coastal Management Program uses the area of particular concern process to provide an additional avenue for identifying and addressing coastal areas which need management attention. Program implementation will continue this activity.

TWO SOURCES OF AREAS OF PARTICULAR CONCERN

Areas of Particular Concern originate from two different sources: (1) state legislated areas of particular concern; and (2) nominated areas of particular concern.

Legislated Areas of Particular Concern

Certain state statutes specifically mandate that coastal areas receive special management attention, (in the context of Michigan's Coastal Management Program, the term legislated areas of particular concern may be used interchangeably with the term

"designated" areas of particular concern). Assisting in the implementation of legislated areas of particular concern according to use priorities established by the Michigan Legislature, will be one focus of program implementation efforts. This effort will include accelerating programs which protect essential coastal resources or provide technical and financial assistance to the coastal area. Legislated APC's are identifed generically by the Michigan Legislature, (e.g., high risk erosion areas, environmental areas, etc.). The specific site location of these areas are determined by the Department of Natural Resources, based upon criteria described in state statutes through due process provisions (Act No. 306 of the Public Acts of 1969).

The following areas and their priority uses mandated by state statute are recognized as legislated (or designated) areas of particular concern. All areas which are identified by the state under authorities and programs described below are legislated areas of particular concern when located on Michigan's coast.

- Great Lakes *High Risk Erosion, Flood Risk and Environmental Areas:* regulated either by state permit or local zoning to protect future structures from erosion caused damages, protect developments in flood prone areas, and protect areas of critical fish and wildlife habitats, under provisions of the Shorelands Protection and Management Act, (Act No. 245 of the Public Acts of 1970, as amended). In these shoreland areas, uses that conform to statutory requirements, including minimum setback distances, developments located outside of established coastal flood plains, and management plans for environmental areas are considered highest priority. Uses which do not conform to statutory requirements such as new development which is prone to property damage from erosion or flooding or which does not conform to environmental area management plans are considered uses of lowest priority.

  Currently there are 197 miles of designated high risk erosion areas and about 100 miles of designated environmental areas.

- *Public Access Sites:* established and managed to satisfy demands for recreational access to public waters under authorities involved in Michigan's Access and Facility Development Program. Uses which support access at such sites are considered of highest priority, while uses which reduce or compromise the quality or quantity of such access opportunities are considered lowest priority.

  The state has three public access fishing sites along the coast and 121 coastal recreational harbors and launching sites, (see also, Harbors of Refuge and Mooring Facilities below).

- *State Game and Wildlife Areas:* dedicated and managed for education, conservation or other public purposes under Michigan's Wildlife Habitat Management, Land Acquisition or Wildlife

Research programs. Uses of highest priority in the publicly owned and dedicated portions of such areas are related to administrative or management goals which are articulated in Ten Year Management Plans developed by the Michigan Department of Natural Resources for each area. Lowest priority uses are those which would conflict with those management goals or plans.

To date, there are 19 coastal state game and wildlife areas.

- *State Parks:* established and managed for recreation, education or other purposes under authorities involved in Michigan's Park Management, Interpretive Services and Conservation-Corrections Workcamp programs. Such areas are managed according to a state-developed Master Plan for each area. Uses of highest priority in the publicly owned and dedicated portions of such areas are related to administrative or management goals articulated in those plans, while lowest priority uses are those which would conflict with those goals or plans.

  Currently 37 state parks are located along the coast.

- *Harbors of Refuge and Mooring Facilities:* established and managed to supply specialized recreational boating needs under respective provisions of Act No. 320 of the Public Acts of 1947 and Act No. 337 of the Public Acts of 1939. Uses which enhance the quality and quantity of access at such sites will be considered of highest priority, while uses which reduce or compromise such access opportunities will be considered of lowest priority.

- *Port Districts:* established and operated to provide for commercial navigation needs under respective provisions of the Port Districts Act (Act No. 234 of the Public Acts of 1925 and Act No. 251 of the Public Acts of 1966). Highest priority uses in Port Districts are related to administrative and management goals articulated in Comprehensive Port Plans developed under Act 234 for each area. Lowest priority uses are those which would conflict with those management goals or plans.

  Currently, there are two port districts: (1) the Detroit Port District, and (2) the Monroe Port District.

- *Historic Districts:* established and regulated to protect against loss or damage to certain valuable historic attributes under provisions of the Historic Districts Act (Act No. 169 of the Public Acts of 1969). Highest priority uses in these areas are those which maintain or enhance attributes of the area identified in historic district ordinances developed by local units of

government under provisions of Act 169. Lowest priority uses are, therefore, activities which would destroy or diminish these attributes.

To date, there are six historic districts along the coast.

- Certain *Farmland or Open Space Areas:* enrolled for a specific time period by voluntary landowners, which legally restrict nonagricultural development under provisions of the Farmland and Open Space Preservation Act (Act No. 116 of the Public Acts of 1974). Highest priority uses are those which comply with Development Rights Easements/Agreements developed under Act 116 for each area. Lowest priority uses are those which would not meet the letter and intent of those documents.

  About 50,000 acres have been enrolled under Act No. 116 in coastal counties.

- State-owned properties dedicated as *Wilderness Areas, Wild Areas and Natural Areas:* regulated to preserve outstanding, unique or archetypical areas of natural quality under provisions of the Wilderness and Natural Areas Act (Act No. 241 of the Public Acts of 1972). State administrative or management authority for such tracts is established by state ownership. Highest priority uses relate to administrative and management goals articulated in a state-developed Master Plan for each area, while lowest priority uses are those which would conflict with those goals or plans.

  To date, there are three natural areas that border the coast.

- *Natural Rivers Areas:* established to preserve and enhance identified values of areas designated under provisions of the Natural Rivers Act (Act No. 231 of the Public Acts of 1970). River Management Plans are developed cooperatively by state and local interests to identify attributes and values in each designated area. These plans are then used as guidelines in developing local ordinances in each area. Uses of highest priority are those which support these plans and ordinances; uses of lowest priority are those which cannot.

  Thus far, four natural rivers have been established in the coastal area.

- Great Lakes designated *Sand Dune Areas:* designated by the state to provide for protection, management and reclamation of Great Lakes sand dunes (Act No. 222 of the Public Acts of 1976). Sand dune mining operators must submit an environmental impact statement, a progressive cell-unit mining and reclamation plan, and a 15-year mining plan as part of the state permit

process. Uses which conform to mining plans and permit conditions are highest priority. Uses which do not conform to plans and permit conditions are lowest priority.

Currently, seven areas have been proposed as designated sand dune areas.

Legislation which requires specific management attention for these areas contains extensive provisions for due process, consistent with Michigan's Administrative Procedures Act, (Act No. 306 of the Public Acts of 1969), prior to implementation on a site specific basis. Hearings, appeals, public meetings, and property owner notification are included in the designated process for many of these areas. (For a more complete description of due process provisions, see Chapter V.)

Other areas may be added by the Michigan Legislature at any time. Legislated APC's differ significantly from publicly nominated APC's in that: (1) management and resulting use priorities are enforceable by state statute; (2) given adequate state appropriations, the management for such areas is assured and (3) some of these areas are owned, operated or directly regulated by state agencies. Maps, showing the location of legislated areas of particular concern are contained in Appendix D of "State of Michigan Coastal Management Program and Draft Environmental Impact Statement".

Nominated Areas of Particular Concern

APC's may be nominated by any individual, group or agency. APC nominations received by the Coastal Management Program identify a variety of public and agency coastal concerns. For example, the Michigan Department of State Highways and Transportation has nominated 23 commercial ports as areas of particular concern. The United States Fish and Wildlife Service also nominated coastal sites as APC's, many of which were identified as critical fish and wildlife habitats. In addition to agencies and interest groups, about 60 percent of the total APC nominators to date have been private individuals. Their concerns range from reducing erosion hazards to protecting ecologically sensitive areas to improving recreation access, etc. Although legislated areas of particular concern are sufficient to meet requirements of the federal Coastal Zone Mangement Act, a method which provides opportunity for all concerned with management of Michigan's coast to indicate problems and suggest management solutions is also included in this program. The nominated form of APC: (1) provides a new avenue for citizens and agencies to become involved in coastal management; (2) formalizes statements of concern about specific areas from those closest to those concerns; and (3) further identifies areas and issues which may be considered in actions or decisions affecting our coast.

Each area of particular concern nomination includes a specific description of the location and characteristics of a coastal site and a recommendation regarding how the site could best be used or managed. Ownership information, current usage, etc., may also be included, (see Figure IV-A). This information is circulated and reviewed by those who have the ability and interest to address the APC's management

FIG. IV-A
Sample Nomination Form
for Coastal Areas of
Particular Concern

Nominator: _____

Address: _____

_____

_____

COASTAL AREAS OF PARTICULAR CONCERN NOMINATION FORM

Name of area nominated: _____

Location: County _____

Township, City or Village _____

Boundary features (rivers, roads, section lines, etc.) _____

_____

_____

Present ownership: _____

_____

Under which category does this area qualify? (Please check only one)

_____ high risk erosion	_____ island
_____ flood hazard	_____ coastal lake, rivermouth, bay
_____ ecologically sensitive	_____ urban
_____ natural area	_____ mineral or energy resource
_____ recreation area	_____ agricultural
_____ historic or archaeological site	_____ prime industrial
_____ sand dune	_____ water transportation

Why is this area of particular concern to you? (physical characteristics, damages, opportunities, present use, problems, etc.) _____

_____

_____

_____

What do you think should be done with the area? (public acquisition, local zoning, preservation, etc.) _____

_____

_____

Other comments: _____

_____

_____

PLEASE RETURN TO:

Citizen Shorelands Advisory Council
Michigan Department of Natural Resources
Stevens T. Mason Building
Lansing, MI 48909

OR:

Michigan Department of Natural Resources
Division of Land Resource Programs
Box 30028
Lansing, MI 48909

recommendations, such as state and federal agencies, local governmental units, planning and development regional agencies, etc. Based upon the degree of support afforded each APC, the objective of this process is to implement the area's management recommendation — either directly by the Coastal Management Program or other sources of technical and financial assistance.

APC nominations and management recommendations may be inventoried and reviewed in groups. As in the preceding policy chapter of this impact statement, areas of particular concern are nominated and may be grouped for program assistance within five resources areas, (see Figure IV-B):

- AREAS OF NATURAL HAZARD TO DEVELOPMENT
  These include various types of erosion or flood prone areas.

- AREAS SENSITIVE TO ALTERATION OR DISTURBANCE
  These include ecologically sensitive areas, natural areas, sand dunes and islands.

- AREAS FULFILLING RECREATIONAL OR CULTURAL NEEDS
  These include areas which are or which should be managed to recognize recreation, historic, archaeological or other cultural values.

- AREAS OF INTENSIVE OR CONFLICTING USE
  These include coastal lakes, river mouths and bays, and urban areas.

- AREAS OF NATURAL ECONOMIC POTENTIAL
  These include water transportation areas, mineral and energy resource areas, prime industrial sites, and prime agricultural areas.

A special category of areas of particular concern, which includes areas nominated under any of the five categories listed above, is Areas for Preservation or Restoration. Since areas for preservation or restoration usually necessitate immediate management attention, these areas are high priority for program financial and technical assistance. Management recommendations for these areas may include: (1) revegetation of sand dunes to reduce erosion; (2) planning and engineering designs to improve the aesthetic conditions and facilitate public access in urban coastal areas; (3) preserving tourist or other economic uses of historic sites; (4) wood chip trails and other creative, low-cost construction measures to protect fragile natural and sensitive areas; etc. Many areas for preservation or restoration possess management problems or opportunities which necessitate a cooperative state, regional and/or local effort to achieve the management objective. In many cases, the management objectives transcend the financial or regulatory capabilities of local governmental units. Through Coastal Management Program financial and technical assistance, these areas will be addressed in order to preserve their unique and special characteristics.

FIG. IV-B
Guide to Identifying
Areas of Particular Concern

AREAS OF NATURAL HAZARD

HIGH RISK EROSION AREAS.

- An area exhibiting at least two of the following characteristics is considered a potential high-risk erosion area:

  A. Vegetation removal (25% or more)

  B. Narrow beach

  C. Slumping bank

  D. Turbidity of adjacent waters

  E. Damaged erosion control structure

  F. Damaged land structure

  G. Protective works present

  H. Unusual angle of response of the bluff material

- Using historic and recent aerial photography, average annual bluff recession can be measured for those areas identified as potential high risk erosion areas. If it is determined that bluffs are receding at an average rate of at least one foot per year, the area is considered a high risk erosion area.

FLOOD HAZARD AREAS.

- The area is within the 100-year floodplain of the Great Lakes, based on engineering studies conducted by federal and state agencies and local units of government. In general, special flood risk areas should include those areas designated by the Federal Insurance Administrator.

SENSITIVE AREAS

ECOLOGICALLY SENSITIVE AREAS.

- Marshes lakeward or landward of the ordinary high water mark with the following values:

  A. A production, brood rearing, feeding, resting or migration habitat for waterfowl and/or other migratory birds.

  B. A traditional waterfowl hunting area.

  C. A habitat supporting a significant furbearer population.

  D. Significant fisheries for important sport and/or commercial species or spawning and-or nursery areas for important species.

  E. Significant fisheries through management or potential as significant spawning and/or nursery areas for important species.

  F. Support for unusual, threatened or endangered plant species or unusual aggregations of species.

  G. Function as a breakwater by absorbing wave energy and retaining rising flood waters.

- Areas of the upland along the shoreline that have any or all of the following values:

  A. A staging or stop over point for migratory birds.

  B. A gull or tern nesting colony or heron rookery.

  C. An eagle or osprey nest.

  D. Valuable habitat for deer, furbearers, hawks, owls, game birds, song birds and/or threatened or endangered animal species.

  E. Support unusual, threatened or endangered plant species or unusual aggregations of species.

- Open water areas from the water's edge to a depth of 20 fathoms with the following values.

  A. Traditionally important sport and/or commercial fishing areas where important species concentrate, or known spawning or nursery areas for important fish species.

B. Potentially valuable fishing areas where management efforts are currently underway to develop the fishery, or potentially good spawning nursery areas for lake trout or other expanding fish populations.

C. Valuable fish habitat areas not now providing a sizable fishery and not currently under management, but with significant fishery values for future development.

D. Submerged aquatic plants important to waterfowl.

NATURAL AREAS.

Guidelines established by the Michigan Wilderness and Natural Areas Advisory Board can be used to identify special natural areas throughout Michigan's coastal area.

- Have retained, have re-established or can readily re-established natural character.
- Possess one or more of the following characteristics:

A. Biotic, geological, physiographic or paleontological features of scientific or educational value.

B. Outstanding opportunities for scenic pleasures, enjoyable contact with nature or wilderness type of experiences (solitude, exploration and challenge).

In addition, the area should exhibit characteristics listed under one of the following categories:

- Wilderness Areas:

A. Large size: has 3,000 or more acres of state land or is an island of any size.

B. Primitive: generally appears to have been affected primarily by forces of nature with the imprint of man's work substantially unnoticeable.

C. Wilderness Recreation: has outstanding opportunities for solitude or a primitive and unconfined type of recreation.

D. Notable natural features: contains ecological, geological or other features of scientific, scenic or historical value.

- Wild Areas:

A. Size: is less than 3,000 acres of land.

B. Wilderness or nature observation type of recreation: has outstanding opportunities for (1) personal exploration; (2) challenge; or (3) contact with natural features of the landscape and its biological community.

C. Wilderness-like: possess one or more of the characteristics of a wilderness area.

- Research Natural Areas:

A. Educational or scientific natural area: retained or re-established natural character, or has unusual flora and fauna or biotic, geological, or other similar features of vegetational or scientific value, but it need not be undisturbed.

B. Verified by scientists: identified and verified through research and study by qualified observers.

C. May be sub-unit: may be coextensive with or part of a wilderness area or wild area.

- Nature Study Areas:

A. Must have essentially the same characteristics as a research natural area.

B. Adaptive to development and use of facilities for conservation, education and nature study or much more intensive use than research natural areas.

- Managed Natural Areas:

A. Same as for research natural areas.

B. An ecosystem that is maintained at a chosen state of development or is brought to a desired stage of development by the use of cultural techniques or controls. These controls are known to favor the maintenance or the development of a particular biological community or may be designed to preserve or restore a desired plant or wildlife species.

FIG. IV-B (continued)

SAND DUNE AREAS.

Sand dune areas are defined as those geomorphic features composed primarily of unconsolidated sand, whether wind blown or of other origin. Sand dunes can be considered special areas when:

- The dune area meets the guidelines for an "ecologically sensitive" or "natural" area.
- The integrity of the dune area is threatened by uncontrolled recreational use.
- The integrity of the dune area is threatened by mining activity.
- The dune area is in need of reclamation due to removal of sand and/or vegetation.

ISLANDS.

Islands can be considered special areas when:

- The entire island and/or littoral area meets the guidelines for an "ecologically sensitive" or "natural" area.

AREAS FULFILLING RECREATIONAL & CULTURAL NEEDS

RECREATION AREAS.

Special recreation areas include:

- Existing shoreland recreation areas and facilities.
- Sites that have been identified for acquisition and development by local, state or federal agencies.
- Other areas with high recreation potential.

HISTORIC AND ARCHAEOLOGICAL SITES.

Guidelines are a combination of those used for identifying National and State Register sites and those established in the Department of Natural Resources "Report on Special Environments". Special historic and archaeological areas are those sites, structures, objects or districts that:

- Are connected with an event resulting in significant contributions to the pattern of history or prehistory.
- Are associated with an important phase of growth or decline of a local society or movement.
- Are associated with lives of historically significant persons.
- Embody distinctive characteristics of type, period or method of construction.
- Represent the work of a master.
- Are part of the Great Lakes bottomland containing shipwrecks.
- Are a grouping of structures which individually are not unique but which taken together represent a certain historic scene or way of life.

AREAS OF INTENSIVE OR CONFLICTING USE

COASTAL LAKES, RIVER MOUTHS AND BAYS.

The special coastal lake, river mouth or bay should be a land/water area experiencing serious conflicts among two or more of the following:

- Valuable fish or wildlife habitat.
- Recreational boating use.
- Recreational use for fishing and/or swimming.
- Supporting or with the potential to support commercial navigation.
- Local water quality impaired by intensive development and/or discharge.

URBAN AREAS.

Special urban areas are those parcels of land which are:

- Vacant and adjacent to the Great Lakes or connecting waterway.
- Occupied by structure in need of rehabilitation or redevelopment.

- Occupied by structures that no longer contribute significantly to the tax base of the community.
- Occupied by uses that do not require or are not enhanced by a shore location.

And located within or in close proximity to:

1. Urbanized areas (defined by the Bureau of Census as central cities of 50,000 or more and surrounding closely settled territory) adjacent to the Great Lakes or a connecting waterway.
2. Urban areas of 2,500 inhabitants incorporated as cities or villages adjacent to the Great Lakes or a connecting waterway.

AREAS OF NATURAL ECONOMIC POTENTIAL

MINERAL RESOURCE AREAS.

Consideration of the following factors will determine special mineral resource areas:

- Demand for the mineral on a local, state or international level.
- Quality of the deposit.
- Quantity of the deposit.
- Minability.
- Amenability to concentration and processing.
- Availability of water, energy supplies, economical transport and other mineral commodities necessary in processing.

ENERGY RESOURCE AREAS.

Consideration of the following will determine special energy resource areas:

- Local, state, or national need for energy.
- Proximity to load centers.
- Fuel delivery access and mode.
- Site suitability.
- Ability of adjacent land use to absorb impacts

Facilities for energy resource areas include:

A. Electric generating facilities (fossil and nuclear).

B. Coal transfer facilities.

C. Gas or oil facilities

AGRICULTURAL AREAS.

Special agricultural areas fall into the categories of prime, unique and critical agricultural lands. Definitions for prime and unique lands have been adopted from Soil Conservation Service. USDA qualitative definitions for these categories.

- Those prime agricultural lands currently used (or available for use) for the production of food and fiber where the moisture, soil characteristics and growing season produce a sustained high yield of crops.
- Those unique agricultural lands combining soil quality, location, growing seasons and moisture supply to produce high quality and high yield specialty crops (i.e. cherries, blueberries, beans, etc.).
- Critical agricultural lands in immediate danger of being placed into other uses. Increasing populations may require that even those agricultural lands which are marginally productive be utilized to meet future demands.

PRIME INDUSTRIAL AREAS.

The following guidelines identify special prime industrial areas.

- Industrial development compatible with existing zoning and land use
- Easily accessible modes of transportation (water transport in particular).
- Adequate utility systems (i.e., sewer, water) presently available.
- Site of adequate depth to accommodate plant operations such that increasing site size with artificial fill is not necessary.
- Industrial operations and appearance compatible with the coastal environment.

FIG. IV-B (continued)

WATER TRANSPORTATION AREAS.
Special water transportation areas include:

- Ports and related facilities associated with waterborne transportation.
- Docking and mooring areas.
- Loading facilities.
- Ferry routes and landings.
- Shipping channels.
- Other land and water facilities related to waterborne transportation.

AREAS FOR PRESERVATION AND/OR RESTORATION

Areas for Preservation and/or Restoration are the highest priority and most special areas in the above categories. The areas must be of regional or statewide interest, and exhibit the following characteristics:

- High aesthetic, recreational, ecologic or conservation value.
- High quality physical or functional characteristics.
- Unique characteristics which are uncommon and occur in very limited areas of the shoreland.
- Threat of irreversible harm and urgent need for management action.
- Problems or opportunities in the area beyond the financial or regulatory capability of local units of government.

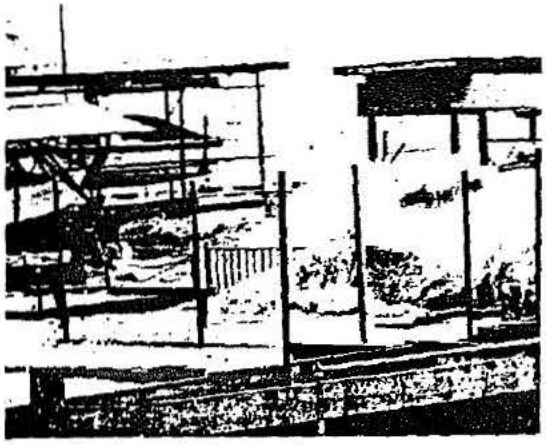
Nominated APC's do not, in themselves, constitute a legal restriction or obligation to private property owners. Owners of property nominated as an area of particular concern are contacted to solicit their participation in the review process. Nominations initiate a formal process to recognize and document support for protecting or enhancing certain coastal sites.

As described in following pages, this process exposes all APC nominations and their management recommendations to coastal decision-makers so that a maximum number of APC's receive consideration through financial and technical assistance, permit reviews, etc. Nominations which receive broad support or those which may be incorporated into ongoing programs increases their potential for implementation. In addition, some nominations will qualify for direct funding assistance from Michigan's Coastal Management Program. APC's which are addressed in the Coastal Management Program budget are termed designated action areas of particular concern.

Since 1976, APC nominations have been actively solicited. As a result, about 800 nominations for areas of particular concern have been received and included in this inventory and review process. The 800 areas have been reviewed by state agencies, regional planning and development agencies and many local governmental units. Some of the areas have already received assistance from Michigan's Coastal Management Program. Designated action areas of particular concern are implemented through contractual agreements between the Coastal Management Program and either state, regional or local agencies and units of government. These agreements are formulated so that actions carried out to address APC management recommendations by local or regional agencies conform to program policies and guidelines. Designated APC's are closely monitored by the Coastal Management Program to assure conformance with program policies and recorded as action program elements in the APC inventory process. Many APC's require various types of technical assistance, such as erosion control, flood control, site design, etc. Federal agencies such as the United States Corps of Engineers, Fish and Wildlife Service, etc., may play an active role by providing technical assistance to local, regional and state agencies to address areas of particular concern on a site specific basis.

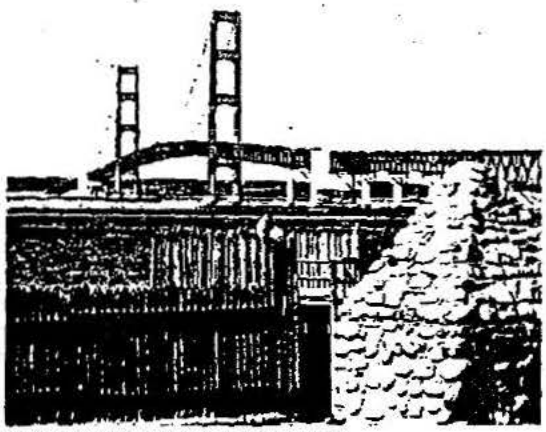
An objective of the Coastal Management Program is to address a variety of coastal issues through the area of particular concern process in order to maximize program benefits. There is no assurance, however, that all nominated APC's will be implemented. Inability to implement APC management recommendations may result from inadequate funds, conflicting management recommendations, lack of local support for the proposed action, or management recommendations which are inconsistent with state policies.

FIVE RESOURCE AREAS FOR CATEGORIZING MICHIGAN'S AREAS OF PARTICULAR CONCERN

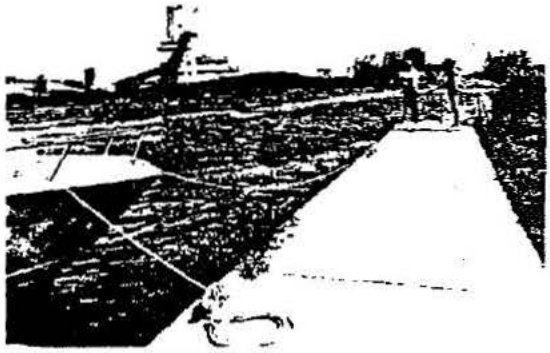


Areas of Natural Hazard to Development:
Includes various types of erosion or flood prone areas

Areas Sensitive to Alteration or Disturbance:
Includes ecologically sensitive areas, natural areas, sand dunes and islands



Areas Fulfilling Recreational or Cultural Needs:
Includes areas which are or which should be managed to recognize recreational, historic, archaeological or other cultural values



Areas of Intensive or Conflicting Use:
Includes coastal lakes, river mouths and bays, and urban areas

Areas of Natural Economic Potential:
Includes water transportation areas, mineral and energy resource areas, prime industrial sites and prime agricultural areas

THE APC INVENTORY AND REVIEW PROCESS

Following is a description of the process for inventorying and reviewing areas of particular concern.

Sources of APC's

Any person, group or local, state or federal agency or unit of government may nominate APC's by completing the form shown as Figure 4.A. Nomination forms are available from the Department of Natural Resources' Coastal Management Program, coastal planning and development regional agencies, and some other public places. The Coastal Management Program accepts nominations continuously. Completed APC nomination forms may be sent to either participating planning and development regional agencies, the Citizens Shorelands Advisory Council, or the Department of Natural Resources' Coastal Management Program.

State agencies may identify legislated APC's. Legislated APC's may be recognized as statutes are enacted or as agencies provide the Coastal Management Program with the location and management recommendations for coastal sites designated under existing legislation.

Local/Regional Agency Inventory and Review Process

Participating regional agencies or local governments which receive nominations utilize the following steps:

- The agency receives nominations and forwards copies to other affected interests (such as local governments), for review and comment. If the APC involves privately owned lands, affected private property owners are contacted as feasible for their comments and participation in the review process.

- The agency reviews nominations utilizing all indications of support, rejection or modification which may have been received from local units, citizen interest groups, etc. The results of this effort are area descriptions and management recommendations which document the degree of local and regional support. Regional agencies often assign this function to a special review body.

- Based upon these reviews, the agency assembles all related comments to ascertain whether or not the nomination should be formally endorsed. Areas and management recommendations which cannot be modified or endorsed may be sent to the Coastal Management Program indicating insufficient local support. Nominations which receive endorsement may be

prioritized (e.g. low, medium, high priority or preservation, restoration). An attempt is then made to notify nominators and concerned property owners of which action was taken.

Guidelines used by regional/local agencies in determining APC priorities include:

- Does the APC have property owner support?
- Is the APC supported by interest groups and local governments?
- Is the APC's management recommendation consistent with local ordinances, plans and programs?
- Does the APC have all necessary reviews and approvals, (e.g. local governments, advisory bodies, etc.)?
- Are there duplicate, overlapping or conflicting management recommendations for the same area?
- Is it a valuable resource which necessitates an immediate need for action due to the severity of a problem?
- Are matching funds available which are necessary to implement the management recommendation by Michigan's Coastal Management Program?
- Are there adequate local provisions for operations and maintenance?
- Does the APC management recommendation provide greater than local impacts or benefits?

The priority used by local/regional agencies in applying these criteria as well as any additional guidelines which may be used vary according to specific local use problems, physical characteristics, land use trends, etc.

If an APC nominator is dissatisfied with the priority his nomination is assigned at the regional/local agency level, the nominator may also submit the nomination directly to the Michigan Coastal Management Program for consideration.

State Level Inventory and Review Process

At the state level, area of particular concern nominations may be received by either: (1) the Michigan Department of Natural Resources, Michigan Coastal Management Program; or (2) the Citizens Shorelands Advisory Council. APC's may originate from: (1) legislated mandates for specific coastal areas; (2) nominations sent directly to the state; or (3) nominations sent to the state following regional/local agency review.

APC's resulting from legislation are received from agencies as area descriptions and management plans. Nominations which were first screened at the regional/local agency level are received by the state with documentation of support or nonsupport. Nominations which are sent directly to the state by nominators are noted and referred to regional and/or local agencies for their review and action. In this referral, nominations have the opportunity to receive additional local attention and support. Local support enhances the nomination's priority for implementation, but is not a necessary condition to qualify for state consideration.

State level review separates from the entire number of APC's a limited number of areas and management recommendations which will receive attention directly from the Coastal Management Program in the form of financial or technical assistance. These APC's are termed designated action areas of particular concern. Additional high priority APC's are considered for funding through other state or state administered federal funding programs. The process for reviewing and prioritizing APC's is as follows:

- The state receives nominations as described above. Each nomination is recorded by geographic area (region, county and township) and by type of APC (areas of natural hazard, sensitive areas, etc.), with any available documentation of local or state support or, in some cases, a legislative mandate. Coastal Management Program staff locate the area on maps and record any data received.

- Copies of nominations are distributed to the Standing Committee on Shorelands and Water Coordination for state agency review. As described in Chapter VI, this Committee is composed of a number of state agency representatives. Recommendations from this Committee are based upon a number of guidelines:
  - Is the APC within the coastal area boundary?
  - Is the APC management recommendation consistent with state policy?
  - Can the APC be implemented through other sources or funds or by other programs?
  - Has the APC received all necessary reviews at the local/regional level?
  - Does the APC have local and state support?
  - Is the APC eligible for funding per the Coastal Zone Management Act of 1972?
  - Does the APC have potential for greater than local impact or benefit?
  - Is the area in immediate need of preservation or restoration?
  - How much time is needed to implement the management recommendation?

APC's which conform to the above guidelines used by the Standing Committee receive priority for implementation. APC's not conforming to these guidelines receive a lower priority in state implementation efforts. If management recommendations and/or priority uses for APC's are significantly altered by the state, the Coastal Management Program will make a reasonable attempt to notify the APC nominator and secure local endorsement for the modified management recommendation. All APC's are kept on file and are reviewed annually to ascertain priority for action. All APC's are also included in environmental reviews, permit processes, technical assistance programs, funding requests, etc.

Many APC's can be carried out in ongoing local planning and zoning programs without support of state level review. Prior to state designation of an action area of particular concern, the Coastal Management Program will insure that affected landowners and governmental units support the proposed action. For designated action areas of particular concern, an indication of lowest use priority will be made in contractual agreements by the Coastal Management Program using: (1) APC management recommendations; (2) documented local/regional support for management recommendations; and (3) other data relative to land capability, neighboring land uses, etc.

Upon assignment of priority, every APC is filed, mapped and cross-referenced for convenient recall by the Coastal Management Program. This information will be utilized in ongoing permit and environmental review activities. It will also be available for public and local agency use.

SUMMARY

The objective of the APC inventory and review process is to maximize the number of APC's implemented. The Department of Natural Resources and other agencies involved in the process actively refer coastal concerns to agencies having the interest, authority and the means to take positive action on them. Actions may take the form of direct financial assistance from the Coastal Management Program. Funds may be applied either to individual project sites or to issues involving groups of sites. Other programs and agencies will be encouraged to consider and include APC's in their work plans.

Though all APC's and their endorsements will be recorded and recalled, a limited number of designated action APC's will receive priority for Coastal Management Program attention.

Chapter V
Coastal Management Program Organization and Authorities

Approaches in the past for managing Michigan's coast are illustrated by statutes which address either specific resources, activities, and/or impacts. Through integration of statutory responsibilities, the Coastal Management Program improves enforcement of authorities and accelerates technical and financial assistance and intergovernmental coordination to protect coastal resources and solve coastal problems.

Michigan has a remarkable legacy of concern for management of Great Lakes resources, and a substantial existing statutory basis for coastal resource protection. The Michigan Department of Natural Resources either administers directly or plays a formal role in the administration of all significant state coastal programs and authorities which provide for air and water quality control, shorelands management, recreational developments and many others. The objective of the Department's Coastal Management Program implementation effort is to: (1) provide increased assistance at the state and local level for creative solutions to coastal issues and problems; (2) minimize program duplication and conflict; (3) improve enforcement and streamline permit processes; and (4) provide opportunity for citizens and other public and private interests to become involved in coastal management. The following pages describe how such entities as the Department of Natural Resources, Natural Resources Commission, Michigan Environmental Review Board, Standing Committee on Shorelands and Water Coordination, and others provide for coordination and strengthened implementation of authorities and programs in the context of the Coastal Management Program's organization structure to insure proper management and protection of Michigan's magnificent coastal resources.

MICHIGAN'S COASTAL MANAGEMENT PROGRAM IN THE CONTEXT OF STATE GOVERNMENT

The Michigan Department of Natural Resources, Division of Land Resource Programs is the lead agency to administer Michigan's Coastal Management Program. Formal designation was conveyed in a letter dated October 21, 1977 by Governor William G. Milliken, under authority of Article V, Section 2 of the Constitution of the State of Michigan of 1963, which transmitted "State of Michigan Coastal Management Program and Draft Environmental Impact Statement" to the United States Department of Commerce.

The Division of Land Resource Programs administers many important coastal authorities, such as the Shorelands Protection and Management Act, Great Lakes Submerged Lands Act, Inland Lakes and Streams Act and others. The Division is responsible for program administration, continuing consultation with the public and local officials, assuring state agency coordination and conflict resolution, and for administering federal consistency provisions.

The Coastal Management Program Unit, in the Division of Land Resource Programs, Department of Natural Resources, is responsible for coordinating state agency responsibilities and programs to provide for improved enforcement of coastal regulatory authorities and to enhance coastal technical and financial assistance efforts.

Within the context of state government, the Michigan Legislature enacts laws, levies taxes and appropriates funds for state government. The Legislature encompasses two houses: (1) the Senate with 38 members, and (2) the House of Representatives with 110 members. Judicial power of Michigan is vested exclusively in the Michigan Supreme Court and additional lower courts. The Supreme Court has supervisory control over all courts in the state.

The Department of Natural Resources is one of 19 operating state agencies which fall under the purview of the Executive Office of the Governor. Many of these agencies administer programs important to coastal management, which will be a focus of program coordination efforts, (Departments of Natural Resources, Public Health, Agriculture, Highways and Transportation, State, Commerce and Labor primarily). In addition, the Attorney General's Office provides broad services to all state programs. The Attorney General is legal counsel for the Legislature as well as other entities within state government and may intervene in both civil and criminal lawsuits where the public interest is involved. The Environmental Protection and Natural Resources Division of the Department of Attorney General serves Department of Natural Resources programs concerned with water and air quality, resource recovery, etc. The Lands, Lakes and Leases Division serves the Department on matters pertaining to submerged lands, coastal wetlands, etc.

As described in this chapter, Michigan's Coastal Management Program integrates and strengthens state agency coastal responsibilities. Coordination is accomplished through such entities as the Michigan Environmental Review Board, the Michigan Natural Resources Commission, the Governor's system of subcabinets, and other mechanisms.

The Department of Natural Resources, Division of Land Resource Programs, is the lead Coastal Management Program agency and will administer implementation grants authorized under Section 306 of the federal Coastal Zone Management Act. Following is a description of the Department's role in coastal management and a detailed discussion of authorities and program responsibilities which will be coordinated by the Coastal Management Program Unit in the Division of Land Resource Programs.

The Michigan Department of Natural Resources — The Lead Coastal Management Agency

Act No. 17 of the Public Acts of 1921, which created the Department, established that the Department, ". . . shall protect and conserve the natural resources of the State of Michigan; provide and develop facilities for outdoor recreation . . . prevent and guard against the pollution of lakes and streams within the state, and enforce all laws provided for that purpose . . ."

The Department is organized into 20 divisions and four offices, (see Figure V-A). Figure V-B illustrates the location of the Department's regional, district and field offices. The Department is managed by a director who is appointed and serves at the pleasure of the Natural Resources Commission.

Natural Resources Commission

A seven member citizen Natural Resources Commission, also established by Act No. 17, is responsible to the Governor and the people of Michigan for meeting mandates of the Act through Department policy formulation and direction. The Commission actively considers all interests in Department programs by providing that any citizen, interest group, private firm, etc., may appear before the Commission to present views on matters pertaining to Department policies, actions, or contested case hearings. The Commission fully considers these contributions in directing the operation of Department programs, (Natural Resources Commission Policy No. 1033).

Issues relating to the environment and natural resources of the state that directly or indirectly involve the Department are addressed by Department policy which is formally endorsed by the Commission. These policies and procedures are widely distributed to insure that Department actions are consistent with Commission policy positions, (Natural Resources Commission Policy No. 1021).

Executive Orders of the Governor 1973-2 and 1973-2a consolidated environmental functions of the state within the Department in order to provide a coordinated response to environmental problems and concerns facing Michigan. These Executive Orders consolidated the Water Resources Commission, Air Pollution Commission, Michigan State Waterways Commission and the Mackinac Island Commission within the Department, (Executive Order authorized under the Executive Organization Act, Act No. 380 of the Public Acts of 1965, by authority of Article V of the 1963 Michigan Constitution).

Roles and responsibilities of these five commissions were established by Executive Order 1976-8 which specifically recognizes that, ". . . these diverse responsibilities (e.g. the Department's) and continued advances in environmental protection and natural resources management require an organizational structure designed to meet existing and emerging program needs . . ." This Executive Order places each of the five commissions in an advisory capacity to the Natural Resources Commission although the Air Pollution Control Commission, Water Resources Commission and Resource Recovery Commission retained authority for independent functions of rule making, issuing permits, licenses and orders for pollution abatement and quasijudicial action, (e.g., contested case hearings).

FIG. V-A
Organizational Structure of the
Michigan Department of Natural Resources

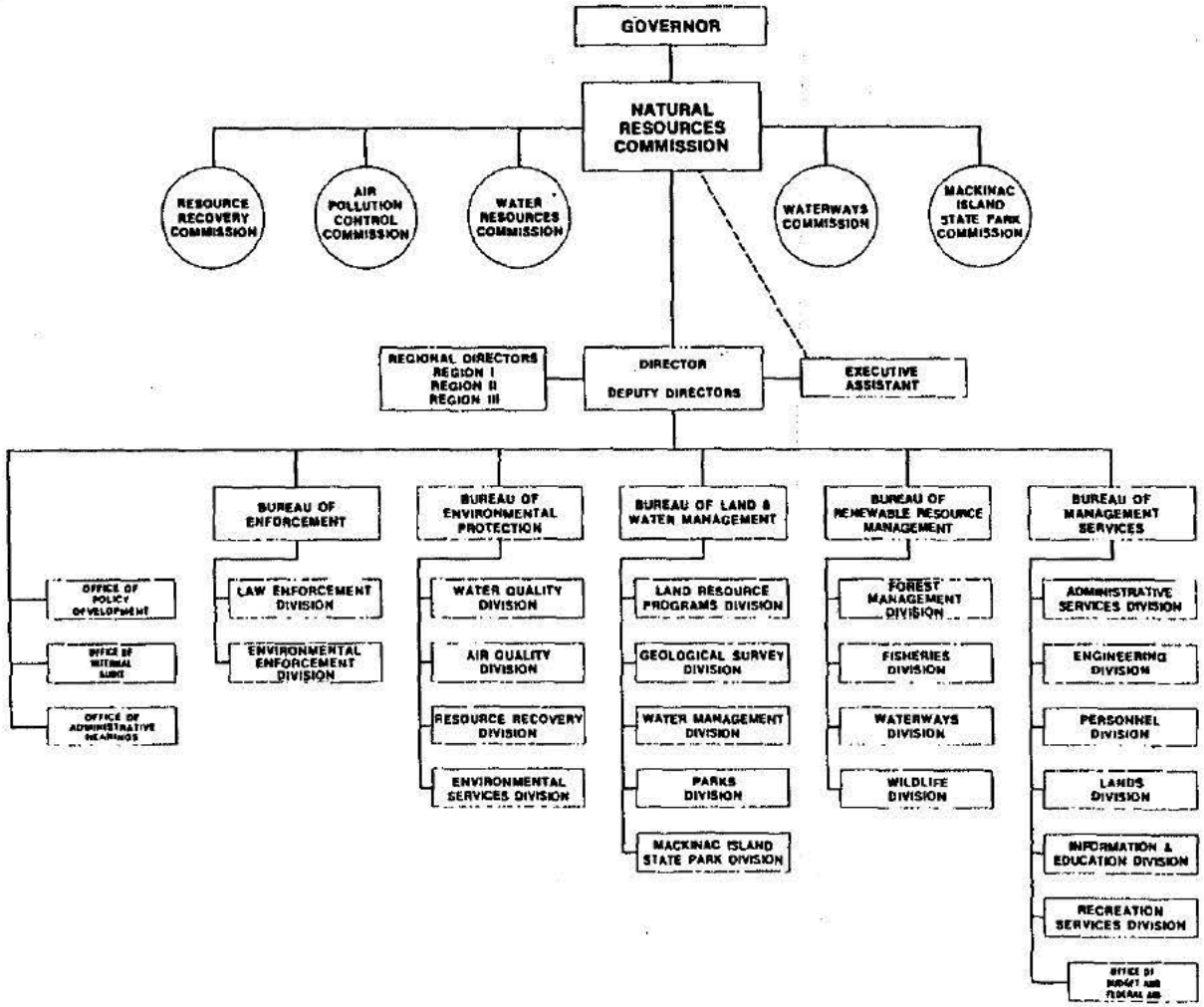


FIG. V-B
Regional, District and Field Offices
of the Michigan Department
of Natural Resources

The consolidation of environmental functions and programs within the Department of Natural Resources strengthens the management authorities and capabilities for implementing Michigan's Coastal Management Program.

Department of Natural Resources provides staff support for the Department commissions. Commission actions including rule making and permit issuance, must be consistent with policies cited in Chapter III, including the process for preparation and review of environmental impact statements, established by Executive Order 1974-4 and the process for public hearings and contested cases, established by Michigan's Administrative Procedures Act. The program policies are based on existing state law, and the commission must comply with these provisions.

The diverse interests represented on the commissions, coupled with their responsibility for establishing Department policy and program direction while providing maximum opportunity for public involvement, provides an important mechanism for coordination and conflict resolution of coastal policies and actions.

As described below, the five commissions are responsible for many Department policies and actions which are involved in coastal management.

- The Water Resources Commission, (established by Act No. 245 of the Public Acts of 1929), is composed of four ex-officio directors of state agencies, including the Department of Natural Resources, and three appointed citizens. The Commission is charged with responsibility to protect and conserve water resources of the state; control pollution over waters of the state; and prohibit pollution of waters held in public trust. These objectives are accomplished largely through permits, surveillance and enforcement. The Commission is also directed to develop adequate wastewater collection and treatment systems.

- The Air Pollution Control Commission, (established by Act No. 348 of the Public Acts of 1965), contains 11 members: three ex-officio directors of state agencies, including the Department of Natural Resources, and eight appointed citizens. The Commission's major role is to prevent new sources of air pollution and to reduce air pollution from existing sources through compliance with air quality standards.

- The Resource Recovery Commission, (established by Act No. 366 of the Public Acts of 1974), is composed of the directors of the Department of Natural Resources and Treasury Department, and nine appointed citizens. The Commission is responsible for disposal control of refuse statewide.

- The State Waterways Commission, (established by Act No. 320 of the Public Acts of 1974), is composed of five citizen members. Its primary function is to acquire, construct and maintain harbors, channels, public access sites and facilities for vessels in navigable waters within the state.

- The Mackinac Island State Park Commission, (established by Act No. 355 of the Public Acts of 1927), has seven citizen members which are appointed by the Governor. Its objectives are to provide for public use and historic preservation of Mackinac Island State Park.

The Coastal Management Program relies upon the authority vested in this organization structure for implementing the Department's coastal policies and programs. The Natural Resources Commission provides leadership to this organization for effective implementation of coastal authorities and programs, and coordination of state and federal activities with the Coastal Management Program. The Natural Resources Commission approval of the provisions of Michigan's Coastal Management Program (Michigan Natural Resources Commission approval, dated October 14, 1977) constitutes formal support for Program implementation to protect valuable coastal resources and solve serious coastal problems.

As described later in this chapter, the commissions also act as a mechanism for resolving conflicts in the event a Department action or ruling is contested. The commissions review such contested Department decisions through a contested case hearing at which time the aggrieved party may appeal directly to affected commission(s). This process provides the opportunity to resolve conflicts resulting from Department actions prior to judicial review in circuit court, as authorized by the Administrative Procedures Act, (Act No. 306 of the Public Acts of 1969) with respect to contested cases.

Department's Role in Controlling Direct and Significant Coastal Impacts

The State of Michigan has a substantial existing statutory basis for controlling direct and significant impacts to coastal lands and waters. These authorities are administered to insure that adverse impacts to the public health, safety and general welfare do not result from various use activities. This represents a performance approach to controlling impacts, rather than zoning or regulation of types of uses per se (e.g., commercial, industrial, residential, etc.). Thus, to identify circumstances where there is potential for a direct and significant impact, criteria statements may be utilized in lieu of the name of use activities. An affirmative response to any of the criteria listed below triggers an individual permit review. As shown below, the Department of Natural Resources either directly administers or plays a major role in the administration of these state regulatory statutes. (For a more complete description of the scope, authority and administrative requirements of statutes cited below, refer to Appendix C of "State of Michigan Coastal Management Program and Draft Environmental Impact Statement".)

NATURAL OR ENVIRONMENTAL SIGNIFICANCE

- Does the activity involve filling, grading or other alterations of the soils, activities which may contribute to soil erosion and sedimentation, alteration of natural drainage (not including the reasonable care and maintenance of previously established public drainage improvements works), the cutting and removing of trees and other native vegetation on lands subject to forest management plans, and the placement of all structures within the area of designation in a designated shoreland environmental area? (Act No. 245 of the Public Acts of 1970) Shorelands Protection and Management Act.

  Administered by the Department of Natural Resources, Division of Land Resource Programs.

- Does the activity involve a designated shoreland natural river area? (Act No. 231 of the Public Acts of 1970) Natural Rivers Act.

  Administered by the Department of Natural Resources, Division of Land Resource Programs.

- Does the activity impact any fish, plant life or wildlife on the state or federal list of threatened or endangered species? (Act No. 203 of the Public Acts of 1974) Endangered Species Act.

  Administered by the Department of Natural Resources, Wildlife Division.

AIR QUALITY

- Does the activity involve the coastal installation, construction, reconstruction or alteration of any process or system which may be a source of air contamination? (Act No. 348 of the Public Acts of 1965) Air Pollution Control Act.

  Administered by the Department of Natural Resources, Air Quality Division.

WASTE DISPOSAL

- Does the activity involve coastal facilities which collect, transfer, process or otherwise dispose of recycled solid refuse materials? (Act No. 87 of the Public Acts of 1965) Solid Waste Management Act.

  Administered by the Department of Natural Resources, Resource Recovery Division.

- Does the activity involve the coastal hauling of liquid, industrial or domestic wastes? (Act No. 136 of the Public Acts of 1969) Liquid Industrial Haulers Act; and (Act No. 243 of the Public Acts of 1951) Domestic Waste Haulers Act.

  Administered by the Department of Natural Resources, Water Quality Division.

- Does the activity involve the use of Great Lakes or other waters of the state for discharge of industrial or commercial waste waters? (Act No. 245 of the Public Acts of 1929) Water Resources Commission Act.

  Administered by the Department of Natural Resources, Water Quality Division.

- Does the activity involve the collection, conveyance, transport, treatment or other handling of domestic or industrial liquid wastes by municipal sewer systems or by municipal treatment facilities? (Act No. 98 of the Public Acts of 1913) Control of Waterworks and Sewage Treatment Systems Act.

  Administered by the Michigan Department of Public Health and the Department of Natural Resources, Water Quality Division.

- Does the activity involve waste from mineral (including test, storage, disposal and brine) wells in the coastal area? (Act No. 315 of the Public Acts of 1969) Mineral Wells Act.

  Administered by the Department of Natural Resources, Geological Survey Division.

LAND USE

- Does the use activity involve new development in a designated shoreland high risk erosion area? (Act No. 245 of the Public Acts of 1970, as amended) Shorelands Protection and Management Act.

  Administered by the Department of Natural Resources, Division of Land Resource Programs.

- Does the activity involve coastal earth changes which are located within 500 feet of a water course or which alter more than one acre of land? (Act No. 347 of the Public Acts of 1972) Soil Erosion and Sedimentation Control Act.

  Administered by the Department of Natural Resources, Division of Land Resource Programs.

- Does the use activity involve or otherwise make permanent use of public trust lands or made lands (including the waters over them) of the Great Lakes or their bays and harbors? (Act No. 247 of the Public Acts of 1955) Great Lakes Submerged Lands Act. ✓

  Administered by the Department of Natural Resources, Division of Land Resource Programs.

- Does the use activity create, alter or otherwise make permanent use of bottomlands or made lands (including the waters over them) in inland lakes and streams or in connecting waters of the Great Lakes? (Act No. 346 of the Public Acts of 1972) Inland Lakes and Streams Act. ✓

  Administered by the Department of Natural Resources, Division of Land Resource Programs.

- Does the activity involve new construction in designated shoreland flood risk areas? (Act No. 245 of the Public Acts of 1970, as amended) Shorelands Protection and Management Act. ✓

  Administered by the Department of Natural Resources, Division of Land Resource Programs.

- Does the use activity involve the alteration, occupation or obstruction of floodways and watercourses (including the Great Lakes connecting waters) which have two or more acres of drainage area? (Act No. 167 of the Public Acts of 1968) Floodway Encroachment Act. ✓

  Administered by the Department of Natural Resources, Water Management Division.

- Does the activity involve the subdivision of coastal lands into five or more parcels, each of which is ten acres or less in size? (Act No. 288 of the Public Acts of 1967) Subdivision Control Act. ✓

  Administered by the Department of Treasury; provisions for flood plains or riparian platted lands administered by the Michigan Department of Natural Resources, Water Management Division.

- Does the activity involve new coastal condominium development? (Act No. 299 of the Public Acts of 1963) Horizontal Real Property Act.

  Administered by the Michigan Department of Commerce, Corporations Security Bureau; flood hazard and sewerage provisions administered by the Michigan Department of Natural Resources, Water Quality Division and Water Management Division.

- Does the use activity involve new coastal mobile home park development? (Act No. 243 of the Public Acts of 1959) Mobile Home Park Act.

  Administered by the Michigan Department of Public Health, Community and Environmental Health Division; Michigan Department of Natural Resources assists in review of activities relative to flood plains and sewerage or wastewater systems.

- Does the use activity involve new coastal campground development? (Act No. 171 of the Public Acts of 1970) Campground Development Act.

  Administered by the Michigan Department of Public Health, Community and Environmental Health Division; Michigan Department of Natural Resources assists in review of activities relative to flood plains and sewerage or wastewater systems.

- Does the activity involve the coastal area in planning, operating, abandoning or reclaiming of mineral mining (including coal, gypsum, stone, metallic ores or similar substances) excavated from natural deposits by open pit methods? (Act No. 92 of the Public Acts of 1970) Mine Reclamation Act.

  Administered by the Michigan Department of Natural Resources, Geological Survey Division.

- Does the activity involve the coastal exploration, extraction or storage of oil and gas resources? (Act No. 61 of the Public Acts of 1939) Oil and Gas Wells Act.

  Administered by the Department of Natural Resources, Geological Survey Division.

- Does the activity involve commercial, industrial or other extraction of sand from designated Great Lakes Sand Dune Areas? (Act No. 222 of the Public Acts of 1976) Sand Dunes Protection and Management Act.

  Administered by the Michigan Department of Natural Resources, Geological Survey Division.

WATER SUPPLY

- Does the activity involve coastal systems which supply or purify water intended for public or household use? (Act No. 98 of the Public Acts of 1913) Waterworks and Sewage Treatment Systems Act.

  Administered by the Michigan Department of Public Health and the Michigan Department of Natural Resources, Water Quality Division.

- Does the activity involve the coastal storing, handling or use of oils, salts, or other materials listed in the Water Resources Commission's Critical Materials Register? (Act No. 245 of the Public Acts of 1929, Part 5 Rule Amendments) Oil and Hazardous Materials Amendments of the Water Resources Commission Act.

  Administered by the Michigan Department of Natural Resources, Water Quality Division.

- Does the activity involve the coastal control, diversion or other use of waters of the state in operating a low grade iron-ore mine? (Act No. 143 of the Public Acts of 1959) Mine Water Diversion Act.

  Administered by the Michigan Department of Natural Resources, Water Quality Division.

- Could the activity result in pollution, impairment, or destruction of the air, water and other natural resources of the public trust where a feasible and prudent alternative exists? (Act No. 127 of the Public Acts of 1970) Michigan Environmental Protection Act.

  The Michigan Environmental Protection Act, (Act No. 127 of the Public Acts of 1970) provides that any party, including the Department of Natural Resources, may seek a judicial review of actions conducted or planned by any other party if the action may result in pollution, destruction or impairment of natural resources. Thus, Act No. 127 may be utilized to protect the natural resources of the state consistent with directives of Article 4 of the Constitution of the State of Michigan of 1963 which declared that the conservation and development of the natural resources of the state are of paramount public concern in the interest of the health, safety and general welfare of the people.

NOTE: In accord with Section 307 3(f), provisions of the federal Water Pollution Control Act as amended; and the federal Clean Air Act, as amended, are incorporated into the Coastal Management Program and administered by the Department of Natural Resources' Water Quality Division and Air Quality Division, respectively. The state has authority to invoke more stringent standards for air and water quality where minimum requirements are insufficient to protect the resource. Authority to invoke more stringent standards is provided by Act No. 245 of the Public Acts of 1929, as amended, and Act No. 348 of the Public Acts of 1965 for water and air quality, respectively.

Recognizing that certain impacts or benefits are larger than local in nature, the Michigan Legislature has enacted several statutes which limit local land regulatory authority. The following section describes how the states implement these authorities to consider uses of regional benefit.

State Considerations for Uses of Regional Benefit

In the context of the federal Coastal Zone Management Act, uses which serve or impact upon more than local areas are termed uses of regional benefit. Following is a discussion of state considerations for coastal uses of regional benefit.

The concept that local ordinances are not enforceable against state-owned lands is well established in legal text authorities, (see 2 Anderson, American Law of Zoning, Sec. 9.06) and Michigan law, (see State Highway Commissioner v. Redford Township, 4 Mich App 223, 1966). Thus, such state-owned lands as the 37 coastal state parks, the 19 coastal state game and wildlife areas, and state owned access sites are unaffected by local ordinances and are managed for uses of larger than regional benefit in accord with state statutes, administered by state agencies — primarily the Department of Natural Resources.

The County Rural Zoning Enabling Act, (Act No. 183 of the Public Acts of 1943, as amended) provides that county zoning ordinances and amendments be submitted to the state for approval before becoming effective. The Department of Natural Resources, Division of Land Resource Programs approves only those county ordinances or amendments which are legal in content and comply with state zoning enabling statutes and court decisions.

Executive Order of the Governor 1973-12 transferred state responsibility for review and approval of county zoning ordinances to the Department of Natural Resources. The Executive Order specifically recognized that: ". . . the focus and importance of zoning has broadened since the inception of the County Zoning Act for achieving effective land use objectives extending to all aspects of a community's development . . . and . . . the importance of centralizing responsibility to strengthen the state's capability in planning and efficient land use development . . ."

The Shorelands Protection and Management Act, (Act No. 245 of the Public Acts of 1970, as amended) provides that any affected local governmental unit (e.g., county, township, city or village) may develop and administer zoning ordinances which conform to regulations of Act No. 245.

If local ordinances do not comply with Act No. 245's provisions in high risk erosion areas, environmental areas or flood risk areas, the state regulates the areas by permit.

Similarly, the Natural Rivers Act (Act No. 231 of the Public Acts of 1970) provides that local units (e.g., county and township) must develop zoning ordinances which comply with provisions of Act No. 231 in designated natural river areas. If local zoning does not comply with measures of Act No. 231, the state may develop and enforce restrictions to protect designated natural rivers.

The Soil Erosion and Sedimentation Control Act also provides for local agency administration in compliance with state-approved guidelines. Administrative rules for the Soil Erosion and Sedimentation Control Act and proposed rules for the Shorelands Protection and Management Act* enable the state to insure effective local agency

*Rules currently proposed by the state for the Shorelands Protection and Management Act would provide for monitoring of locally-delegated enforcement programs to insure consistent with state requirements in high risk erosion, environmental and flood risk areas. Proposed rules would provide for performance evaluation and decertification by the state of a local government's authority to administer provisions of Act No. 245 if it could be demonstrated that the local unit had failed to fully enforce the statute, consistent with state requirements.

enforcement through review of any proposed amendments or alterations to zoning ordinances or plans and annual evaluations of permits issued and applications for permits acted upon by a local administering agency.

The Mobile Home Commission Act (Act No. 419 of the Public Acts of 1976) provides that the state Mobile Home Commission shall determine the sufficiency of local mobile home ordinances which are designed to provide local governments with superintending control over mobile home business use, according to rules established by the Michigan Department of Public Health in accord with Act No. 419 and Act No. 243 of the Public Acts of 1959.

Other facilities reviewed by the state, according to a number of state enabling statutes, with larger than local impact include: hospitals, correctional facilities, schools, sewage treatment plants, water storage and retrieval systems, public utilities, drainage facilities, road improvements, historic sites, and air pollution facilities.

For example, review of plans and ordinances for local historic districts are reviewed by the Michigan Historical Commission (Act No. 169 of the Public Acts of 1970). Act No. 40 of the Public Acts of 1956 enables the state to review local drainage facilities. Similarly, Act No. 348 of the Public Acts of 1965 enables the state to review local air pollution control facilities.

With respect to energy developments, oil and gas well drilling, completion or operation may not be regulated by zoning ordinances of counties or townships pursuant to Act No. 183 of the Public Acts of 1943 and Act No. 184 of the Public Acts of 1943, respectively. Authority for implementing this authority resides with the Supervisor of Wells who is the Director of the Department of Natural Resources.

In agreement with a recent Michigan Supreme Court decision, local ordinances may not be arbitrarily, capriciously or unreasonably exclusionary, (see Kropf v. Sterling Heights, 391 Mich 139). This court decision set forth that, " . . . on its face, an ordinance which totally excludes from a municipality a use recognized by the constitution or other laws of this state as legitimate also carries with it a strong taint of unlawful discrimination and a denial of equal protection of the law as to the excluded use . . ."

The court ruled in Kropf v. City of Sterling Heights that ordinances were subject to judicial review: "One who purchases with knowledge of zoning restrictions may nonetheless be heard to challenge the restrictions' constitutionality; an otherwise unconstitutional ordinance does not lose this character and immunize itself from attack simply by the transfer of property from one owner to another.". The court also set forth that: "Determination to grant or deny a change in zoning by a local legislative body on individual grounds is administrative, not legislative; it is quasijudicial and affects the private rights and is subject to direct review by the courts; the merits, the reasonableness of the proposed use — the standard in fact generally followed by a local legislative body when granting or refusing a change — is, under the Michigan Constitution, subject to judicial review and the question on review is whether the grant or denial is supported by competent material and substantial evidence on the whole record." This decision, which provides for judicial review of ordinances (e.g., standing) was later confirmed by findings in Kirk v. Tyrone Township, December 21, 1976.

Thus, the state assures recognition of uses of regional benefit through the following means: (1) no local ordinance is enforceable against state-owned lands; (2)

state review of county ordinances to assure compliance with state zoning enabling statutes and court decisions; (3) state permit or other regulation in lieu of local zoning which does not comply with state statutes; (4) state review of certain local facilities and operations; and (5) the Supreme Court ruling that local ordinances may not be arbitrarily, capriciously or unreasonably exclusionary.

Department Procedures for Administering Authorities

The preceeding sections demonstrate that the lead Coastal Management Program agency — the Department of Natural Resources — is responsible for administering the majority of statutes which regulate or control direct and significant impacts to coastal lands or waters. In addition to enforceability relative to actions of private parties and local units of government, regulatory authorities administered by the Michigan Department of Natural Resources are enforced for Department actions as well as actions of other state agencies.

In administering these authorities, the Administrative Procedures Act establishes the process for the " . . . effect, processing, promulgation of state agency rules; state agency administrative procedures and contested cases and appeals in licensing and other matters; and declaratory judgements as to rules." Figure V-C illustrates the procedures, authorized by Act No. 306 which are used by the Department to promulgate administrative rules for state statutes. As shown, this process provides opportunity for public review and legislative deliberations.

Figure V-D illustrates how the provisions of the Administrative Procedures Act may be utilized by a party aggrieved by a decision to deny a permit under the authority of the Shorelands Protection and Management Act, (Act No. 245 of the Public Acts of 1970). The figure shows that an aggrieved party may first appeal the decision to the agency through a hearing and, if the results of the hearing and Natural Resources Commission's findings do not satisfy the aggrieved party, judicial review of the permit decision may be granted by circuit court.

Figure V-D also shows the general process utilized by the Department in making orders, designations or licensing and permitting decisions in accord with state statutes or Department policies, including the provisions of contested case hearings. Contested cases result when a party is aggrieved by an agency rate-making, licensing, permitting or other activity in which the agency makes a determination of the legal rights, duties or privileges of the affected party prior to judicial review in cicruit court. The Natural Resources Commission and the five other Department commissions make final agency rules for the Department on contested case hearings based upon views provided by the Department and an aggrieved party.

Act No. 306 establishes that, when an individual has exhausted all administrative remedies within an agency (i.e. Commission finding), and is aggrieved by the agency decision or order in a contested case, the decision or order is subject to review by the circuit court. A petition of judicial review of a final agency decision is filed in the circuit court of the county where the petitioner resides or his principal place of business or in the circuit court for Ingham County, Michigan.

In making their ruling, the court holds unlawful and sets aside a decision or order of an agency if substantial rights of the petitioner have been prejudiced if the order is:

FIG. V-C
Promulgation of Administrative Rules

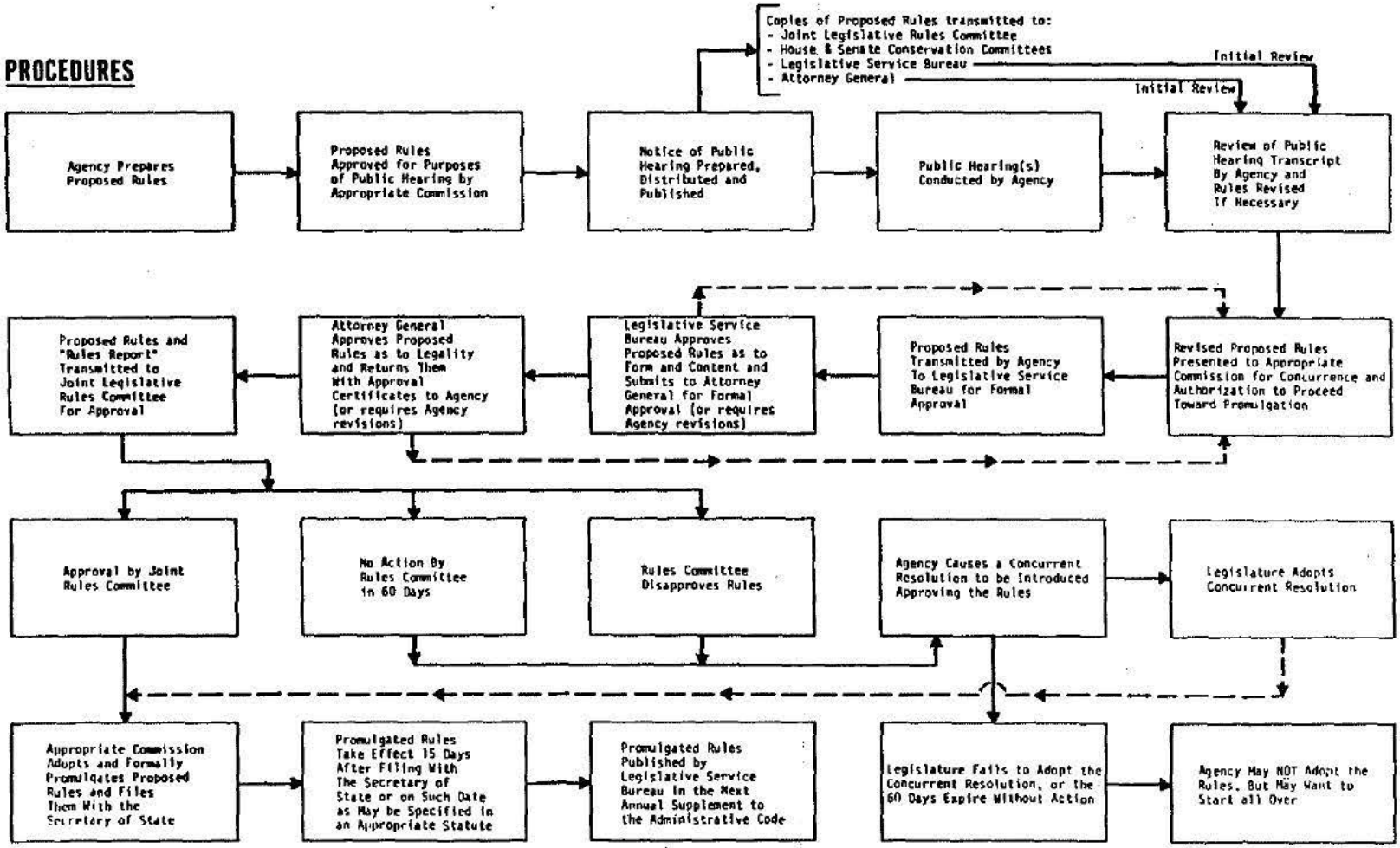
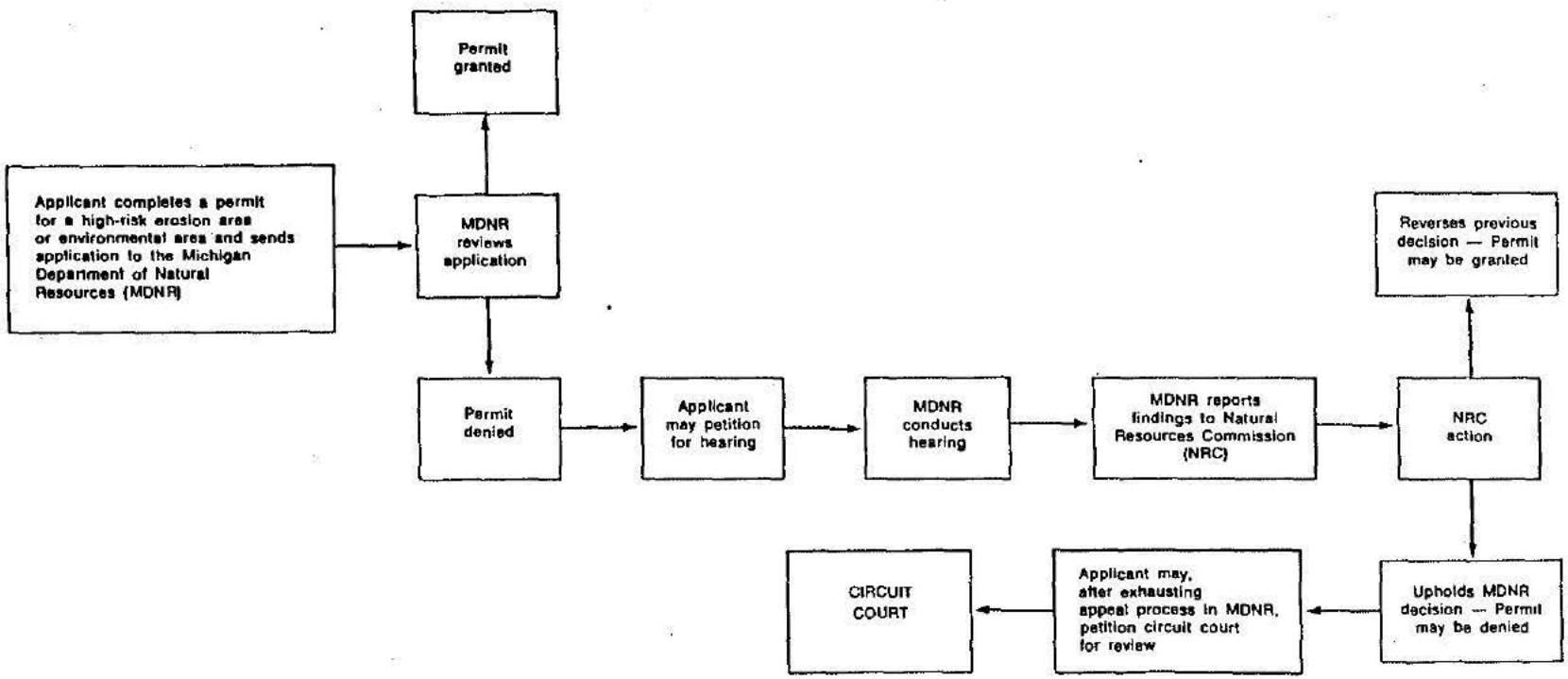


FIG. V-D
Due Process Provisions — Permitting Authority



(1) in violation of the constitution or statute; (2) in excess of the statutory authority or jurisdiction of the administrative agency; (3) made upon unlawful procedure resulting in material prejudice to a party; (4) not supported by competent material and substantial evidence on the whole record; (5) arbitrary, capricious or clearly an abuse or unwarranted exercise of discretion; and (6) affected by other substantial and material error of law.

The court may affirm, reverse or modify the decision or order or remand the case for further proceedings.

Thus, the provisions of the Administrative Procedures Act provides for contested cases and judicial review of actions by state agencies relative to orders or rules resulting from licensing, permitting and other activities.

This section demonstrates the Department of Natural Resources significant role in administering and coordinating programs and authorities which are important to program coordination needs to improve coastal regulations and enhance technical and financial assistance efforts. Following is a discussion of the coordination responsibilities and other functions of the lead Coastal Management Program division within the Department of Natural Resources — the Division of Land Resource Programs.

PRINCIPAL COASTAL MANAGEMENT PROGRAM DIVISION

Within the Department of Natural Resources, the principal Coastal Management staff unit is located in the Division of Land Resource Programs.

Great Lake Shorelands Section

The Great Lakes Shorelands Section of the Division is solely concerned with coastal management activities. This Section's objectives are tailored to confront a range of issues and interests along Michigan's 3,200 mile shore. The Section's Coastal Management Program Unit is responsible for development and implementation of the Coastal Management Program including: (1) intergovernmental coordination; (2) federal consistency determinations; (3) grant administration; (4) liaison responsibilities including financial and technical assistance, with regional agencies and local governments; (5) formulating public participation strategies; (6) developing planning processes for shore erosion, energy facility siting, and beach access; and (7) inventorying and reviewing areas of particular concern; (8) monitoring of state agency actions to ensure consistency with the program.

In addition to the Coastal Management Program, the Great Lakes Shorelands Section also administers the Shorelands Protection and Management Act, (Act No. 245 of the Public Acts of 1970, as amended), and the Great Lakes Submerged Lands Act, (Act No. 247 of the Public Acts of 1955). Through funds provided by the Coastal Management Program, many environmental areas and high risk erosion areas have been identified and protected along the coast as mandated by Act No. 245. Act No. 247 protects the public trust in Great Lakes bottomlands through regulation of dredge and fill activities and placement of shore protection structures.

The Land Resource Programs Division administers many significant coastal authorities. In addition to the Shorelands Protection and Management Act and the Submerged Lands Act, the Division of Land Resource Programs also administers the following statutes:

- Natural Rivers Act (Act No. 231 of the Public Acts of 1970)
- Wilderness and Natural Areas Act (Act No. 241 of the Public Acts of 1972)
- Inland Lakes and Streams Act (Act No. 346 of the Public Acts of 1972)
- Soil Erosion and Sedimentation Control Act (Act No. 347 of the Public Acts of 1972)
- Farmland and Open Space Preservation Act (Act No. 116 of the Public Acts of 1974)

Division Permit Review Procedures

In accord with statutes cited above, the Division of Land Resource Programs has established procedures for review of permit applications for major coastal authorities administered by the Division. Figure V-E illustrates the permitting procedure utilized by the Division of Land Resource Programs for activities proposed under the authority of Act No. 247 of the Public Acts of 1955, as amended, the Great Lakes Submerged Lands Act.

As described in Chapter VI of this impact statement, the Division of Land Resource Programs will assure that federal consistency determinations are made for all state programs but, with the exception of statutes directly administered by the Division, will not be directly responsible for the specific review of all federal actions for compliance with all state authorities. Thus, in many cases, either other Department of Natural Resources divisions or other state agencies will make initial federal consistency findings, with the Division of Land Resource Programs serving to confirm and review state agency determinations and assure that complete consistency determinations have been executed.

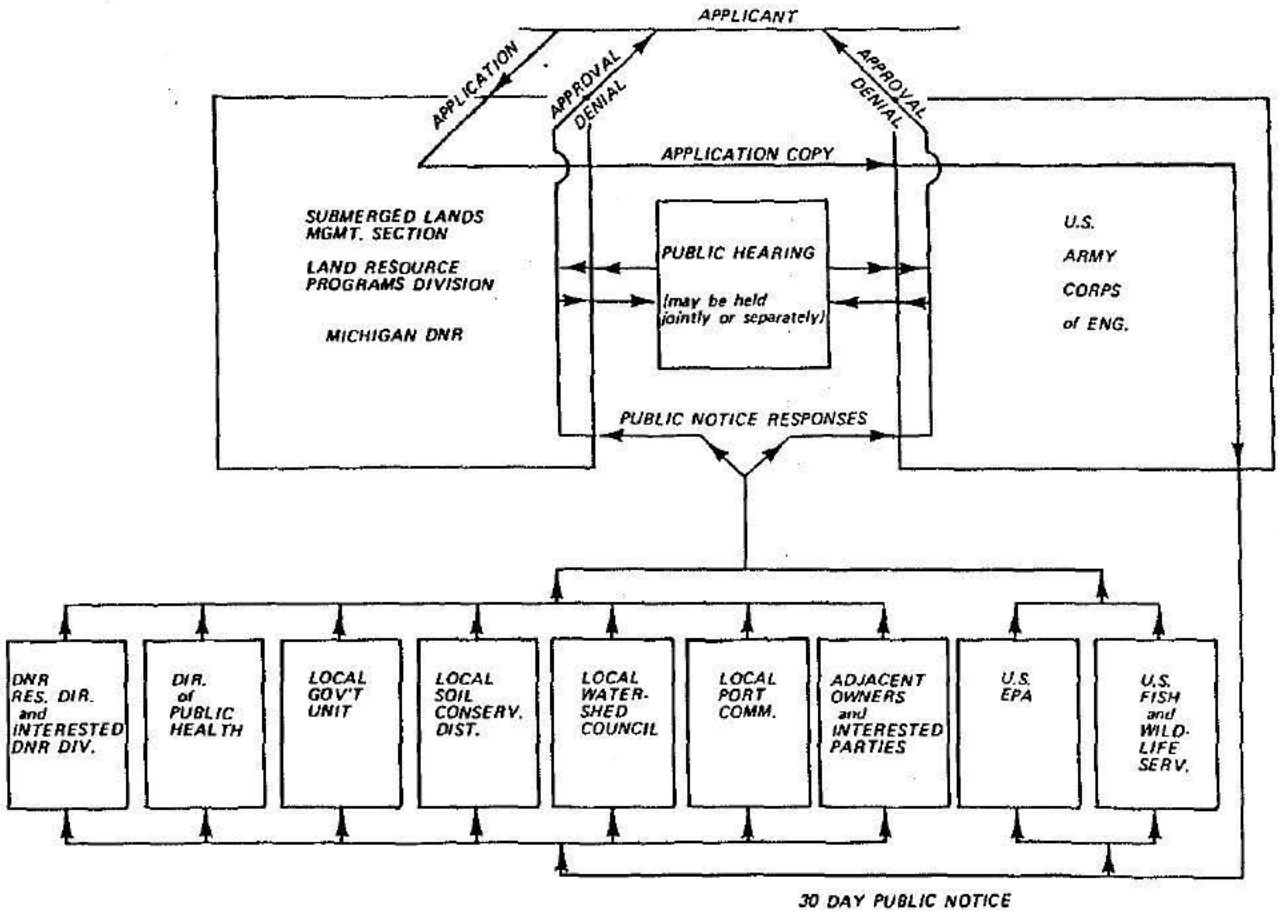
Coastal Coordination and Conflict Resolution Mechanisms

Citizen Advisory Body

On November 19, 1973, the Natural Resources Commission appointed a citizen advisory body to the Coastal Management Program Unit. Creation of the Citizens Shorelands Advisory Council was a recommendation of Michigan's *Shorelands Plan* and is consistent with Natural Resources Commission policy of maximum citizen participation in Department programs. The Council advises the Natural Resources Commission on such matters as erosion control, protection of fish and wildlife, estuarine sanctuaries, shorelands development and other issues. In advising the Commission, the Council is directed to consider all interests, including the national interest, and local governments. The Council is also directed to promote education and encourage public response to the Coastal Management Program through: (1) local and regional meetings; (2) inter- and intra-state liaison; and (3) formal public presentations. The Council reviews Department of Natural Resources programs and policies pertaining to coastal management, and reviews and makes recommendations on legislation. Council subcommittees include: the *Executive Committee*, which identifies project priority and formulates meeting agendas; the *Legislation Committee*, which reviews and sponsors coastal-related legislation; the *Committee on Conflicting and Intensive Uses*, which directs its efforts toward addressing coastal problems and issues in urban areas, coastal lakes, river mouths and bays; the *Committee on Economic Importance*, which makes recommendations on projects and issues relative to mineral and energy resources, agriculture, industry and water transportation; and *Committee on Hazards to Development and Sensitive Areas*, which examines erosion, flooding, sand dunes, islands, natural and ecological areas.

An important role of this Council is to actively solicit public involvement in the Coastal Management Program and to provide for public appearances before the

FIG. V-E
Application for Construction Permit



Council to assist in the analysis of local, state and national issues related to coastal management. The results of this involvement may be summarized before the Natural Resources Commission for their consideration in decisions regarding Department policy and actions in the coastal area.

Another important Council function includes reviewing special projects to be funded by the Coastal Management Program. The Council reviews proposed actions for consistency with factors such as: (1) program goals and objectives; (2) the overall state management program; and (3) the public interest in general. This review process provides the Coastal Management Program with information on priorities for funding under the Coastal Zone Management Act.

State Agency Coordination Body

To further coordinate coastal activities and achieve state agency consistency with this program, a Standing Committee on Shorelands and Water was organized in 1974 by the Department of Natural Resources. This Committee is comprised of members from Department of Natural Resources divisions and offices and eight other state agencies, and serves in an advisory capacity to the Coastal Management Program Unit. Committee responsibilities include:

- Identification and recommendation on priority projects and activities for Coastal Management Program consideration. This function includes screening proposed program activities to assure their consistency with state policy. The Committee also assists in developing project proposals and project priorities for funding consideration by the Coastal Management Program. Incorporated in this procedure is a review of management recommendations for Action Areas of Particular Concern. The Committee reviews area of particular concern nominations to identify where other sources of funding could be utilized to address coastal problems and opportunities.

- Evaluating state agency activities for consistency with Coastal Management Program goals, objectives, principles, policies, and Legislated Areas of Particular Concern: Consistency evaluations involve state agency review of coastal projects and activities through Committee participation and environmental review procedures described later in this text. The Committee actively considers the national interest through coordination of programs managed with federal funds with the Coastal Management Program such as the state's "208 program", authorized under the federal Water Pollution Control Act Amendments and the state's air quality program, which is administered to incorporate requirements of the federal Clean Air Act. The Committee structure provides a forum for conflict identification and mediation in the event of nonconsistent state

agency program actions within the coastal area. Formal procedures for conflict resolution are provided in established environmental review procedures.

- Coordination on federal permit reviews and projects: Federal agency activities in the coastal area are evaluated for consistency with the Coastal Management Program. In particular, on projects or developments of major significance, the Committee provides a forum for discussion and deliberation prior to formal action to determine federal agency consistency, (see also Chapter VII).

The Committee on Shorelands and Water Coordination is divided into Intra-departmental (only Department of Natural Resources) and Inter-departmental subcommittees. As noted, most programs which are a focus of coordination by the Coastal Management Program are administered by the Department of Natural Resources. In particular, two Department units provide substantial intra-departmental coordination functions:

- The Environmental Enforcement Division (formerly the Office of Program Review and Project Clearance) is concerned with expediting the review and decision-making process for projects requiring a number of Department approvals or permits, such as environmental impact statements developed in accord with Executive Order 1974-4. This division is generally concerned with projects of large scale, or those projects which may have significant impacts or are highly controversial. The division provides for review and recommendations on large scale projects and developments having potentially significant impacts in the coastal area. Through Committee participation, this division facilitates multi-division discussion, recommendations, and conflict resolution of major coastal projects requiring multi-division review prior to formal environmental review procedures.

- The Office of Policy Development evaluates Department policy and the interrelationships of policies. This office drafts new or revised policies for consideration by the Executive Office of the Department of Natural Resources and the Natural Resources Commission. The Office of Policy Development provides recommendations on coastal-related policies and examines new or revised Departmental policies for consistency with all Department programs, including the Coastal Management Program.

The inter-departmental Subcommittee on Shorelands and Water Coordination includes representatives from nine state agencies: Participating agencies include: (1) Public Health, (2) State Highways and Transportation, (3) Agriculture, (4) Labor, (5) State, (6) Commerce, (7) Treasury, (8) Management and Budget, and (9) Natural Resources.

Programs vested under the authority of these agencies, which comprise the interdepartmental committee include intergovernmental relations, A-95 Review coordination, soil and water management, port development, plat review, historic preservation, campground inspection and others. As with the Intra-departmental Subcommittee, the Inter-departmental Subcommittee facilitates discussion and conflict resolution and develops recommendations on coastal resource projects or activities which require multi-agency review, prior to formal environmental review procedures. The Subcommittee provides a forum for determining state agency consistency of projects and plans with the Coastal Management Program.

Executive Office

The Governor is responsible for supervising all state agencies in the Executive Branch, except as otherwise provided for in the State Constitution. With the advice and consent of the Senate, the Governor appoints directors of most state agencies not headed by elected officials, as well as various boards and commissions, including the Department of Natural Resources' Natural Resources Commission. The Governor also has the authority to make changes in the organization of the Executive Branch or in the assignment of functions among its units which he considers necessary for efficient administration.

As authorized under Article V of the Constitution of the State of Michigan of 1963, the Governor may initiate court proceedings in the name of the state to enforce compliance with any constitutional or legislative mandate, or to restrain violations of any constitutional or legislative power, duty or right by any officer, department or agency of the state or any of its political subdivisions. Thus, the Governor has authority to intervene through judicial review to resolve major conflicts involving state agencies and political subdivisions.

Authority conveyed to the Governor by the 1963 Michigan Constitution as well as the Governor's role in: (1) coordinating state policy through the system of subcabinets and directly with department heads; and (2) making decisions on major state activities with significant environmental impact through the review of environmental impact statements, strengthens the Governor's role as an essential point of conflict resolution for the Coastal Management Program.

Governor's Cabinet Committee on Environment and Land Use

To provide for ongoing communication and coordination of state agency program policies, the Governor has established five subcabinets, composed of directors of Michigan state agencies and the Governor. The Governor's Cabinet Committee on Environment and Land Use is composed of representatives from the following

Michigan agencies: Natural Resources, Public Health, Commerce, Agriculture, State Highways and Transportation, and Management and Budget. The objectives of the committees are to review ongoing program operations and to identify emerging problems in the implementation of Executive Office policies in order to: (1) coordinate review of implementation of executive policies; (2) provide for regular involvement of appropriate agency directors in the development of Executive Office program policies; (3) resolve interdepartmental policy and communication differences within established gubernatorial policy; and (4) coordinate the development and implementation of Executive Office legislative recommendations in cooperation with department directors, (Executive Directive of the Governor, October 1, 1975).

Thus, the Cabinet Committee on Environment and Land Use provides an important forum for policy coordination and conflict resolution among state agencies and the Executive Office as well as an important policy relationship with other agencies for the Coastal Management Program.

Michigan Environmental Review Board

The Michigan Environmental Review Board serves as a formal mechanism, through review of state and federal environmental impact statements, to encourage coordination, consistency and conflict resolution of state agency projects and activities.

The Michigan Environmental Review Board, (MERB), was created by Executive Order 1974-4. Implementation of this Executive Order requires that all major activities of each state agency having a potentially significant impact on the environmental or human life be the subject of a formal environmental impact statement, to be reviewed by MERB with the aid of the Inter-Departmental Environmental Review Committee, (INTERCOM). Executive Order 1974-4 requires MERB to recommend to the Governor those actions of state agencies that should be suspended or modified because of a significant implication for the quality of the state's environmental or human life. Use of public involvement procedures and public hearings is encouraged as part of the MERB decision-making process. Environmental impact statements (EIS) are available prior to public hearings. MERB may also make policy recommendations on specific issues (e.g. energy development, commercial navigation, etc.), for the Governor's consideration.

EIS's are prepared for major state activities when: (1) requested by the Governor; (2) the director of an agency determines that a proposed policy or administrative action may result in or create significant environmental effects; (3) an activity raises general public concern or controversy; (4) MERB recommends such action upon review of a negative declaration EIS; or (5) it is specifically requested by MERB.

MERB also maintains a list of interested citizens, citizen groups, governmental agencies and public media to which a monthly environmental impact statement status list and Board agenda is distributed.

Since MERB is composed of 10 members of the general public appointed by the Governor, one of which is selected Chairman, and seven members from state agencies, including the Department of Natural Resources, it provides an

important forum for resolving coastal conflicts and making policy recommendations to the Governor by reviewing environmental impact statements and providing maximum opportunity for all interests to be heard and considered. MERB reviewed "State of Michigan Coastal Management Program and Draft Environmental Impact Statement", and formally advised Governor Milliken that the Board did not wish to delay approval of the Program by the United States Department of Commerce, and indicates a desire to continue to work with the Department during program implementation.

Figure V-F illustrates the process used by state agencies in the formulation and review of environmental impact statements.

Executive Order 1974-4 establishes that environmental impact statements be a major part of decision-making in each state agency. This is based upon the premise that environmental protection will be best provided when environmental and economic impacts are balanced in decision-making processes.

Department of Natural Resources' procedure for preparing and processing environmental impact statements is set forth in Department Procedure #1036.6, January 1, 1977. This procedure establishes: (1) three categories of actions that can require environmental impact statements; (2) who will prepare environmental impact statements; and (3) types of projects or programs requiring an environmental impact statement. A procedure is established for review and action on Departmental environmental impact statements: (1) within the Department; (2) by the Michigan Environmental Review Board and the Governor; and (3) procedures for review and action on environmental impact statements by other agencies at both state and federal levels. From the perspective of the Coastal Management Program, integration of public or private interests', local, areawide and state governments' review of environmental impact statements which impact coastal resources is an important coordination forum. Thus, Michigan's environmental review procedure provides a full opportunity for review and input on environmental impact statements, and a formal mechanism through Department of Natural Resources representation on MERB and INTERCOM to promote program consistency and conflict resolution. Executive Order 1974-4 also assists the state in accomplishing objectives of the Michigan Environmental Protection Act as described below.

Michigan Environmental Protection Act

The Environmental Protection Act (Act 127 of the Public Acts of 1970) represents a comprehensive effort on the part of the Michigan Legislature to preserve, protect and enhance the natural resources of Michigan. The Act is designed to accomplish two results: (1) to provide a procedural cause of action for protection of Michigan's natural resources; and (2) to prescribe the substantive environmental rights, duties and functions of subject entities. (see Highway Comm. v. Vanderkloot, 392 Mich 159).

The Act provides that the Attorney General, any political subdivision of the state, any instrumentality or agency of the state, or a political sub-division, any person, partnership, corporation, association, organization or other legal entity

FIG. V-F
Five Basic Steps in the Review
of EIS's* and NDEIS's**

STEP 1

AGENCY PREPARES EIS OR NDEIS:

Prepared usually by divisions proposing the action

STEP 2

MICHIGAN ENVIRONMENTAL REVIEW BOARD (MERB)

Receives EIS or NDEIS from agency
and refers the EIS to the Interdepartmental
Environmental Review Committee (INTERCOM).

STEP 3

INTERDEPARTMENTAL ENVIRONMENTAL REVIEW COMMITTEE:

Makes recommendations to MERB.

If INTERCOM finds EIS inadequate, the EIS
is referred back to the submitting agency
(preceeding steps are then repeated).

If INTERCOM finds EIS sufficient, it will
recommend to MERB that the EIS be approved.

STEP 4

MICHIGAN ENVIRONMENTAL REVIEW BOARD:

Determines if EIS is sufficient and if
proposed action should proceed.
If activity is environmentally unacceptable,
MERB may recommend to the Governor that the
proposed activity be halted or modified.

STEP 5

GOVERNOR:

May request that the agency not proceed
with the proposed action or modify it
so as to reduce or remove the
environmental hazards.

*ENVIRONMENTAL IMPACT STATEMENT (EIS):
A written analysis of the environmental aspects of any proposed policy, project or program, that by virtue of its scope or complexity could cause a sizable or serious impact on or alteration of the human and natural environment or could cause a significant alteration in the quality of human life.

**NEGATIVE DECLARATION EIS (NDEIS):
A short EIS on a major project or program with very little or no negative impact.

may maintain an action in circuit court having jurisdiction where the alleged violation occurred or is likely to occur for declaratory and equitable relief against any other party for the protection of the air, water and other natural resources and the public trust from pollution, impairment or destruction.

Of major significance is the decision rendered in Highway Comm. v. Vanderkloot (392 Mich 159) which stated that, ". . . while the constitutional provision concerning protection of Michigan's Natural Resources creates a mandatory legislative duty to act to protect Michigan's natural resources, the Legislature has acted to fulfill the duty and the substantive environmental duties placed on the Michigan State Highway Commission by the Environmental Protection Act are relevant to judicial review in that failure by the Commission to reasonably comply with those duties may be the basis for a finding of fraud or abuse of discretion . . ." In Highway Comm. v. Vanderkloot, the court affirmed Governor Milliken's actions with respect to requirements for preparing environmental impact statements" ". . . The Governor's Executive Order (Executive Order 1974-4) required all state agencies to review all major activities with respect to their impact on the environment and particularly to review; evaluation of alternatives to the proposed action that might avoid some or all of the environmental effects . . . and . . . the possible modification to the project which would eliminate or minimize adverse environmental effects . . . it usefully illustrates . . . a proper executive interpretation of the Michigan Constitution of 1963, Article 4 and, more particularly, the no feasible and prudent alternative provision of the Michigan Environmental Protection Act.

Thus, the Michigan Environmental Protection Act provides for resolution of conflicts involving coastal resources through judicial review of actions or proposed actions by any part in the state.

PROGRAM IMPLEMENTATION ROLES

The Coastal Zone Management Act requires citizen involvement in the development and implementation of coastal management programs. Special efforts, integrated into the development of Michigan's Coastal Management Program, assure continued involvement of citizens, local units of government, and areawide agencies. As described in the following, local and areawide participation will continue to be a key element during implementation of the Coastal Management Program. State policies, described in Chapter III, demonstrate strong commitments toward strengthening state-local partnerships in conducting governmental responsibilities. Extensive efforts were made during program development to minimize conflicts between the Coastal Management Program and existing plans and programs of local units of government. A program objective is to accelerate and provide support for well conceived local and areawide programs operating in the coastal area.

During program implementation, five program levels will operate to insure maximum input and equitable distribution of program benefits:

Level I — Citizens. Agencies and Groups
Level II — Local Governmental Units
Level III — Areawide Agencies
Level IV — State Agencies
Level V — Federal Agencies

Program Level I

As conveyed throughout this program description, a variety of citizen, agency and group contributions are utilized in formulating Coastal Management Program strategies. During program implementation, participants at this level will continue to contribute by:

- Participating in the area of particular concern process: Any individual, group or agency may nominate specific coastal locations for special management attention. Nominations may be made either to the Citizens Shorelands Advisory Council, Michigan Department of Natural Resources or to participating coastal planning and development regional agencies. This process provides the opportunity to identify problems, issues and conflicts at the local level, and to initiate or accelerate action programs at the local, regional or state level to address management needs.

- Assisting in formulating local goals for coastal management: Advisory assistance may be provided by program level I participants and, in many cases requested by local, regional or state agencies. Formulation of comprehensive goals and objectives which represent a wide variety of interests will provide direction for future funding decisions as well as providing one basis for performance evaluations.

- Serving on coastal management advisory bodies: Where local, regional or state agencies have organized advisory bodies to direct program efforts, program level I participants may serve and appear before such bodies. For example, at the state level, the Citizens Shorelands Advisory Council, a group of 15 concerned citizens from around the state, advises the Michigan Natural Resources Commission on coastal related policies and Department of Natural Resources actions.

- Review of documents and reports relating to coastal management: Any participant at program level I may review and provide recommendations on program documents or progress. This

action provides local, regional and state agencies with information necessary to make decisions which reflect the public interest.

Information derived from program level I will be useful in developing action proposals for funding consideration, formulating ongoing coastal management work programs, and identifying both short- and long-term coastal management related priorities. For example, by participating in the area of particular concern process, program level I participants convey coastal related concerns to local, regional or state agencies, providing one important basis for decision-making on coastal matters.

Program Level II

Program level II consists of county, township, city or village units of government. Traditionally, under statutory provisions or general police power authorities, local governments are relied upon in Michigan to carry out public work projects, resource planning and zoning and the administration of certain state-delegated authorities. Local government officials are readily accessible and directly accountable to their constituents and are best equipped to identify the needs of coastal residents for use of coastal resources. Utilization of existing resource planning and zoning at the local level assists the state in avoiding duplication of effort and also reduces administrative burdens upon the state. Throughout the development of the Coastal Management Program, and especially during program public hearings and meetings, representatives of local governmental units expressed a strong desire to continue and expand their role during program implementation. The Coastal Management Program is committed to this objective.

Program level II roles will include such tasks as: (1) formulating and periodically evaluating local goals and objectives for coastal management; (2) identifying, screening and prioritizing area of particular concern nominations for management consideration; (3) establishing citizens and agency coastal advisory bodies; (4) developing annual work programs to address identified coastal problems and opportunities; and (5) submitting project proposals to the Michigan Coastal Management Program for funding consideration; and (6) administer certain state-delegated authorities at the local level, such as provisions of the Shorelands Protection and Management Act.

With respect to Section 306(c)(B) of the Coastal Zone Management Act, a procedure for state notice, consultation and coordination with local governments and others is provided in provisions of the state's Administrative Procedures Act. The Act provides for full public notice on major agency actions such as rule making and for public hearings and contested case hearings in the event an agency decision is contested. Beyond the formal statutory requirement, the Coastal Management Program is committed to consulting with local units regarding program decisions in order to minimize conflicts in coastal decision-making.

Program Level III

Program level III consists of agencies established to coordinate and address areawide concerns. Such agencies consist primarily of coastal planning and development regional agencies, although such agencies as Resource Conservation and Development, Watershed Steering Committees, intergovernmental compacts, etc., are also included.

A variety of local and areawide involvement functions are performed under subcontract from the Michigan Department of Natural Resources by 10 coastal planning and development regions. The regions, established in 1968 by Executive Order, serve as areawide coordinators of programs and plans affecting member local units within the regional boundary. Major functions include:

- Identification of land use trends, goals and objectives, and problems and issues in each of the 10 coastal regions.
- Identification of priority areas of particular concern for management assistance from hundreds of public and agency nominations.
- Participating with coastal management training and information sessions.
- Assisting local units with resource management techniques.
- Assisting in the development of and coordination of the Coastal Management Program and the state's "208" program.

Accordingly, planning and development regional agencies have developed and provided information relating to local coastal resource issues and needs as well as existing land use trends, policies and controls. This information is used in Program efforts to minimize conflicts in planning and to stimulate local activities which best address problems and opportunities.

To avoid conflicts, a necessary requirement of such agencies is that project proposals be submitted to the Coastal Management Program for funding consideration formulated with input from program levels I and II participants. These agencies may establish areawide goals and objectives in concert with local needs; formulate local citizen and agency advisory bodies on coastal management; participate in the area of particular concern process by identifying, screening and prioritizing nominations; and submit project proposals to the Michigan Coastal Management Program for funding consideration on behalf of local governmental agencies or regional agencies. Copies of project proposals submitted by local governmental units will be distributed to affected planning and development regional agencies for their review and information. It is anticipated that, in many instances, this review will enhance the likelihood of funding local governmental unit proposals.

Coastal planning and development regional agencies also play a vital program

role as clearinghouses for review of A-95 notices and state and federal environmental impact statements. Through this review process, the program is better able to make decisions regarding federal agency consistency with Michigan's Coastal Management Program.

Planning and development regions provide technical services and training to member local governmental units on such matters as zoning ordinances and resource planning and management. Through this function, these agencies assist local governmental units in developing plans and ordinances which assure effective local action in response to local coastal issues.*

Project Proposals

Any established local governmental unit (county, township, city or village governments), or areawide agency may submit project proposals to the Michigan Coastal Management Program for technical assistance and/or funding consideration. To be considered for funding, agencies must demonstrate capability to: (1) formulate coastal management action priorities; (2) participate in the identification, screening and prioritizing of areas of particular concern; (3) develop work programs for coastal management which recognize local support and priority coastal management needs; (4) deliver performance and financial reports on projects to the Michigan Coastal Management Program; and (5) provide for required local matching effort.

These requirements assure that local governments and areawide agencies establish priority recommendations for addressing pressing coastal issues. By participating in the area of particular concern process, each local government or areawide entity submitting project proposals for Coastal Management Program consideration may be able to determine the levels of support and nonsupport for the proposed activity. For example, a project proposal should indicate: (1) how the proposed action relates to coastal management priorities; (2) its relationship to area of particular concern management recommendations; and (3) degree of local support. Through this process, local governments may identify and seek to resolve resource conflicts at the local level — prior to formal project proposal submission.

To be considered for program funding, project proposals must meet eligibility requirements, established under the authority of the federal Coastal Zone Management Act of 1972. Project proposals must be submitted to the Coastal Management Program Unit within a specified time to allow for review and contractual refinements. As previously stated, all funded special projects will be subject to review both during the project phase and at the conclusion of the project. This review will include both written performance and financial reports, to be compiled by the submitting agency and on-site assessments, to be conducted by the Michigan Department of Natural Resources.

*For example, any local governmental unit may provide for restrictions in zoning ordinances, in compliance with state guidelines, to administer the provisions of the Shorelands Protection and Management Act (Act 245 of the Public Acts of 1970, as amended). In lieu of such local zoning, the state will enforce restrictions regarding identified high risk erosion and environmental areas through permit. Appeal and permit procedures for other state authorities is more fully described in the Direct and Significant Authorities section of this text.

To solicit project proposals, the Coastal Management Program Unit will contact each local governmental unit and areawide agencies annually to provide the following information: (1) format for project proposal submittal; (2) schedule for project proposal submittal; and (3) eligibility requirements for funding, established under the authority of the Coastal Zone Management Act. It is expected that a three-to-four month period will be available for local units to develop and submit project proposals to the Michigan Department of Natural Resources.

Types of Projects to be Considered

Criteria for determining project eligibility will be communicated with the annual notice for proposals. Present federal regulations provide for activities described in Chapter III of this impact statement under the heading "Action Programs". In general, tasks relating to feasibility and engineering studies to address priority areas of particular concern, such as recreational boat launching facilities, establishing local regulations in conformance with state guidelines for local unit administration of certain state delegated authorities, commercial port and harbor studies, and others will be eligible.

Project proposals submitted to tne Coastal Management Program, which are either ineligible or of low priority for funding will be circulated to state agencies with other sources of funding, using the Standing Committee on Shorelands and Water Coordination as a medium of exchange.

Program Level IV

Participants at this program level include all state agencies, with the major focus being the Michigan Department of Natural Resources' Coastal Management Program, the Standing Committee on Shorelands and Water Coordination and the Citizens Shorelands Advisory Council.

The Michigan Coastal Management Program receives all project proposals for program funding consideration. The Coastal Management Program Unit initially screens project proposals to identify funding eligibility, prepares federal grant applications and allocates implementation funds to local units and state agencies, evaluates project performance and financial reports, conducts on-site investigations of projects, and consults actively with all previously mentioned program level participants to minimize and resolve conflicts concerning coastal activities.

The Standing Committee on Shorelands and Water Coordination serves three roles: (1) review of project proposals to assure consistency with state policy; (2) submits project proposals to the Coastal Management Program for funding consideration; and (3) reviews federal and state actions to determine consistency with the Coastal Management Program.

As a part of the overall screening process for project proposals, each representative of the Standing Committee on Shorelands and Water Coordination is provided copies of screened project proposals and provides information to the Coastal Management Program regarding the proposed projects' consistency with state policy

and programs.

In addition, state agencies may submit project proposals to the Coastal Management Program for funding consideration. These projects, in general, propose actions which have larger than local coastal impact. For example, a state agency may submit a proposal which provides for more effective administration of state statutes in order to improve the delivery of public services in the coastal area. For project proposals which impact specific resources or locations, the submitting agency must document the degree of local support or nonsupport for the activity, using such means as the area of particular concern process and direct contact with local and regional agencies. State agency project proposals must follow the same time and eligibility requirements established by the Coastal Management Program Unit for project proposals emanating from local or areawide agencies.

In addition, the Standing Committee will review area of particular concern nominations and project proposals which are either ineligible or low priority for Coastal Management Program funds, and to ascertain whether or not other funding sources may be utilized to address identified management needs.

The Citizens Shorelands Advisory Council, a group of 15 concerned citizens from around the state, review annual Coastal Management Program grant applications and evaluate consistency of the elements of the grant application with program goals and objectives. The Council may identify areas where there is either strong public support for or conflict with a proposed activity, which may, in some instances, necessitate grant revisions or more detailed review prior to submittal of grant applications to the federal Office of Coastal Zone Management.

Program Level V

A major participant in this level is the federal Office of Coastal Zone Management. This agency receives and reviews each grant application from the Department of Natural Resources which requests funding under the Coastal Zone Management Act. The agency reviews all contractual agreements and provides guidance on project eligibility. The Office provides technical assistance to various coastal states and their advisory bodies. The Secretary of Commerce acts as the first level appeal officer in cases of federal inconsistency with approved state programs.

Other federal agencies may provide financial and technical assistance in the implementation of management recommendations, and must notify the Coastal Management Program Unit of any projects, programs or permits which may significantly affect the coastal zone so that a federal consistency determination can be made by the state.

Federal agency program roles are more completely described in the next chapter.

SUMMARY

Michigan's Coastal Management Program will utilize regulatory authorities existing at the state and local levels, technical and financial assistance and intergovernmental coordination and cooperation to implement the program. The program will focus these management techniques toward protecting essential coastal resources and assuring wise use and management.

These management techniques and capabilities — which reside primarily with the Department of Natural Resources — will be coordinated by the Coastal Management Program utilizing such forums as the Natural Resources Commission, the Governor's system of cabinet committees, the Michigan Environmental Review Board and the Standing Committee on Shorelands and Water Coordination.

Provisions of the Administrative Procedures Act and the Michigan Environmental Protection Act serve to resolve conflicts through contested case hearings and judicial review. The Natural Resources Commission and the Michigan Environmental Review Board also act to resolve conflicts through consideration of all interests in agency decision-making and in making recommendations on environmental impact statements.

Coordination at the local level is achieved through the Citizens Shorelands Advisory Council, participating regional agencies, and through program allocations of technical and financial assistance.

Michigan's approach for integrating program roles and responsibilities into a comprehensive Coastal Management Program will provide benefits for the citizens of the state, including:

- Technical and financial assistance to local governments, regional agencies and state agencies to solve coastal problems and issues.

- Improved management of Michigan's coast through streamlined permit procedures and financial assistance for state and local regulatory programs.

- The opportunity for maximum public involvement in identifying priority areas for program attention.

- Technical assistance for property owners and local governments to assure wise management and proper development in coastal hazardous areas.

- Increased awareness and appreciation for the importance of coastal resources.

- The opportunity to test and evaluate new and innovative management techniques relating to waterfront developments, erosion and flood control, wetland management, historic preservation and restoration and others.

Michigan is well organized and has the necessary authorities to implement an effective Coastal Management Program to protect coastal resources and solve coastal problems. Numerous mechanisms are in place to provide for state agency coordination, conflict resolution and, where necessary, judicial review.

The program will use financial assistance provided by the United States Department of Commerce to improve its management capabilities for coastal resource management to insure Michigan's legacy of concern for the Great Lakes is continued and improved, so that future generations may enjoy the magnificent coastal resources of the State of Michigan, the Great Lake State.

Chapter VI

Federal Agency Program Roles and Consideration of the National Interest

One objective of Michigan's Coastal Management Program is to strengthen coordination and cooperation among federal, as well as local and state agencies and interests. This chapter focuses on: (1) forums utilized for continued federal coordination and consultation; (2) the process for evaluating and assuring federal agency consistency with program provisions; and (3) mechanisms which provide for consideration of the national interest in Michigan's coastal area.

FEDERAL AGENCY CONSULTATION AND COORDINATION

Michigan's experience demonstrates that federal-state coordination can assist in achieving mutually desirable goals for coastal management. Examples include the coordination of off-road vehicle regulations on state and federal lands; coordination of permit processes between the United States Army Corps of Engineers and the state relative to activities on Great Lakes bottomlands; and state-federal efforts to protect scarce breeding habitats of certain rare and endangered species.

The Coastal Management Program will strive to strengthen this coordination effort. During program development, over 500 contacts were made with federal agencies to request comments, solicit statements of national interest, and answer questions. A total of 20 public meetings and 13 public hearings were conducted to provide program information and receive comments on program documents. Many federal agencies were present at these sessions to discuss their program concerns. Michigan actively participates on the Great Lakes Basin Commission's Coastal Zone Standing Committee which provides a forum for state-federal interaction. As described in the following, these and other efforts will be continued during program implementation to insure federal-state consultation and coordination, and to facilitate federal consistency determinations and consideration of the national interest.

Federal Agency Program Participation

To assure that federal agency programs and interests were recognized in the Coastal Management Program, federal agencies were contacted in early 1975 to ascertain various federal program responsibilities and authorities and to solicit comments on the developing program through review of documents which describe various program elements. Contacts with at least 30 federal agencies have been established on a formal and/or working basis. Several of these federal agencies coordinate programs and responsibilities with one or more state agencies, (e.g. Environmental Protection Agency). Following is a list of federal agencies consulted by the Coastal Management Program.

COUNCIL ON ENVIRONMENTAL QUALITY

DEPARTMENT OF AGRICULTURE
- Forest Service
- Soil Conservation Service

DEPARTMENT OF COMMERCE
- Economic Development Administration
- Great Lakes Environmental Research Laboratory
- Maritime Administration
- National Marine Fisheries Service
- National Oceanic and Atmospheric Administration

DEPARTMENT OF DEFENSE
- Michigan Air National Guard
- U.S. Air Force
- U.S. Army
- U.S. Army — Corps of Engineers
- U.S. Navy

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

DEPARTMENT OF INTERIOR
- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Mines
- Heritage Conservation and Recreation Service

- Fish and Wildlife Service
- Geological Survey
- National Park Service

DEPARTMENT OF JUSTICE

DEPARTMENT OF STATE
- Office of Environmental Affairs

DEPARTMENT OF TRANSPORTATION
- U.S. Coast Guard
- Federal Aviation Administration
- Federal Highway Administration
- Federal Railroad Administration
- St. Lawrence Seaway Development Corporation

DEPARTMENT OF TREASURY

ENVIRONMENTAL PROTECTION AGENCY

ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

GENERAL SERVICES ADMINISTRATION

FEDERAL ENERGY ADMINISTRATION

FEDERAL ENERGY REGULATORY COMMISSION

FEDERAL POWER COMMISSION

NUCLEAR REGULATORY COMMISSION

Each of these agencies received copies of program documents, including "A Proposed Program for Michigan's Coast" and "State of Michigan Coastal Management Program and Draft Environmental Impact Statement". The federal agencies also receive "The Shorelands Watch", a monthly program newsletter, area of particular concern nomination forms and other materials. Ongoing state-federal agency consultation and coordination is facilitated by federal agency nominations for areas of particular concern and by collaborating jointly with the state on technical and financial assistance programs relative to erosion protection, wetlands management, location of sites for polluted dredged materials, and others. Specific requests were made to federal agencies to provide the Coastal Management Program with descriptions of federally owned lands along the coast, (see also Chapter II). Michigan's Coastal Management Program efforts to identify federal agency responsibilities, program

concerns and interests is summarized in Appendix A of "State of Michigan Coastal Management Program and Draft Environmental Impact Statement". All substantive federal agency comments and area of particular concern nominations will continue to be considered in the Coastal Management Program and integrated wherever possible.

State-Federal Interagency Agreements

To achieve mutually desirable objectives in resource management, state and federal agencies have formulated a number of interagency agreements which complement the goals of the Coastal Management Program and assure close state-federal coordination. For example, a memorandum of understanding between the Department of Natural Resources and the United States Army Corps of Engineers establishes a joint process for reviewing applications for permits and conducting public hearings with respect to actions proposed under the federal River and Harbor Act of 1899, the federal Water Pollution Control Act amendments of 1972, and state Act No. 247 of the Public Acts of 1955 and state Act No. 346 of the Public Acts of 1972.

Another interagency agreement exists between the National Park Service and the state to insure coordination on wildlife management relative to Sleeping Bear National Lakeshore.

Administration of Federal Programs

The Department of Natural Resources administers some 41 programs through federal funds, authorized by federal legislation. Examples include water pollution control programs, administered by the Department's Water Quality Division in conjunction with the Environmental Protection Agency and Public Law 84-666 and Public Law 95-200, and programs which provide for outdoor recreation areas and facilities, administered by the Department's Recreation Services Division in conjunction with the National Heritage Conservation and Recreation Service and the Land and Water Conservation Fund.

Through funds provided by federal agencies, the state is able to administer programs to achieve both state and national goals in resource management.

Great Lakes Basin Commission

As previously noted, Michigan actively participates on the Great Lakes Basin Commission's Standing Committee on Coastal Zone Management. The purpose of this committee is to assist Great Lakes states in achieving beneficial interstate and federal agency coordination in coastal management programs. Many representatives of federal agencies regularly attend committee meetings to discuss and resolve conflicts concerning such topics as transportation of hazardous and toxic materials, winter navigation, pollution abatement, etc. Through committee participation, the Coastal Management Program actively consults with federal agencies to identify and consider concerns and program recommendations.

Fish and Wildlife Coordination Act

Since 1934, the Department of Natural Resources has complied with provisions of the Fish and Wildlife Coordination Act of 1934, as amended, which states that, ". . . any department or agency of the United States, or any public or private agency operating under federal permit or license, proposes to impound, divert, channel or otherwise control or modify a stream or body of water for any purpose shall consult with the United States Fish and Wildlife Service, Department of the Interior, and with the head of the agency exercising administration over the (fish and) wildlife resources of the particular state wherein the proposed activity is to be constructed with a view to the conservation of fish and wildlife resources by preventing loss of and damage to such resources, as well as providing for the development and improvement thereof in connecting with water resource development."

The Act provides for cost allocation and cooperative funding arrangements to carry on mitigation, land acquisition and necessary investigations. It also requires that any report submitted to Congress supporting a recommendation for authorization of any new project for the control or use of water must include an estimation of fish and wildlife benefits or losses to be derived. Each report identifies those benefits to be derived from measures recommended specifically for the development and improvement of fish and wildlife resources. The Fish and Wildlife Coordination Act does not apply to impoundments of less than 10 acres, or to activities for or in connection with programs primarily for land management and use carried out by federal agencies with respect to federal lands under their jurisdiction. In addition to the Fish and Wildlife Service, Michigan consults with the National Marine Fisheries Service on matters relating to compliance with mandates of the Act.

Review of Environmental Impact Statements

The National Environmental Policy Act of 1969 (NEPA) requires that federal agencies diligently assess the environmental impacts of any "major" actions. The Act requires the preparation of an environmental impact statement (EIS) for any "major federal action significantly affecting the quality of the human environment." These provisions have been liberally interpreted by the courts to cover a wide range of federal actions including private projects that require federal permits, federal assistance and direct federal projects or programs.

Michigan's authority for preparation and review of environmental impact statements is established by Executive Order 1974-4, (see also, Chapter V). Executive Order 1974-4 satisfies NEPA mandates by requiring that all major activities of each state agency having a potentially significant impact on the environment or human life be the subject of a formal environmental impact statement, to be reviewed by the Michigan Environmental Review Board (MERB) and the Interdepartmental Environmental Review Committee (INTERCOM). Through review of state and federal agency environmental impact statements, MERB and INTERCOM serve as a formal mechanism for coordination and resolution of conflicts among state and federal activities, consistent with the spirit and intent of the National Environmental Policy Act of 1969.

As established by Executive Order 1974-4, the Department of Natural Resources

is a permanent member of both the Michigan Environmental Review Board and the Interdepartmental Environmental Review Committee. As described in Chapter V, Executive Order 1974-4 requires each state agency to forward to the attention of the Governor, an environmental impact statement on each proposed major action that may have significant impact on the environment or human life. Impact statements which are required by regulation of state or federal agencies comply with the requirements of the Executive Order.

The Michigan Environmental Review Board, also established by the Executive Order, receives environmental impact statements and forwards copies to INTERCOM within five days. INTERCOM has 40 days to review and recommend a course of action to MERB. MERB considers these recommendations in reviewing the environmental impact statement and may recommend to the Governor actions of state agencies that should be suspended or modified if such actions should seriously threaten the quality of the environment or human life.

In making recommendations to the Governor on federal or state agency environmental impact statements, the Board considers all interests and views as may be presented formally to the Board. Thus, private citizens, groups, state or federal agencies, etc., may appear before the Board and offer recommendations on environmental impact statements. This process provides for coordination and integration of these interests in Board recommendations to the Governor. As described later in this chapter, the provisions of Executive Order 1974-4 provide an important forum for considering the national interest in Michigan's coastal area.

A-95 Review Procedures

A-95 review process is provided for in Title IV, Section 403 of the Intergovernmental Cooperation Act of 1968. This title establishes the broad policy base of Office of Management and Budget Circular A-95. A-95 provides for a network of state and areawide clearinghouses for the purpose of reviewing and commenting on all notices of intent to apply for federal assistance in Michigan. The purpose of the review process is to provide federal cooperation with state and local governments in the evaluation, review and coordination of federal and federally assisted programs and projects.

The A-95 review process requires that any agency or individual who applies for federal assistance for a project or a direct federal development be required to notify both state and areawide clearinghouses in whose jurisdiction the project is to be located. If the activity is statewide (or broader in nature), the areawide clearinghouse may not receive notification. Federally recognized Indian tribes are excluded from the A-95 review unless they voluntarily choose to participate.

Since eight of Michigan's ten coastal planning and development regional agencies are designated as A-95 areawide clearinghouses, Michigan will continue to rely heavily upon the A-95 review process to maintain federal-state-local consistency with the Coastal Management Program.

Michigan's state clearinghouse is within the Department of Management and Budget's Federal Aid Management and Coordination Division. The functions of this division were established by Executive Directive 1972-2 and Executive Order 1974-1.

Functions of the state clearinghouse include: (1) evaluate the significance of proposed federal or federally assisted projects to state programs; (2) receive and disseminate project notifications to appropriate state and multi-state agencies; (3) provide liaison between state agencies and the applicant or federal project agency; (4) assure that projects affecting the coastal area are referred to authorized agencies to review the project for consistency; (5) assure that agencies authorized to develop and enforce environmental standards are informed and provided opportunity to review and comment on federal projects; (6) provide agencies enforcing civil rights laws with the opportunity to review and comment on the civil rights aspects of the project; and (7) provide liaison between federal and local agencies and between the applicant and the commenting agency.

Within 30 days after receipt of a notice of intent, the state clearinghouse must indicate to the applicant, the nature and substance of comments received regarding the proposal. In Michigan, the first five to seven days of the period is used by the clearinghouse in assembling and distributing a weekly list of "notices of intent".

Distribution is presently made to approximately 90 departments, agencies and quasi-governmental groups. The agencies have 14 days in which to comment to the state clearinghouse on projects of concern. Comments may take three forms: (1) the agency may request more information such as the exact location of the project; (2) the commenting agency may request to review the complete grant application; or (3) the state agency may request a meeting with the applicant or project agency. The state clearinghouse acts as a liaison to schedule and chair the meeting.

If no comments or requests for additional review are received by the clearinghouse within 14 days of distribution, a response is made to the applicant. If requested, a complete application will be provided with an additional 30 days to complete the agency review. If a meeting is scheduled to negotiate issues, the time span for application review will be adjusted accordingly.

The applicant must include all comments and recommendations received from the clearinghouse as part of a completed application. If no comments are received, the applicant provides a statement indicating that review procedures were followed. Grant applications lacking evidence of clearinghouse review are returned to the applicant.

To keep the clearinghouse aware of events subsequent to their comments, federal agencies notify concerned clearinghouses within seven working days of any major action taken concerning the application which may include: grant awards; rejections, amendments, deferrals and withdrawals of the application. If federal action is contrary to the clearinghouse recommendations, the funding agency is required to provide an explanation of its action along with a notice of major action taken.

Thus, the A-95 review process provides a forum for state and local coordination on federal projects or funding efforts. A description of the A-95 review process as it relates to program federal consistency determinations is contained later in this chapter.

Forums described thus far demonstrate Michigan's commitment to strengthen state-federal relationships through ongoing consultation and coordination. Following sections of this chapter describe: (1) the process which will be used to assure federal consistency with the Coastal Management Program; and (2) forums which provide for consideration of the national interest in Michigan's coast.

FEDERAL CONSISTENCY

The federal Coastal Zone Management Act requires federal agency actions to be consistent with approved state coastal management programs. This requirement applies to activities requiring federal licenses or permits and federal assistance programs to local or state governments. Federal activities and development projects must be consistent to the maximum extent practicable with the approved state program.

The Division of Land Resource Programs, Michigan Department of Natural Resources will be responsible for federal consistency review. The division's Coastal Management Program Unit will be responsible for coordination of consistency review and time scheduling. As cited in Chapter V, substantive requirements of programs administered by the division relative to controlling soil erosion and sedimentation, natural rivers, inland lakes and streams, natural areas, Great Lakes submerged lands, shoreland erosion and flooding and shorelands wetland protection will be utilized for consistency reviews conducted directly by the division. Permit reviews conducted by other department divisions (e.g., air and water quality) and by other state agencies and participating local agencies and governments will be coordinated for coastal consistency by the Coastal Management Program Unit. The unit will also be responsible for direct review of A-95 notices of intent to apply for federal assistance. The Environmental Enforcement Division will work in conjunction with the Coastal Management Program Unit on coordinating review of federal environmental impact statements among Department of Natural Resources divisions and by the Michigan Environmental Review Board, (see also, Chapter V).

Criteria for Determining Federal Consistency

Chapters III and V of this impact statement describe policies which are included in Michigan's Coastal Management Program. Policy statements are derived from state statutes and rules, Executive Orders of the Governor, formal policies of the Natural Resources Commission and certain federal laws, regulations and inter-agency agreements (e.g., Public Law 92-500). Enforceable policies included in this program require federal consistency. Significant policies described in Chapter III and also listed in Chapter V are the principal authorities Michigan will utilize to control direct and significant impacts to coastal waters and determine federal consistency. An affirmative response to any of the direct and significant criteria statements in Chapter V triggers an individual permit process for the cited statutory authority. Other enforceable policies which necessitate federal consistency include Natural Resources Commission Policy Numbers 3301 and 3108 which pertain to Great Lakes fisheries management (as described in Chapter III).

Chapter III of this impact statement also describes nonenforceable policies which pertain to technical and financial assistance, coordination, etc. While federal agencies will not be required to be consistent with nonenforceable policies, they should be considered by federal agencies as part of the consistency process. It is anticipated that many of those policy statements will provide one basis for enhanced state-federal agency cooperation on mutually desirable projects affecting Michigan's coast,

including wetlands management, erosion protection, flood plain management, selection of sites for polluted dredged materials and others.

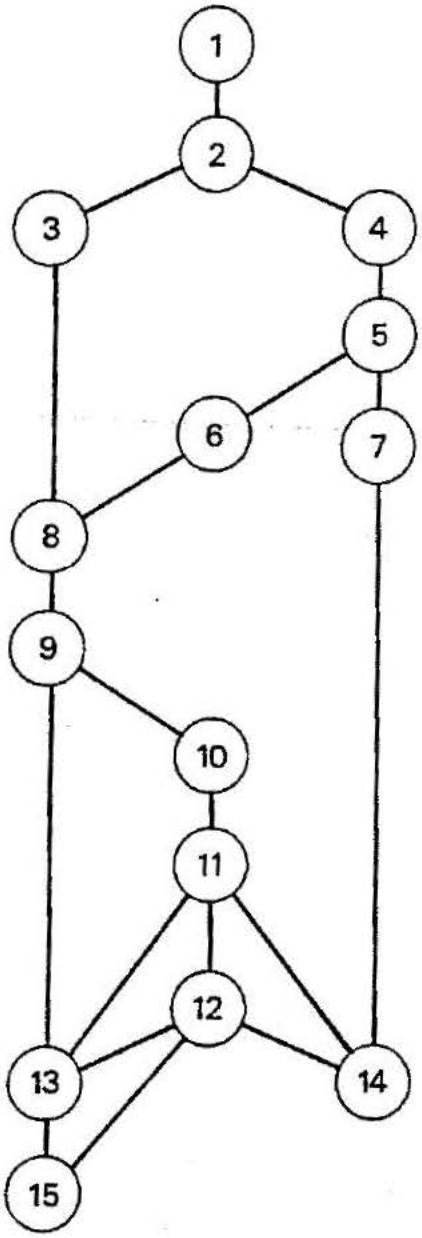
FEDERAL CONSISTENCY — FEDERAL CONDUCTED OR SUPPORTED ACTIVITIES

A consistency determination will be required for ongoing federal activities other than development projects initiated prior to program approval which are governed by statutory authority under which the federal agency retains discretion to reassess and modify the activity. In these cases, the consistency determination must be made by the federal agency at the earliest practicable time following management program approval, and the Michigan Coastal Management Program must be provided with a consistency determination no later than 120 days after program approval for ongoing federal activities affecting Michigan's coastal area.

Procedures

Figure VI-A illustrates the process for determining federal consistency for federally conducted or supported activities. These activities may include property acquisition or disposition, design, construction, alteration or maintenance of federal facilities, etc. within the coastal boundary or which may have a significant impact on the coastal zone. Federal agencies are responsible for notifying the Division of Land Resource Programs of its proposed action and making a determination that the activity is consistent to the maximum extent practicable with the Coastal Management Program. For major federal agency activities which may significantly impact the coast, environmental impact statement review procedures, established by the Governor's Executive Order 1974-4 will be used to satisfy both state and federal requirements, (e.g., National Environmental Policy Act), and will serve as an important process for reviewing federal agency actions to determine consistency with Michigan's Coastal Management Program. This review process will be facilitated by the Michigan Environmental Review Board where the Department of Natural Resources is a permanent representative, and also satisfies National Environmental Policy Act requirements. Upon notification of a federal activity or development project, the Division of Land Resource Programs will notify local participating agencies. A 45-day review period will ensue which may be extended to 60 days upon request. The Division of Land Resource Programs will then act on its own behalf and on behalf of local/regional and state agency program participants using one of three options: (1) concur with the federal agency determination; (2) allow 45 days to pass, thereby enabling the federal agency to presume concurrence (except where the state requests review extensions); or (3) disagree with the federal agency determination. In the event of the latter (option 3), the Division of Land Resource Programs will negotiate with the federal agency, on its own behalf and behalf of local/regional and state agency participants, to achieve consistency. Upon failure to achieve consistency, either party — state or federal — may appeal to the Secretary of the United States Department of Commerce for mediation. If mediation is not used or is unsuccessful, the state may seek resolution in court action.

Process for Review of Federally Conducted or Supported Activities



1) Federal agency initiates a federal development project, plans to acquire or dispose of land or proposes a change in rules and regulations.

2) Federal agency evaluates effect of proposal on the coastal area.

3) Proposal determined to have no significant effect on coastal area.

4) Proposal determined to have significant effect on coastal area.

5) Federal agency evaluates proposal, for consistency, with Michigan's Coastal Program.

6) Proposal determined to be consistent to the maximum extent practicable with Michigan's Coastal Program.

7) Proposal determined to be inconsistent with Michigan's Coastal Program.

8) Michigan Coastal Program notified of federal determination.

9) Review by state and local/regional program participants.

10) Michigan Coastal Program disagrees with federal determination and gives justification.

11) Negotiations between Michigan Coastal Program and federal agency.

12) Disagreement: Michigan Coastal Program and federal agency begin mediation and conflict resolution.

13) Michigan Coastal Program concurs with determination.

14) Proposed activity discontinued or modified to be consistent with or have no direct effect on the coastal area.

15) Federal agency proceeds with activity.

FEDERAL CONSISTENCY — FEDERAL GRANTS AND FINANCIAL ASSISTANCE

Procedure

In an attempt to avoid creating a new forum for review of federal programs providing grants and financial assistance that directly affect or result in a direct effect on Michigan's coastal area, existing state and regional clearinghouses (OMB Circular A-95) will be utilized as the process for determining federal consistency. Only those grant and loan applications to federal agencies started after the program's approval by the Secretary of Commerce are subject to the federal consistency requirements.

Eight of the ten regional planning and development agencies that participate in Michigan's Coastal Management Program are designated by the state clearinghouse as areawide clearinghouses for the A-95 review process. Through the A-95 review process, the state and areawide clearinghouses notify state, regional and local officials of an applicant's intent to request federal assistance for the initiation of a program or project. These officials may then comment on the proposal, (see also the first section of this chapter). Figure VI-B illustrates the process to be used for determining federal consistency of federal grants and financial assistance.

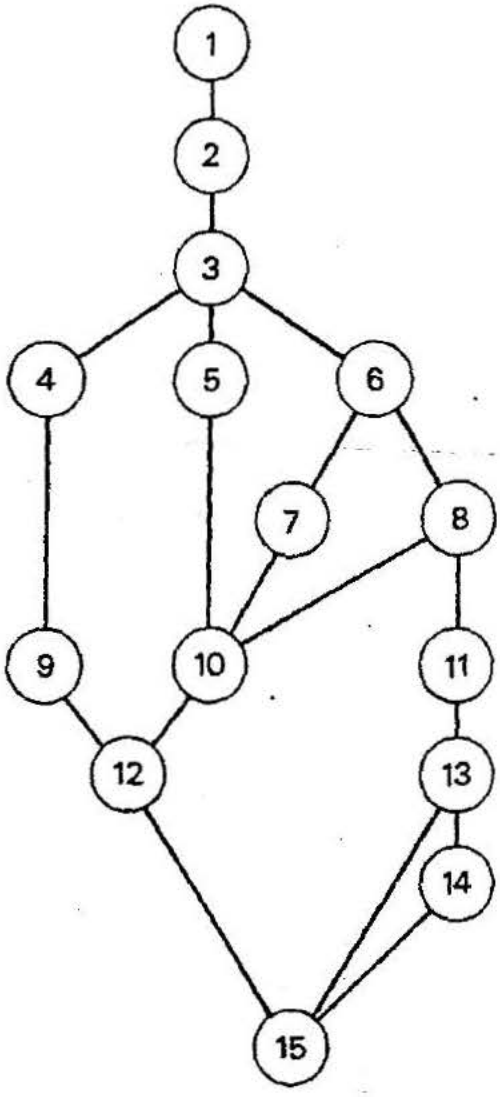
Many federal grants have received Coastal Management Program attention to date due to their potential for coastal impact (refer also to Appendix A of "State of Michigan Coastal Management Program and Draft Environmental Impact Statement".) The Coastal Management Program will continue to review proposed federal grants and financial assistance for consistency during program implementation. It should be recognized that a development project which receives approval for federal funding must still be approved through the normal municipal or state permit procedures.

FEDERAL CONSISTENCY — ISSUING LICENSES AND PERMITS

Consistency review for federal permits employs the substantive requirements of state permitting authorities and authorities in certain state approved local enforcement programs, (See Chapters III and V). The key to assuring the consistency of federal permits is the requirement that permits from the state and approved local programs be granted prior to issuance of the federal permit. Only those license and permit issuing and amendment activities and federal assistance applications initiated after the date of approval of Michigan's Coastal Management Program are subject to federal consistency requirements.

An applicant for a federal permit will be required to demonstrate to the federal agency that he has received the necessary local and/or state approvals. To accomplish this the Coastal Management Program will provide guidance to applicants concerning the permit procedures and requirements to be satisfied. (see also Chapter V). When satisfied that the proposed activity meets federal consistency requirements of the Coastal Management Program, all applicants for federal licenses or permits subject to consistency review shall provide in the

FIG. VI-B
Process for Review of Federal Domestic Assistance Grants



1) Applicant agency applies to federal agency for assistance.

2) Applicant agency provides application to regional "A-95" clearinghouse; application is routed to state "A-95" clearinghouse, to Michigan's Coastal Program and to participating local/regional entities.

3) Review.

4) State agency comments to state clearinghouse.

5) Substate and municipal entities comment to regional clearinghouse.

6) Local/regional entities or state agency objects, notifies Michigan Coastal Program, applicant and/or affected federal agency.

7) Michigan Coastal Program determines that application is either consistent or has no effect on the coastal area.

8) Michigan Coastal Program determines that application is inconsistent.

9) State clearinghouse signs off with comments.

10) Regional clearinghouse signs off with comments.

11) OCZM and federal agency notified of inconsistency.

12) Applicant receives sign-offs and comments; forwards to federal agency.

13) Negotiations among Michigan Coastal Program, applicant, and federal agency.

14) Application inconsistent; application either modified to be consistent or funding is denied by federal agency.

15) Application consistent.

applications to the federal licensing or permitting agency a certification that the proposed activity complies with and will be conducted in a manner consistent with Michigan's Coastal Management Program. At the same time, the applicants shall furnish the Michigan Coastal Management Program Unit a copy of the certification. This consistency determination will be especially facilitated where state and federal agencies have coordinated permit processes, such as the process for coordinated review of permits issued under Act No. 247 of the Public Acts of 1955 and Section 404 of the Federal Water Pollution Control Act.

In cases where state permits are not required of applicants for activities requiring federal licenses or permits, the applicant is responsible for certifying in its application to the federal agency that the proposed action is consistent with the Coastal Management Program. The applicant must also furnish the state with a copy of the consistency certification. Federal agencies may deny a permit or license pursuant to their statutory responsibilities notwithstanding state concurrence.

The list below indicates what federal permits have received program attention to date due to their regulation of important coastal resources, uses or impacts. Michigan proposes to review proposals submitted through these permit programs for consistency during program implementation. Other permits may, of course, be added as further needs are indicated.

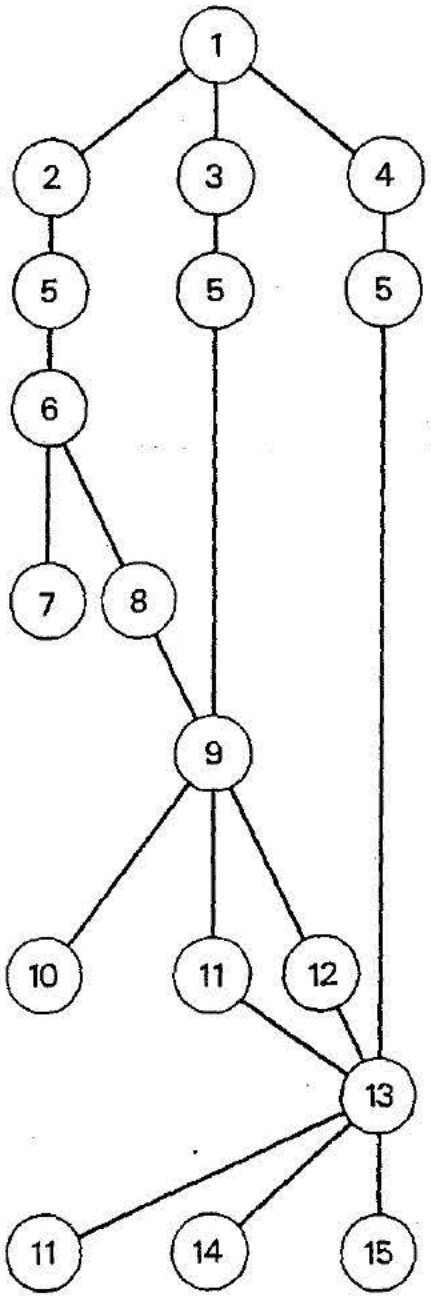
A maximum six month time period will exist for acting on a federal license or permit consistency certification after which time consistency will be conclusively presumed. Alterations in permit and licensing criteria will be effectuated through federal agency consultation and approval by the United States Department of Commerce.

Department of Agriculture	
43 USC 1716	Permits for water easements on National U.S. Forest Service lands (Forest Service) Use and occupancy of land for hotels, resorts, summer homes, stores and facilities for industrial, commercial, educational or public use
16 USC 497	Use and occupancy of land for hotels, resorts, summer homes, stores and facilities for industrial, commercial, educational or public use.
17 USC 661-667	Fish and Wildlife Coordination Act
Department of Interior	
16 USC 3	Construction of visitor facilities on National Park Service lands (NPS)
16 USC 5	Rights-of-way for electrical transmission lines on National Park Service land (NPS)
—	Reclamation permits at dam sites and recreation areas

Environmental Protection Agency	
33 USC 1251	Water pollution control (state permit required)
33 USC 1857	Clean air (state permit required)
Department of Housing and Urban Development	
-----	Flood insurance permits (state permits required)
-----	Interstate land sales registration (state permit may be required)
Nuclear Regulatory Commission	
-----	Licenses for nuclear generating stations, fuel storage and processing centers
-----	Siting and operation of nuclear power plants (state permits required)
Federal Energy Regulatory Commission	
16 USC 797(e)	Licenses required for nonfederal hydroelectric projects and associated transmission lines
15 USC 717(f)(c)	Certificates required for the construction and operation of natural gas pipeline facilities, defined to include both interstate pipeline and terminal facilities
15 USC 717(f)(b)	Permission and approval required for the abandonment of natural gas pipeline facilities
Department of Defense — Army Corps of Engineers	
33 USC 401-403	Excavation and fill permits, construction in navigable waters (state permit also required)
33 USC 1344	Discharge of dredge and fill material
33 USC 419	Hazardous substances and materials (state permit required)
Department of Transportation	
33 USC 401	Construction and modification of bridges, causeways in navigable waters (US Coast Guard) (state permit also required)
-----	Construction of airports (state permits may be required)

Figure VI-C illustrates the process used to review these permits for consistency.

FIG. VI-C
Process for Determining
Consistency of Federal Licenses and Permits



1) Applicant inquires at federal, state or local office about permit requirements. Applicant directed to appropriate federal, state and local offices.

2) Applicant applies for local permit if appropriate.

3) Applicant applies for state consistency review and for state permit if required.

4) Applicant applies for federal permit.

5) Public notice and review; hearings if appropriate. Federal, state and local agencies may perform this function individually or jointly as appropriate.

6) Local agency acts on application.

7) Application does not meet local requirements — applicant must re-apply.

8) Application meets local requirements, local permit granted.

9) State acts on application and/or consistency with state program.

10) Application does not meet state requirements — applicant must re-apply.

11) Application inconsistent with state program — applicant must re-apply.

12) Application meets state requirements and is consistent with state program — state permit granted.

13) Federal agency acts on application.

14) Application does not meet federal agency requirements — applicant must re-apply.

15) Application meets federal agency requirements and is consistent with state program — federal permit granted.

CONSIDERATION OF THE NATIONAL INTEREST

Recognizing the distinct and irreplaceable nature of the nation's coast, the United States Congress, in enacting the Coastal Zone Management Act of 1972, found that, "... there is a national interest in the effective management, beneficial use, protection, and development of the coastal zone." The Michigan Coastal Management Program clearly provides forums and policy statements which reflect the national interest in coastal management in Michigan. Specifically, Section 306(c)(8) of the Coastal Zone Management Act requires state coastal management programs to provide for, "... adequate consideration of the national interest involved in planning for, and in the siting of facilities (including energy facilities in, or which significantly affect such state's coastal zone) which are necessary to meet requirements which are other than local in nature."

Michigan fully recognizes that coastal issues and concerns reflect a national interest for energy development, wetlands management, protection of rare and endangered species and other facility siting and resource protection issues. Many national interests are mutually shared by Michigan and are illustrated in policy statements and action programs, cited in Chapter III of this impact statement, as well as state-federal interagency agreements.

Previous sections of this chapter describe Michigan's extensive effort to actively consult with federal agencies on their missions relative to the national interest. In addition to comments received from federal agencies, the Michigan Coastal Management Program evaluated, and will continue to evaluate, the following sources for policies and information to adequately consider the national interest in planning and management responsibilities:

- Federal laws and regulations.
- Policy statements or Executive Orders from the President of the United States (e.g., National Energy Plan).
- Special reports, studies and comments from federal and state agencies.
- Testimony received at public hearings and meetings on the Michigan Coastal Management Program.
- Certificates, policy statements and solicited opinions issued on specific projects by federal regulatory agencies.
- Statements of national interest issued by federal agencies.

Balancing National Interests

Michigan does not specifically exclude national interests relative to facilities or coastal resources. Through policy statements, as described in Chapters III and V, national interests are balanced in the Coastal Management Program through site specific determinations involving permit procedures, review of environmental impact statements, and lease arrangements, to assure that activities conform to resource carrying capacities and afford protection of coastal resources as mandated by state authorities. Thus, Michigan does not exclude any national interests so long as they conform to substantive requirements of state authorities. This represents a performance approach for assuring proper resource protection and management.

The discussion below summarizes the three major forums which provide for on-going consideration of the national interest relative to facilities and resources: (1) the Michigan Natural Resources Commission; (2) the Michigan Environmental Review Board; and (3) the Michigan Department of Natural Resources. These formally established bodies are directed by state policies to consider all interests in making decisions relative to resource protection and management. The remaining section of this chapter describes more specific national interests with respect to individual resources and facilities and includes a discussion of how the national interest is adequately considered in Michigan's Coastal Management Program.

FORMAL MECHANISMS FOR CONSIDERATION OF THE NATIONAL INTEREST

Michigan Natural Resources Commission

The Natural Resources Commission was established by Act No. 17 of the Public Acts of 1921 to provide policy formulation and program direction for the Department of Natural Resources. Since; as noted earlier, the department is responsible for the significant coastal authorities and programs, the commission's responsibility for making department policy decisions based upon all interests provides for active consideration of the national interest in the Coastal Management Program.

Natural Resources Commission Policy Number 1033 requires that "Openness in government is essential to our democratic institution, and is not subject to question . . . Citizen participation and interest in the activities of the department shall be encouraged in all ways possible. . . Citizen advisory committees shall be used in all cases where programs and activities are particularly sensitive to public opinion or impinge on citizen activities and philosophies in such a way as to cause a substantial response, or an unusually high level of interest." This policy commitment exemplifies the commission's attitude toward encouraging the participation and consideration of all interests in department programs, including the Coastal Management Program.

Several commission actions provide clear evidence of their commitment to considering interests and impacts which transcend Michigan's boundaries and are important to coastal management.

For example, Natural Resources Commission Policy Number 2310 specifically recognizes national energy needs: "Until such time as further developments require a change in policy, or until there is imminent danger of drainage of petroleum from state-owned bottomlands in the Great Lakes, or *a condition of national emergency* requiring greatly increased production efforts, state-owned submerged lands in the Great Lakes will not be available for lease for the exploration, development and production of petroleum. . . Continued attention shall be given by the department to advances in technology of drilling and production of offshore areas, to new knowledge of geological conditions in the petroleum industry. Continued study will be given to the need for an oil and gas lease form, and to possible rules and regulations pertaining to oil and gas leases for the Great Lakes bottomlands, so that the department will be prepared to act if and when it becomes appropriate to do so." (emphasis added)

With respect to the national interest in proper conservation and development of energy resources, Natural Resources Commission Policy Number 1026 recognizes that, "The era of inexpensive energy and seemingly unlimited energy resources is over. For instance, much of the oil and some of the gas supplies upon which the *economy and prosperity of Michigan and the United States* is based, is produced in other nations which can control both prices and production, affecting life styles and values. According to energy experts, coal, nuclear or other sources of energy cannot be expected to replace oil or gas in the near future. The department should be a leader in the wise use of energy and also encourage its employees to be energy conscious in their habits and decisions." (emphasis added)

An even stronger recognition of the department's consideration of national interests is reflected in an environmental impact statement, prepared by the department for potential hydrocarbon development on the Pigeon River Country State Forest. (December 15, 1975)

As conclusively demonstrated from the following excerpt of that impact statement, the Michigan Department of Natural Resources clearly recognizes larger-than-state issues and impacts.

> *On a national scale, new, large domestic hydrocarbon resources are often found in environmentally sensitive areas subject to extreme natural hazards such as in the North Slope of Alaska or in the Pacific, Gulf and Atlantic coastal waters. At any rate, extraction of oil or gas from Canada or Alaska and not Michigan only displaces the total environmental impact.*
>
> *Without a specific national plan for energy conservation, it is very difficult to perceive what Michigan's role should be. Even under existing conservation measures, Michigan's high energy consuming products and processes are seriously affected as reflected in our state's high rate of unemployment.*
>
> *Under any national energy conservation plan, the known hydrocarbon resources on relatively accessible land sites near industrial centers might be exploited first. The energy cost of extracting the hydrocarbons, and*

energy cost of transporting it to where it will be used, puts oil and gas resources that are accessible high on the nation's priority list.

Oil from other states is available at a price. The environmental risks in extracting oil from other sources in the United States, especially offshore, are in many cases greater than in the Pigeon River Country State Forest. New large natural gas supplies are not generally available in Michigan at any price, and severe shortages are expected. Natural gas from the Pigeon River Country State Forest cannot be replaced by other gas even if Michigan wished to displace the environmental impact of extraction to other places. With national price controls of interstate natural gas prices, the incentive for exploration and production is missing. Canadian policies regarding exports of hydrocarbons can change at any time.

It is national policy to reduce our dependency on foreign oil. This in turn increases demand on domestic supplies. Through federal controls and pricing schemes, the alternative of foreign oil supply is becoming less available.

In addition, as described in Chapter V, the commission, (as well as the five other department commissions), considers all interests in making decisions relative to contested department decisions or orders (e.g. licensing and permitting, etc.). In accord with the Administrative Procedures Act, a party which is aggrieved by a commission finding relative to a contested case may seek judicial review of the findings in circuit court.

Thus, as described, the Michigan Natural Resources Commission guides Department of Natural Resources policies and actions and has a long-standing commitment to recognize and consider all issues and interest, including the national interest, in their decision making process.

Michigan Environmental Review Board

As described in Chapter V, the Michigan Environmental Review Board (MERB) was established by Executive Order 1974-4 to provide policy recommendations to the Governor on environmental issues and to assist the Governor in the review and formulation of recommendations on federal and state environmental impact statements. Environmental impact statements are required for major state actions that may have a signficant impact on the environment or human life. Any interested party, including local governments and citizens may request to MERB to be placed on a mailing list to receive notification of available environmental impact statements for their review. Mailing lists are normally compiled and distributed at least once every month. In making recommendations to the Governor, MERB actively considers all interests. Individuals or groups may make recommendations directly to MERB for their consideration. Specifically, MERB adopted a policy on public participation on October 27, 1975 which states that:

"All public comments, including those considered by INTERCOM, will be forwarded to the Environmental Review Board before it takes final action on an EIS. However, written comments received after the comment deadline may not be distributed to Environmental Review Board members in sufficient time for their consideration. Those who wish to appear before

the Board on an EIS scheduled for Board action may make a brief verbal presentation. Submission of a written copy of the verbal presentation is encouraged, however."

Thus, the Michigan Environmental Review Board provides an open process for considering all interests relative to state or federal environmental impact statements.

Michigan Department of Natural Resources

The Michigan Coastal Management Program, through Department of Natural Resources recommendations to the Natural Resources Commission and department representation on the Michigan Environmental Review Board, as well as close coordination with federal agencies throughout program implementation, will insure that national interests in coastal management are adequately considered. Specifically, Dr. Howard A. Tanner, as chief administrator of the department of Natural Resources has insured that the Department of Natural Resources will continue its consideration of the national interest in facility siting and resource protection in the administration of the department's regulatory and resource management responsibilities. This commitment was formalized by Director's Letter No. 17, dated May 8, 1978 (see Appendix B). The Director's personal involvement with the Natural Resources Commission and the Director's representation on the Michigan Environmental Review Board provide direct access for the department to the primary forums Michigan will use to insure adequate consideration of the national interest.

Powers and duties of the Director, as chief executive of the Department of Natural Resources, are established by Act No. 192 of the Public Acts of 1929. The act requires the Director to provide for the enforcement of all laws and regulations of the state. Administrative Order No. 1976-1 provides that the exercise of a delegated power, duty, or function by the department shall at all times be subject to the general superintendance and supervision of the Director and that the Director shall prescribe and adopt internal procedures stating the course and method of Department operations, (approved November 5, 1976, reviewed and approved by the state Attorney General).

SPECIFIC NATIONAL INTEREST IN MICHIGAN'S COAST

Figure VI-D summarizes resources and facilities in which there is a national interest in planning, siting and other activities relative to coastal management in Michigan. The following discussion summarizes how Michigan's Coastal Management Program, both during program development and as a continuing process during implementation, considers facilities and resources which may be in the national interest.

FIG. VI-D
Michigan's Coastal National Interest Concerns

Category	Examples of Resources and Related Facilities
National Defense and Aerospace	Military bases and installations, defense manufacturing facilities; aerospace facilities
Recreation	Wildlife management areas, national lakeshores, state and national parks, wild and scenic rivers, etc.
Transportation	Commercial ports and harbors, interstate highways, railroads, airports, aids to navigation, coast guard facilities.
Air and Water Quality	Air and water pollution discharges, regional waste treatment plants.
Wetlands	Sensitive habitats critical to fish and wildlife, endangered species habitats
Hazard Areas	Shoreline erosion areas, areas of earth change and sedimentation, flood risk areas
Historic and Archeologic Sites	National and State register of historic sites
Energy	Coastal energy resource areas including energy facility sites, oil and gas rigs, storage distribution and transmission facilities, power plants, and coal facilities

National Defense and Aerospace

Michigan's Coastal Management Program recognizes the importance of national defense and that, such facilities may require uses or impacts on coastal resources. In the event that new or expanded defense facilities are proposed, the Coastal Management Program will not question the need for national security but will strive to evaluate the alternative sites in accord with statutes cited in Chapters III and V of this impact statement, including review of environmental impact statements in accordance with Executive Order of the Governor 1974-4, which created the Michigan Environmental Review Board and the process for distributing and coordinating environmental impact statement review responsibilities.

Recreation

The Michigan coast is a resource of unique beauty which affords numerous opportunities for recreational use. Out-of-state tourism is a major coastal economic consideration.

Recognizing national responsibilities in coastal recreation, the sources consulted by the Coastal Management Program include:

- The nationwide Outdoor Recreation Plan
- State and local recreation programs (e.g., Michigan's Statewide Comprehensive Outdoor Recreation Plan)
- State-federal interagency agreements
- Federal agency nominations for recreational areas of particular concern

Major objectives of the national interest in recreation are: 1) to provide high quality recreational opportunities to all people; 2) increase public recreation in high density areas; 3) improve coordination and management of recreation areas, protect existing recreation areas from adverse contiguous uses; and 4) accelerate the identification of transfer of surplus under-utilized federal property.

Michigan's Coastal Management Program incorporates the national interest in recreation through state consistency with the National Outdoor Recreation Plan, adopted in 1973 (the state's Comprehensive Outdoor Recreation Plan). The Michigan Recreation Plan will continue to be used as the planning process for adequately considering the national interest in recreation.

Other elements incorporated in Michigan's Coastal Management Program include state-federal interagency agreements, such as the agreement between the state and the National Park Service for coordinated wildlife management on Sleeping Bear National Lakeshore.

In addition, Act No. 316 of the Public Acts of 1965, enables the state to: 1) participate in programs of federal assistance relating to outdoor recreation; and 2)

keep an up-to-date comprehensive plan for development of outdoor recreation resources. Thus, the state actively pursues federal financial assistance provisions for outdoor recreation, such as those provided by the Land and Water Conservation Fund. For example, the Department of Natural Resources is currently collaborating with the National Heritage Conservation and Recreation Service to provide increased coastal urban recreation along the Detroit waterfront.

As cited in Chapter III, it is also state policy to improve the accessibility of state land and water resources to the widest range of socio-economic classes consistent with environmental protection and public safety needs, (Michigan Recreation Plan). This policy clearly reflects the national interest in recreation and is enhanced by proposed Coastal Management Program action programs to assist in projecting supply and demand of recreation use, develop programs for meeting projected recreational demands and implementing the coastal access planning element. (Refer also to program concerns, policies and action programs listed under the heading recreation areas.)

Transportation

There is a national interest in maintaining and enhancing the level of commercial navigation on the Great Lakes and in improving the efficiency of the present Great Lakes navigation system. There is also a national interest in providing a safe and efficient land transportation system.

To determine the national interest in transportation, sources consulted by the Coastal Management Program include:

- Federal agency area of particular concern nominations for transportation areas (all 23 commercial ports have been nominated)
- Railway Safety Act of 1970
- Environmental Impact Statements on the extended commercial navigation season and state participation on the Winter Navigation Board
- Activities and development projects conducted by the Department of Commerce's Maritime Administration
- Department of Transportation Act
- Coast Guard, Primary Duties
- Technical studies sponsored by the U.S. Army Corps of Engineers
- National Transportation Plan

The major objectives of the national interest in transportation are: 1) develop national transportation policies and programs conducive to the provisions of fast, safe, efficient and convenient transportation at the lowest cost; 2) to facilitate waterborne activity in support of national, economic, scientific, defense and social needs; 3) to maintain and improve the quality of the water environment; 4) to develop the full potential of the Great Lakes-St. Lawrence Seaway Navigation system, including season extension and maintenance and development of adequate port facilities; 5) to maintain adequate depth of waterways and channels to accommodate vessels active in domestic and international commerce.

Michigan's Coastal Management Program addresses national interests in transportation through: 1) the Governor's conditional support of the extended Great Lakes commercial navigation season; 2) by enabling the creation of port districts; and 3) by providing for enforcement of the substantive requirements of authorities relative to water quality, dredge and fill activities, etc. The Department of Natural Resources coordinates the identification of sites for dredged polluted material through a dredge spoil committee, composed of state as well as federal agency representatives. Other policies and program concerns relative to coastal transportation are contained in Chapter III of this impact statement.

With respect to commercial ports, the Coastal Management Program provided financial assistance to the Michigan Department of State Highways and Transportation to identify land cover and land use for Michigan's ports to facilitate future planning and development of port areas.

Specific concerns of the Coastal Management Program which reflect the national interest in transportation include: 1) to avoid environmental and economic loss, careful planning and analysis is needed to determine the impacts of future port development; and 2) to serve the future needs of development in the coastal area, there is a need to establish a comprehensive transportation planning mechanism.

Air and Water Quality

Protection of air and water quality is necessary to maintain the integrity of Michigan's fragile coastal environment.

Sources consulted by the Coastal Management Program in determining the national interest in air and water quality include:

- Federal Water Pollution Control Act of 1972 and recent amendments.
- Clear Air Act of 1970 and amendments.
- Federal Refuse Act.
- National Solid Waste Act.

- Working agreements between Michigan and the United States Environmental Protection Agency, including specifically the state's "208" program, solid waste, air and water quality programs.

- Area of particular concern nominations relating to air and water quality.

Objectives of the national interest with respect to air and water quality include: 1) provide adequate funds for sewage treatment facilities so that the pollution of our nation's waters can be abated; 2) to control and abate pollution systematically by proper integration of a variety of research, monitoring, standard setting and enforcement activities.

The Michigan Coastal Management Program fully incorporates the national interests in air and water quality, and the requirements of the federal Water Pollution Control Act and Clean Air Act are made part of the Michigan program, including nonpoint sources of water pollution and air pollution. Thus, the water and air national interest will be met during program implementation through the process of issuing state and federal air emmission and waste water discharge permits and by incorporating SIPS and 208 plans developed pursuant to the Federal Clean Air and Water Acts.

Wetlands

Michigan's coastal wetlands support many habitats critical to fish and wildlife which are often threatened by development activities. Wetlands also play vital roles as water quality purifiers and retain flood waters.

Sources consulted by the Coastal Management Program to discern national wetlands interests include:

- The Endangered Species Act of 1972.

- President's Executive Order on Wetlands (May 24, 1977).

- Area of particular concern nominations for wetlands, such as those nominations received from the U.S. Fish and Wildlife Service.

- Fish and Wildlife Coordination Act.

- Draft environmental impact statement comments from U.S. National Marine Fisheries Service.

Objectives of the national interest in wetlands include: (1) to avoid to the extent possible the long- and short-term adverse impacts associated with the distribution or modification of wetlands and to avoid direct or indirect support of new construction in wetlands whenever there is a reasonable and prudent alternative; (2) provide means whereby ecosystems upon which endangered and threatened species depend may be preserved; and (3) to provide a program for the conservation of endangered and threatened species.

Through funds provided by the Coastal Management Program, a wetlands value study was conducted to ascertain the values derived from proper wetlands management. As cited in Chapter III, a significant program concern with respect to wetlands is that: actions such as navigation dredging, spoil disposal, marine construction, sanitary landfills, construction of recreational facilities, intense urbanization, drainage and other actions have resulted in habitat loss in many wetland areas. Continued review and regulation of such actions is necessary to avoid unnecessary and unretrievable losses in ecologically sensitive coastal wetlands.

Under authority of Act No. 245 of the Public Acts of 1970, as amended, the Shorelands Protection and Management Act, environmental areas critical to fish and wildlife are identified and regulated by management plan. The Michigan Environmental Protection Act may also be employed to protect wetlands. Through this authority, coastal wetlands may be properly managed, consistent with the national interest. The state is currently seeking wetlands legislation which would provide comprehensive wetlands management.

Hazard Areas

Shoreland erosion and flooding annually results in excessive damage costs to structures and property. Soil by volume is our greatest pollutant.

In discerning the national interest in such hazard areas, sources consulted by the Coastal Management Program include:

- Flood Disaster Protection Act
- National Flood Insurance Act of 1968 and 1973 amendments
- Water Resources Development Planning Act of 1974
- The President's Executive Order on Flood Plain Management (May 24, 1977)
- Erosion and flood hazard areas of particular concern.

Objectives of the national interest in hazard areas include: (1) to avoid long- and short-term adverse impacts associated with the occupancy and modification of floodplains; (2) to develop and carry out a national soil and water conserva-

tion program; and (3) to designate areas eligible for floodplain insurance, including the erosion aspects of 1973 amendments.

Michigan addresses these national interests in implementing provisions of Act No. 245 of the Public Acts of 1970 which provides for the designation and regulation of flood and erosion areas along the coast. Act 347 of the Public Acts of 1972 provides for control of soil erosion and sedimentation resulting from earth change activities. A goal of the Coastal Management Program which complements national interest concerns includes: encourage the management of properties so as to minimize environmental and property damage resulting from natural and man-induced erosion and flooding. In addition, the Department of Natural Resources is currently working with the Department of Housing and Urban Development to identify erosion hazard areas for federal agency use in determining acceptable insurance premiums. Department of Natural Resources is frequently consulted by federal agencies such as the Flood Insurance Administration on matters relative to delineating and regulating hazard areas.

Archaeological and Historic Sites

Michigan's coast is a rich chronicle of the state's development. Heavy concentrations of records and artifacts of the state's 13,000 year history are located along the Great Lakes coast.

In determining the national interest in archaeological and historic areas, sources consulted by the Coastal Management Program include:

- The Antiquities Act of 1906
- Historic Sites Act of 1935
- Archaeological and Historic Preservation Act of 1974
- National Historic Preservation Act of 1974
- National Environmental Policy Act of 1969
- Federal agency nominations for historic and archaeological areas of particular concern
- Executive Order 11593

Major objectives of the national interest in historic and archaeological sites are: 1) to afford protection for designated historic and archaeological sites from adverse impacts; and 2) to consider cultural resources in assessing the environmental impacts of proposed activities.

Elements of Michigan's Coastal Management Program which apply to the national interest include provisions of Act No. 169 of the Public Acts of 1970 which

encourages the establishment of historic districts and provides for: 1) acquisition of land and structures for historic purposes; 2) preservation of historic sites and structures; 3) creation of historic district commissions; and 4) maintenance of publicly owned historic sites and structures by local governmental units.

It is also state policy to maintain a state register of historic sites which may involve state agencies in environmental review procedures, (Act No. 10 of the Public Acts of 1955 and Executive Order of the Governor 1974-4). The Director of the Michigan History Division, Department of State, acts as State Historic Preservation Officer, authorized under the National Historic Preservation Act of 1966. Michigan's State Historic Preservation Officer has formally indicated approval of program policies related to historic and archaeologic areas, (February 24, 1978 Appendix C). (See also Chapter III under the heading historic and archaeological areas.)

The Coastal Management Program has also provided grant funds to the Michigan History Division, Department of State, to conduct studies which clearly reflect the national interest. For example, the two reports entitled: "The Distribution and Abundance of Archaeological Sites in the Coastal Zone of Michigan", and "Coastal Zone Management Program Historic Properties" assisted the state in identifying historic and archaeologic resources for their protection and maintenance.

A specific concern of the Coastal Management Program which reflects the national interest is: To avoid program duplication and conflict, historic planning in Michigan's coastal areas should be consistent with provisions of the *Michigan Historic Preservation Plan.*

Energy Resource Areas

Expanding energy resource supplies to meet increasing domestic and industrial needs will place new demands on the lands and waters along the nation's shores.

To determine the national interest in energy resources, sources consulted by the Coastal Management Program include:

- The National Energy Plan
- Federal Power Act
- Natural Gas Act
- Data supplied by the U.S. Geological Survey
- Data supplied by the East Central Area Reliability Commission
- Area of particular concern nominations for energy resource areas

The National Energy Plan sets forth three energy objectives for the United States: 1) as an immediate objective that will become even more important in the future, to reduce dependence on foreign oil and vulnerability to supply interruptions; 2) in the medium term, to keep U.S. imports sufficiently low to weather the period when world oil production approaches its capacity limitations; and 3) in the long-term, to have renewable and essential inexhaustible sources of energy for sustained economic growth, (Plan Overview p. ix). Significant features of the National Energy Plan are: 1) conservation and fuel efficiency; 2) national pricing and production policies; 3) reasonable certainty and stability in government policies; 4) substitution of abundant energy resources for those in short supply; and 5) development of non-conventional technologies for the future. (Plan Overview p. ix-x).

As documented in earlier portions of this section, Michigan has demonstrated its consideration of the national interest in energy, particularly through formal policy statements of the Natural Resources Commission and authorities and programs administered by the Michigan Department of Natural Resources. Specific concerns, policies and action programs, described in this impact statement in Chapter III, provide additional indication of Michigan's committment to recognize larger-than-Michigan issues relative to energy conservation and development.

With specific reference to planning for the siting of energy facilities, Michigan is actively engaged in meeting the requirements of Section 305(b)(8) of the Coastal Zone Management Act. The Coastal Management Program is currently working to document supplies, demands and plans related to energy and their impacts on the coastal area. This planning effort is coordinated among several state agencies, such as the Department of Commerce's Energy Administration and federal interests, public and private groups involved with development and/or conservation of energy, and will specifically examine the national interest in energy in executive policies, federal laws and regulations, plans, programs and policies, and federal agency statements of national energy interest in Michigan's coast.

SUMMARY

Michigan's effort to coordinate and consult with federal agencies and other national interests will continue during program implementation. During program development, the coordination effort strengthened Michigan's Coastal Management Program through recognition of federal agency program concerns and missions and area of particular concern nominations. Through local, state and federal involvement, Michigan's Coastal Management Program can assist in developing and conserving Michigan's unique 3,200 mile shore, consistent with the health, safety and welfare of present and future generations.

Conclusion

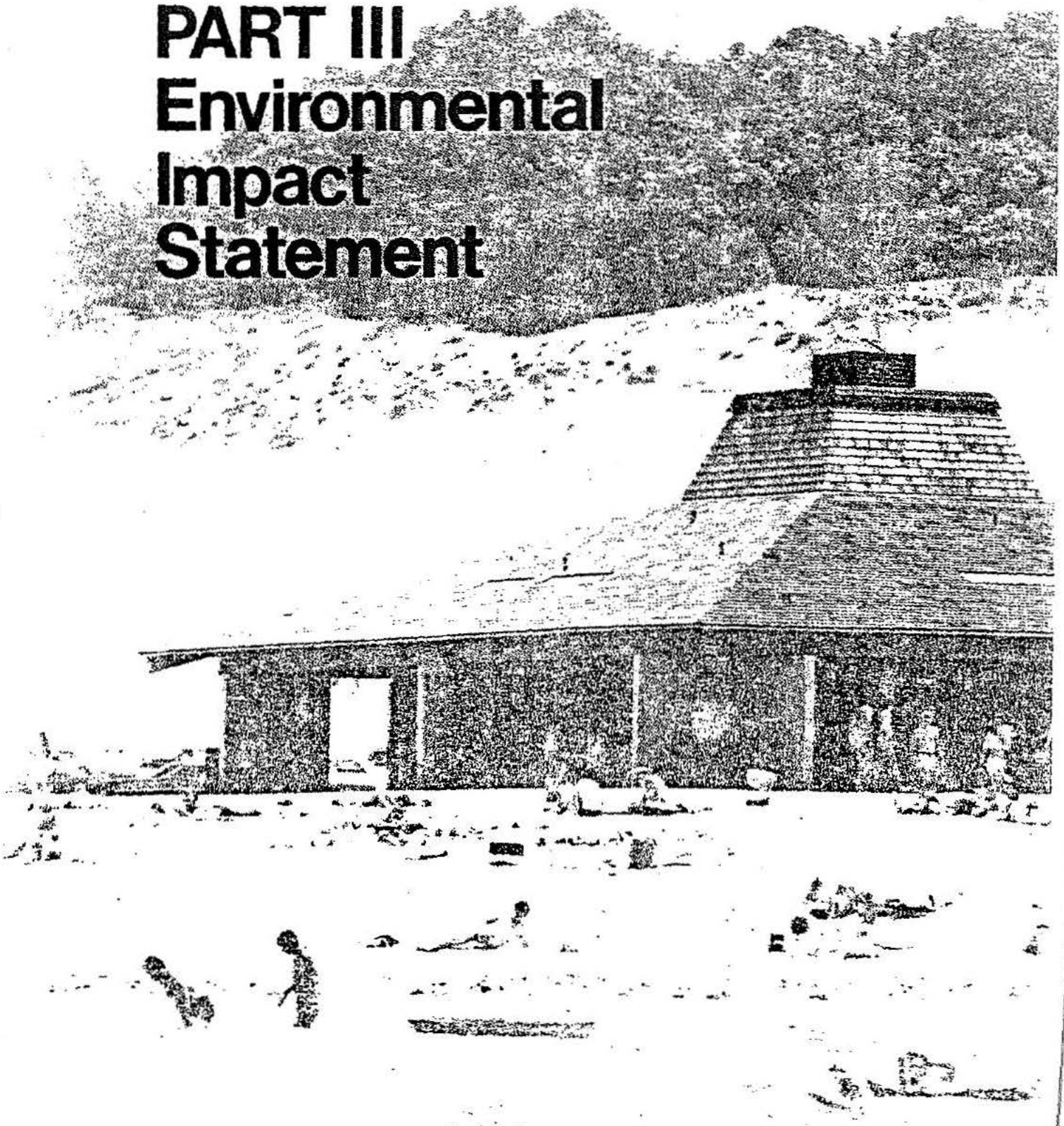
This document is the culmination of a three year effort by the Michigan Department of Natural Resources, the Citizens Shorelands Advisory Council, coastal planning and development regional agencies, local governments and citizens to develop a Coastal Management Program for the people of Michigan.

Benefits of this program will continue to be illustrated by improved administration of coastal statutes, more effective technical assistance, increased financial assistance and beneficial local, state and federal coordination efforts. In accomplishing these benefits, the major program objective will be to protect essential coastal resources and increase the capabilities of local governments to properly manage their coastal areas.

In anticipation of federal approval of this program, the Michigan Coastal Management Program has requested proposals for funding consideration under Section 306 of the Coastal Zone Management Act from all coastal local governmental units, planning and development regional agencies and state agencies. To date, about 130 proposals from local and regional entities have been submitted, requesting more than $3.5 million. Thirty-two proposals have been received from state agencies, requesting about $2.1 million. The Standing Committee on Shorelands and Water Coordination, the Citizens Shorelands Advisory Council and participating regional agencies have begun to review project proposals to assist in identifying technical and financial assistance priorities. Some federal agencies, such as the U.S. Corps of Engineers and the U.S. Fish and Wildlife Service have been consulted and provided information on proposed projects relating to shore protection, wetlands inventories and others.

Thus the Michigan Coastal Management Program is taking active steps to insure that program implementation is a successful and meaningful endeavor. In closing, we would like to recognize the contributions of the Division of Land Resource Programs — particularly the Great Lakes Shorelands Section — and members of the Standing Committee on Shorelands and Water Coordination and the Citizens Shorelands Advisory Council. Special thanks to Janet Griffin who afforded hours of patience and hard work in collaborating in the development of this impact statement and the program as a whole.

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 archaeologic 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 consistant 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 Managment 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 Managment 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 that 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, adherance 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 or 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 issue 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 Sedimentaiton Act, the Sand Dunes Protection and Management Act, and others. Program implementaiton 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 Shorland regulation to include developed and platted areas; adopt all coastal policies as regulation; and establish criteria for the review of county rural zoning ordinaces 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 utitlity 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

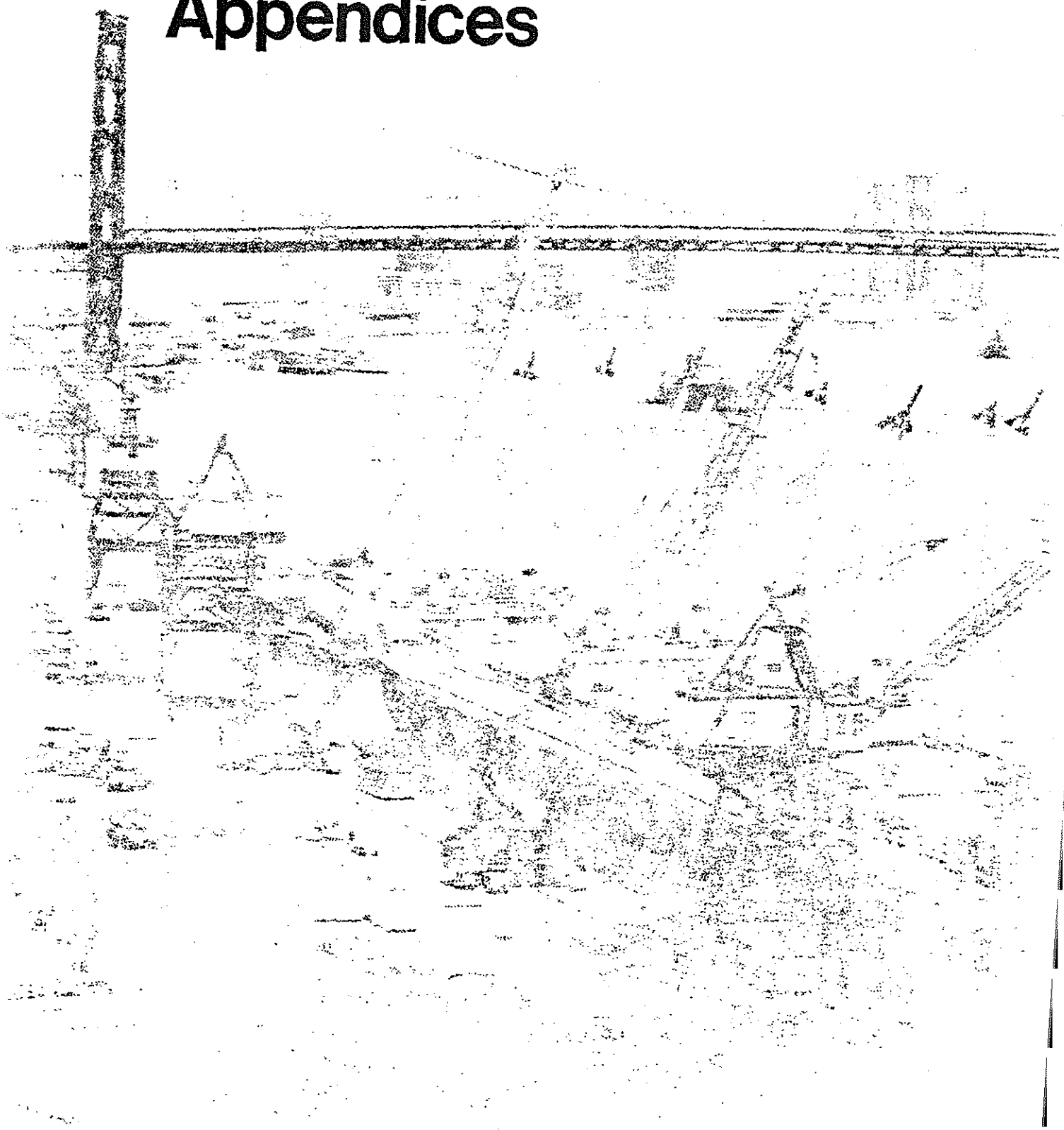
The Program will allow the use of shoreline for economic development including mineral, energy, agricultural, prime industrial, and transportation development. Some of these will probably involve irreversible negative impacts on coastal resources. The basic rational for allowing such resource commitments 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.

Appendices



APPENDIX A
Natural Resources Commission
Program Approval

APPROVED

Oct 14, 1977

MICHIGAN NATURAL RESOURCES COMMISSION

EXECUTIVE ASSISTANT

September 22, 1977

Memorandum to the Natural Resources Commission:

Re: "A Proposed Program for Michigan's Coast"--
Approval for Implementation

Public Law 92-583 (Coastal Zone Management Act) provides grant monies for coastal states to develop and implement coastal programs "for the management, beneficial use, protection and development of the land and water resources of the Nation's coastal zones." Since 1974, the Michigan Department of Natural Resources has received grant monies from the United States Department of Commerce, National Oceanic and Atmospheric Administration, Office of Coastal Zone Management, to develop a coastal program with the people of Michigan. Michigan's program development effort is summarized in a document entitled "A Proposed Program for Michigan's Coast".

To develop a program which would be both responsive to federal requirements and the challenging needs of Michigan's coastal area, it was necessary to formalize a strong partnership with citizens, local governmental units and state and federal agencies. To facilitate this partnership, the Natural Resources Commission, on November 19, 1973, appointed a citizens' shorelands advisory body to assist in insuring maximum citizen participation in the development of a coastal program strategy. In addition, coastal planning and development regions and local units of government made extensive contributions by identifying coastal resource problems and opportunities, formulating local goals and objectives for coastal management, participating in coastal management training and information meetings, and assisting public and private agencies and groups with resource management techniques. At the state level, a Standing Committee on Shorelands and Water Coordination, composed of representatives from the Michigan Department of Natural Resources and other state agencies advises the coastal program on policies and program actions, assuring consistency of state plans and actions in the coastal area.

To gain additional input, a series of 20 public informational meetings and 10 formal public hearings on Michigan's proposed coastal program were conducted statewide. A summary of public hearing comments and responses is appended to the document "A Proposed Program for Michigan's Coast".

Upon approval by the Michigan Natural Resources Commission, Governor William G. Milliken, and the United States Department of Commerce, Michigan will become eligible for federal funds to implement provisions of "A Proposed Program for Michigan's Coast".

At the August, 1977 meeting of the Natural Resources Commission, staff of the Division of Land Resource Programs introduced the proposed coastal program. During September 1977, the Natural Resources Commission members were forwarded copies of "A Proposed Program for Michigan's Coast" for their review.

In brief, this document proposes the way in which Michigan will utilize information derived during the program development effort to: (1) direct program efforts in a defined coastal area boundary; (2) assist in the implementation of state statutes to carry out the mandates of the Michigan Legislature; (3) identify prominent coastal problem and opportunity areas; and (4) provide for active program involvement of citizens, local, regional, state and federal agencies.

The coastal program will be directed toward identifying and correcting deficiencies in programs now operating in the coastal area and assist in the development and implementation of new and innovative programs to improve the delivery of public services, guide the long-term wise use of coastal resources, and reduce program delays and overlap. The primary thrust of Michigan's program is to: (1) provide overall guidance, direction and coordination of state agency programs operating in the coastal area; (2) direct funding and/or technical assistance toward solving coastal problems and improve coastal recreational and economic opportunities; (3) develop effective working relationships with federal agencies to assure that their actions consider local and state interests; and (4) develop a strong partnership between state and local units of government, supported by grants and technical assistance to strengthen resource management techniques at the local level.

The Division of Land Resource Programs, therefore, recommends that the Natural Resources Commission approve the provisions of Michigan's Coastal Program as described in "A Proposed Program for Michigan's Coast".

Karl R. Hosford

KARL R. HOSFORD
Division of Land Resource Programs

I have analyzed and discussed this recommendation with the Deputy Directors, Bureau Chiefs and staff and we concur.

Howard A. Tanner

HOWARD A. TANNER
Director

APPENDIX B
Director's Letter Regarding Consideration of the National Interest

STATE OF MICHIGAN

NATURAL RESOURCES COMMISSION
CARL T. JOHNSON
E. M. LAITALA
DEAN PHIDGEON
HILARY F. SNELL
HARRY H. WHITELEY
JOAN L. WOLFE
CHARLES G. YOUNGLOVE

WILLIAM G. MILLIKEN, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING, BOX 30028, LANSING, MICHIGAN 48909
HOWARD A. TANNER, Director

April 27, 1978

DIRECTOR'S LETTER

Letter No.: 17
Effective Date: May 8, 1978

TO: All Unit Supervisors and Conservation Officers

FROM: Howard A. Tanner, Director

SUBJECT: Consideration of the National Interest in Coastal Management

In the Coastal Zone Management Act of 1972, as amended, the United States Congress offered to assist coastal states in the development and implementation of management programs to achieve wise use of the land and water resources of the coastal area. As part of this overall national commitment, Congress provided a unique arrangement between the states and the Federal Government. The act mandates that all federal agencies, in conducting activities or undertaking development projects in the coastal area must be consistent to the maximum extent practicable with policies of an approved state coastal management program. In Michigan these policies are based upon authorities such as state statutes, Executive Orders of the Governor, and Natural Resources Commission policies. In return Michigan is required by the federal act to assure adequate consideration of the national interest in planning and siting of facilities which are other than local in nature in Michigan's coastal area.

The purpose of this communication is to insure that Department programs continue to consider the national interest in their operation with respect to facility siting (e.g., energy, recreation, transportation) and resource protection (e.g., water, air, wetlands, erosion areas) in the conduct of regulatory responsibilities and resource management. It is important to note that the federal act requires adequate consideration of the national interest which does not mean that the national interest must be necessarily accommodated.

Thus, I hereby direct all Department Units, in carrying out statutory and programmatic responsibilities, including: (1) issuance of permits and licenses; (2) preparation of environmental impact statements pursuant to Executive Order 1974-4; and (3) through representation on various boards and committees, including the Standing Committee on Shorelands and Water Coordination, the Interdepartmental Environmental Review Committee and the Michigan Environmental Review Board; to consider the national interest involved in the planning for and siting of facilities which are necessary to meet other than local requirements, including the national interest in resource conservation. In carrying out these responsibilities, reference should be made to Chapter VI of the Michigan Coastal Management Program document. In addition, the Coastal Management Program Unit of the Division of Land Resource Programs is available for consultation and assistance.

Howard A. Tanner

MICHIGAN

R1026 10/76

Distribution C and Conservation Officers

APPENDIX C
Confirmation of Program Involvement and Approval by Michigan's State Historic Preservation Office

MICHIGAN DEPARTMENT OF STATE
RICHARD H. AUSTIN SECRETARY OF STATE

LANSING
MICHIGAN 48918

MICHIGAN HISTORY DIVISION
ADMINISTRATION, ARCHIVES, HISTORIC SITES, AND PUBLICATIONS
3423 N. Logan Street
517-373-0510
STATE MUSEUM
505 N. Washington Avenue
517-373-0515

February 24, 1978

Mr. Chris A. Shafer
Coastal Management Program
Division of Land Resource Programs
Department of Natural Resources
Stevens T. Mason Building
Box 30028
Lansing, MI 48909

Dear Mr. Shafer:

This letter is to confirm that as State Historic Preservation Officer, I have participated in the development of the Michigan Coastal Management Program and have reviewed and approved the program's policies which pertain to the Michigan History Division's responsibilities.

Sincerely,

Martha Bigelow

Martha M. Bigelow, Director
Michigan History Division and
State Historic Preservation
Officer

MMB/jjs

APPENDIX D
Summary of Comments and Responses

LIST OF AGENCIES, GROUPS AND INDIVIDUALS WHO RECEIVED THE DEIS
(*Denotes written comments received on the DEIS)

A. Federal Agencies

Advisory Council on Historic Preservation
Council on Environmental Quality
*Department of Agriculture
Agriculture Research Service
Agricultural Stabilization and Conservation Service
Forest Service
Soil Conservation Service
Department of Commerce
*Maritime Administration
*National Oceanic and Atmospheric Administration
*Environmental Data Service
*Department of Defense
Air Force
*Army Corps of Engineers
Navy
*Department of Energy
Department of Health Education and Welfare
*Department of Housing and Urban Development
*Department of the Interior
Bureau of Land Management (public lands)
Bureau of Mines
Heritage Conservation Recreation Service
Bureau of Reclamation
Geological Survey
Keeper of the National Historic Register
National Park Service
Office of Oil and Gas
Department of Justice
Department of State
Department of Transportation
*Coast Guard
Federal Aviation Administration
*Federal Highway Administration
Federal Railroad Administration
*Saint Lawrence Seaway Development Corporation
Transport and Pipeline Safety
Department of Treasury
Assistant Secretary for Administration
Energy Research and Development Administration
*Environmental Protection Agency
Federal Enetgy Administration
*Federal Energy Regulatory Commission
Federal Power Commission
Marine Mammal Commission
National Aeronautics and Space Administration
*Nuclear Regulatory Commission
U.S. Water Resources Council

B. State, Regional, Local Agencies and State Interest Groups and Interested Individuals

Department of Agriculture
Department of Attorney General
Department of Civil Rights
Department of Civil Service
Department of Corrections
Department of Education
*Southeast Michigan Council of Governments
Southwestern Michigan Regional Planning Commission
East Central Michigan Planning and Development Regional Commission
Region 2 Planning Commission

Department of Labor
Department of Licensing and Regulation
Department of Management & Budget
Department of Mental Health
Department of Military Affairs
Department of Public Health
Department of Social Services
Department of State Highways and Transportation
Department of Treasury

Central Upper Peninsula Planning and Development Regional Commission
Western Upper Peninsula Regional Planning Commission
West Michigan Shoreline Regional Development Commission
Citizens Shorelands Advisory Council
Standing Committee on Shorelands and Water Coordination

Southcentral Michigan Planning and Development Council
GLS Region V Planning and Development Commission
Tri-County Regional Planning Commission
*West Michigan Regional Planning Commission
*Northeast Michigan Council of Governments
Northwest Michigan Regional Planning and Development Commission
Eastern Upper Peninsula Regional Planning and Development Commission
*Monroe County Planning Department and Commission
Selected libraries along the coast
Groups, firms, associations, organizations and interested individuals

C. National Interest Groups

Environmental Groups

American Littoral Society
American Shore and Beach Protection Association
Center for Law and Social Policy
Environmental Policy Center
Friends of the Earth
Izaak Walton League
National Audubon Society

Natural Resources Defense Council
National Wildlife Federation
Nature Conservancy
Sierra Club
The Conservation Foundation
The Wildlife Management Institute
Wilderness Society

Professional

American Fisheries Society
American Institute of Architects
American Institute of Planners

American Society of Planning Officials
National Parks and Conservation Association

Public Interest

Council of State Planning Agencies
Coastal States Organization
League of Women Voters of the United States
National Association of Counties

National Conference of State Legislatures
National Governors Conference
National League of Cities
United States Conference of Mayors

Private Sector

American Association of Port Authorities
American Farm Bureau Federation
American Mining Congress
*American Petroleum Institute
American Right of Way Association
American Waterways Operators
Atomic Industrial Forum
Boating Industry Association
Chamber of Commerce of the United States
Chevron Oil Company
Edison Electric Institute
EXXON
National Environmental Development Association
National Farmer's Union
National Federation of Fishermen
National Fisheries Institute
National Forests Products
National Ocean Industries Association
National Recreation and Park Association
National Association of Conservation Districts
National Association of Electric Companies
National Association of Engine and Boat Manufacturers
National Association of Home Builders
National Association of State Boating Law Administrators
National Boating Federation
National Canners Association
National Coalition for Marine Conservation, Inc.
National Security Industrial Association
National Waterways Conference
Mobil Oil Corporation
Saltwater Sportsmen
Society of Real Estate Appraisers
Sport Fishing Institute
United Brotherhood of Carpenters and Joiners of America
Western Oil and Gas Association
World Dredging Association

D. Individuals and Other Parties

Upon request, copies were sent to all individuals and other interested parties not listed as receiving copies of the DEIS. Responses were received from the following:

*Consumers Power Company
*Copper County League of Women Voters
*Detroit Edison
*Manistee County League of Women Voters

MAJOR ISSUES RAISED BY REVIEWERS OF THE DEIS

Issue - Boundary Delineation and Mapping (Chapter II)

Several reviewers of the DEIS commented on the fact that the coastal boundary did not appear to be fixed and they also requested that maps of the coastal boundary be included in the document.

The criteria used for delineating the coastal boundary was established at the time of the issuance of the DEIS. However, the actual mapping of the boundary was not complete since the State was in the process of reviewing the coastal boundary maps compiled by the regional planning agencies for consistency with the boundary criteria.

Maps of the coastal boundary are available for public inspection or purchase from the State or appropriate coastal regional planning agencies. Maps are not included in the FEIS for the following reasons:

1. The variability in scale of existing maps of coastal areas;
2. The scale of map necessary to make the boundary line meaningful with respect to land area covered would be very large;
3. The volume of any document depicting 3200 miles at a meaningful scale would be extremely large.

Issue - Program Focus and Policies (Chapter III)

Concerns were raised over the general nature of several of the Michigan Coastal Management Program Policies.

This chapter of the document has been revised to more clearly state the policies of the program which address the major coastal issues of Michigan. In addition the specific legal authority which supports the respective policies is now

cited. However, as indicated at the outset of both the DEIS and FEIS an extensive listing of the statutory and administrative criteria used in implementing these policies is not supplied in this chapter. Reprinting of this material was not possible due to the expense and the voluminous nature of the sources involved. Appendix C of the DEIS does provide a synopsis of the criteria. For additional information, the statutes and administrative code, which are a matter of public record, should be consulted.

Issue - Areas of Particular Concern (Chapter IV)

The major questions raised over the APC's process were: what areas have been designated; who may nominate areas for designation as an APC; and how will the rights of private property owners be protected?

Chapter IV clearly indicates that the legislated areas of particular concern are designated, specific information on each of the areas is provided.

As to the second question, the Michigan Coastal Management Program encourages any individual, group, or agency within the public or private sector, to place in nomination any site for designation as an APC.

With respect to the third issue concerning private property rights, the public nomination process of APC's provides that under no circumstances will private property be designated as an APC without the expressed agreement of the landowner. Where legislatively designated APC's affect private property rights the normal legal requirements of notice, public hearings and judicial review will be followed.

Issue - Coordination and Conflict Resolution (Chapter V)

Of overriding concern to many reviewers of the Michigan DEIS was the capacity of the state to ensure consistency with the MCMP's policies.

The chapter describing the State's organization and authorities was revised to more clearly illustrate how coordination and resolution of conflicts among the various State agencies would occur. The Department of Natural Resources has the critical role of pulling together the various statutory programs in order to implement a coherent and comprehensive MCMP. The significant factor that led to the designation of the Department as the lead agency with this coordinating responsibility was that it administers directly or in conjunction with one or more State agencies all 27 regulatory programs that are incorporated as part of the MCMP. In exercising this authority the DNR will use several forums to ensure consistency with the program objectives, including: the Committee on Shorelands and Water Coordination, the Inter-Departmental Environmental Review Committee, and the Michigan Environmental Review Board. A complete description of each of these entities and the coordinating process is provided in Chapter V.

Issue - National Interest (Chapter VI)

Several reviewers had questioned the adequacy of the process that Michigan would use in ensuring consideration of the national interest.

The discussion on the national interest has been considerably strengthened. While no national interests are excluded from the lands and waters of Michigan's coastal area an outline is now provided of the specific resources and facilities of national interest that the program will focus on. Furthermore, an extensive discussion is provided on the sources and processes that Michigan will rely on to ensure that adequate consideration of the national interest will continue

including: Federal legislation, Presidential Executive Orders, national studies and plans, State and Federal agency consultation, A-95 review process, national and State EIS processes, the directive to all Department of Natural Resources employees (see Director's letter #17, Appendix B supra) and the decision-making processes of the Natural Resources Commission, Michigan Environmental Review Board and the Committee on Shorelands and Water Coordination. See Chapter VI for further elaboration.

Issue - Federal Consistency (Chapter VI)

A number of comments were received on the MCMP's Federal consistency procedures. The major concerns were: the program's description of the agencies responsible for conducting Federal consistency review activities; the consistency criteria which must be satisfied versus that which should be considered in consistency review; and the correction of consistency diagrams in the DEIS which were misleading.

With respect to the first major concern over what agency will be responsible for carrying out Federal consistency, it is important to note that under the Federal consistency regulations the agency designated pursuant to Section 306(c)(5) of the CZMA is responsible for reviewing the consistency of Federal actions. However, the Federal regulations allow the 306(c)(5) state agency to delegate the consistency review responsibility to other state, regional, or local government agencies. The explicit limitation on this delegation alternative is that the MCMP not require a Federal agency, applicant or person to submit a consistency determination or certification to more than one agency. In Michigan, the Division of Land Resources Program, Department of Natural Resources (306(c)(5) agency) will be responsible for the consistency review. The Division's Coastal Unit will be responsible for consistency review co-

ordination and time scheduling. The substantive requirements of the Division administered programs controlling soil erosion and sedimentation natural rivers, inland lakes and streams, natural areas, Great Lakes submerged lands, shore erosion coastal flooding and coastal wetland protection will be used for consistency reviews conducted directly by the Division. Permit reviews conducted by other Department Divisions and by other state agencies will be coordinated by the Coastal Unit. Also, the Coastal Unit will review A-95 notices directly.

In response to the questions raised concerning consistency criteria the document has been revised to distinguish between those criteria which must be satisfied and those criteria which should be considered. The criteria which must be satisfied are based upon the enforceable policies of the MCMP and include the direct and significant impact criteria, designated areas of particular concern and state plans and state-approved local enforcement programs. The criteria which should be considered are based upon the encouragement policies of the MCMP and include the goals objectives and principles.

In order to correct the confusion over the consistency diagrams supplied in the DEIS the diagrams have been revised Two important changes were made in response to comments on the figure showing consistency of Federal licenses and permits: (1) The Federal agencies option to deny a permit or license after state approval is illustrated; and (2) the concurrent reviews of local, state and Federal agencies is provided for.

RESPONSES TO DETAILED COMMENTS RECEIVED FROM REVIEWERS OF THE DEIS

U.S. Dept. of Agriculture
(R.H. Davis)
1/17/78

Comment	Response
Figures 1 and 2 of Chapter II vividly show ownership and kind of use of Michigan's Great Lakes coast. They are very useful.	No response necessary.
The absence of definitive boundary maps make it difficult to understand the entire program.	Maps are not printed in the FEIS because of their volume, lack of uniform scale, and poor reproductive quality of some of the maps. The maps can be inspected at the offices of the Michigan Coastal Program or in the appropriate coastal regional planning agency. The boundary criteria are spelled out in the FEIS.
Editorial comments on Action Programs.	This section has been revised.
Collecting information regarding the conversion of unique agricultural lands in cooperation with local, State, and national soil conservation programs is management action of a passive nature. The MCMP will be strengthened if it includes an activity designed to protect unique agricultural uses.	The Division of Land Resources Programs will assist farmers in enrolling their lands under the Farmland and Open Space Act which provides income tax relief for those individuals who agree to restrict nonagricultural development on their lands. At this time about 50,000 acres within coastal counties have been enrolled in the program.
The process for receiving nominations of APC's has not yet been formalized (p. IV-16). Before the coastal management program is approved, this process should be carefully examined by the public. The process outlined here raises questions in the reviewers mind. For example, step 2a p. IV-14 includes the statement, "If the APC involves privately owned land, an effort is made to contact the landowners and invite their comments and participation in the review process." This should be strengthened to require that the landowner is officially contacted in the nomination process.	The process for nominating sites for APC designation has been formalized since 1976. Copies of the actual nomination forms and the types of areas which may be nominated (i.e., guide to identifying APC's) are both provided in Chapter IV of the DEIS and FEIS. The public has participated in this process to the extent that the state of Michigan has received well over 1500 nominations. Moreover, the specific steps of the inventory and review process are outlined in the FEIS. As to the concern of the reviewer over ratification by the private landowner whose land may be involved in the APC process, the document has been clarified to address this concern. The APC process requires that before a privately owned site may be designated as an action APC, the concurrence of the private landowner is required. Where restrictions are placed on the use of property as a result of legislative designation of APC's, as mandated by the state legislature, conformance with normal state public notice procedures is required.

U.S. Dept. of Agriculture (cont)

Comment	Response
Figure 6J indicates that Federal agencies may not approve licenses or permits following state agency objection. Same Figure indicates State makes consistency determinations of Sections 307(c)(3)(A) (Subpart D) and 307(d) (Subpart F). This should be changed.	This is true. Under Section 307(c)(3)(A) of the CZMA no license or permit shall be granted by the Federal agency until the state or its designated agency has concurred with the applicant's certification or until, by the state's failure to act, the concurrence is conclusively presumed. Under Subpart D, Applicants certify consistency and the state agency concurs, fails to act, or disagrees. Under Subpart F, the applicant applies and the state agency determines if the project is consistent with the MCMP.
Two U.S.D.A. permit citations proposed by the state as subject to Federal consistency should be corrected to reflect new permitting authority.	Corrections made.
The Department has suggested editorial changes to more accurately reflect activities of the Soil Conservation Service activities in Michigan.	Corrections made to the appendices. However, these appendices are not published in the FEIS.
Public comment during the state hearing process questioned the respect for landowner property rights. It is difficult to determine the course of an appeal for private individuals affected by CZM regulation.	The program in no way undermines the personal property rights and personal liberties of the private landowner. All regulations which are applied by the program are based on existing state law. This program must adhere to due process, public hearings, and adequate administrative and judicial relief guaranteed under the Michigan Constitution and Administrative Procedures Act.
The document indicates that two types of USDA Forest Service permits require state certification or approved state and local permits before the Federal permit can be issued. Because these national forests are excluded from the coastal zone, this permit certification is not required.	Permitted activities on excluded lands "affecting the coastal zone" are subject to the Federal consistency requirements (see 15 CFR Part 930, Sections 930.33 and 930.32).
It is not clear what Forest Service activities will be subject to Federal consistency procedures as stipulated by Section 307(c)(1) of the CZMA. The state should provide reasonable assurance that Federal activities requested for review directly affect the coastal zone.	The Forest Service activities which will be reviewed for Federal consistency determinations include, but are not limited to, the acquisition or disposition of property as well as the design construction, alteration or maintenance of federal facilities which significantly affect the coastal zone. It is the responsibility of the Forest Service to notify the state of these types of activities and to notify the MCMP of its consistency determinations. For major activities, the environmental impact statement review procedures will be used to determine Federal consistency.
It is difficult to determine how state and Federal agency responsibilities and activities will be coordinated.	The document has been revised to more clearly illustrate the various processes and mechanisms which will be used to coordinate Federal/state activities, see Chapter VI.

U.S. Department of Commerce
Maritime Administration
(Al Ames 12/22/77)

Comment	Response
We have in the past supplied Michigan DNR with program description which included the MarAd responsibiliity for Emergency Port Planning. A copy of our comments to previous requests for MarAd program responsibilities are attached and should be included in the Michigan DEIS.	Changes have been made for the record in Appendix A of the DEIS; however, the Appendix is not printed as part of this FEIS.
MarAd is also concerned with the final determination of state legislated GAPCs as described in Appendix D to the DEIS. A review of Michigan Harbors indicates that 25 of the 121 designated recreational harbors are considered highly important to the local community economy. Some commercial port facilities are no doubt privately owned and have not been involved in the CZM Programs to date. We would suggest that all harbors in Michigan serving commercial waterborne traffic be nominated or designated as an APC. The Maritime Administration is interested in promoting effective and efficient waterborne commerce which is very dependent upon properly maintained navigation channels and harbors.	The Michigan Department of State Highways and Transportation has nominated all commercial ports of Michigan (23 in total) for designation as APC's. In addition, the Maritime Administration is encouraged to nominate any other areas that it feels deserve such recognition.
The Michigan DEIS recognizes commercial harbors and includes the Port Districts of Detroit and Monroe, Michigan. The plan for the two port districts is not well-defined and does not provide us with a basis for judgment in determining program consistency. We believe we have stated this opinion in past review efforts and feel strongly that it is the proper procedure for developing a realistic planning effort.	Program consistency is based on the enforceable policies of the program. Implementation of any plans for the Port Districts of Detroit and Monroe will be subject to consistency review by the state DNR for Federal grants, Federal activities, or Federal licenses and permits which the state has indicated it will review for determination of Federal consistency. While it is not possible to affect all plans involving coastal areas at once, MarAd's recommendations will continually be considered in the MCMP's ongoing efforts to strengthen port planning in Michigan.
It is clear that a balanced land-water use plan is needed at the harbor of Harbor Beach, Michigan. This is especially true because commercial and recreational activities occur here. A similar balancing effort is needed at other Michigan harbors. It would seem feasible to include the 27 Michigan harbors as APCs within a balanced program of recreational and commercial planning needs.	For harbors which Michigan designates as GAPCs, this type of planning effort is possible through the use of MCMP funding.

MarAd (cont)

Comment	Response
Commercial ports and the Maritime Administration should be added to the chart which identifies national interest in defense and aerospace facilities and associated Federal agencies. MarAd cites its responsibility under Executive Order 11921 which calls for port and vessel operation in times of national transportation emergency and in times of national defense requirements.	Michigan has revised this chart to reflect its consideration of the national interest. However, MarAd should note that the suggested change was not made. The requirement of 306(c)(8) calls for the adequate consideration of the national interest in the planning for and siting of facilities in the national interest. MarAd's responsibility calls for port and vessel operation in times of national transportation emergency and in times of national defense requirements. (emphasis supplied) Federal licenses, permits and activities are, of course, subject to Federal consistency procedures. The Secretary of Commerce can find that an activity, license, or permit, although inconsistent with a state's management program, is permissible because a national defense or other national security interest would be significantly impaired if the activity were not permitted to go forward as proposed. More detailed procedures for this determination are outlined in Federal Consistency Regulations Section 930.122, dated March 13, 1978.

National Oceanic and Atmospheric Administration (NOAA)
(David H. Wallace)

Comment	Response
The MCMP and DEIS are very general making it difficult to visualize how the program will operate.	The MCMP will be administered by the Land Resources Division of the DNR. It will utilize existing state authorities and existing state boards and commissions in implementating the program. The document has been revised to more clearly illustrate how the program will operate. See Chapter V.
On what coordinating mechanism will the state depend to assure cooperation among agencies with differing mandates and missions?	The primary mechanisms that the MCMP will depend on in ensuring cooperation and coordination of various agencies are the EIS process which is administered by the Michigan Environmental Review Board, the Standing Committee on Shoreland and Water coordination which will evaluate proposed activities for consistency with the program, and interagency agreements. Moreover, it must be emphasized that the DNR's Land Resources Division as the lead agency will play a critical role in furthering cooperation and coordination among the Departments' various divisions and other state, local, regional and Federal agencies. In response to this comment a more complete description of these coordinating mechanisms is provided in Chapter V.

Comment	Response
In several places in its policy statements the state says that it will not issue a permit for, or engage in, activities where it can be demonstrated that the activity is likely to result in pollution, destruction or impairment of identified natural areas or their attributes to the extent that there are feasible and prudent alternatives consistent with the reasonable requirements of the public health, safety and welfare. This type of statement should be clarified. For instance, how will natural areas be identified, and what are "reasonable requirements of the public health, safety and welfare?"	Act 241 of the Michigan Public Acts of 1972 authorizes establishment of natural areas. State management authority for these areas is established by state ownership. Other natural areas which are not designated as such by state ownership are managed through state regulation pursuant to such authority as the Shorelands Protection and Management Act and Natural Rivers Act. These areas are established pursuant to procedures established under each act. These procedures are summarized in Appendix C of the DEIS. With regard to the language in this comment, it is important to note that the words "feasible and prudent alternatives consistent with the reasonable requirements of the public health, safety, and welfare" are taken directly from the Michigan Environmental Protection Act. When the state of Michigan acts to carry out its statutory authority such as the issuance of permits it uses the protection of public health, safety, and welfare as a standard. This is a broad, time-tested legal standard the state has chosen to apply to its coastal regulatory decision-making process. It is used as well at the Federal level as evidenced by the Presidential Executive Orders on Wetlands and Floodplains. In granting permits where the state must demonstrate that an activity has met this standard, Michigan would examine alternatives to the activity that would minimize any adverse effects. Where no alternative exists, it may deny a permit or condition it to minimize the adverse effects that an activity has on the public health, safety, and welfare.
The discussion of the program's impact on the coastal environment is very general. Adverse impacts of individual projects of the program should be discussed.	The discussion of program impacts has been rewritten to identify the environmental effects of the program in greater detail. It is impossible at this stage in the program to identify adverse impacts of individual projects of the program. Where a proposed program activity could have a direct and significant impact, then an EIS could be required under State law and Federal law. However, the program is not a construction program although regulations provide for a limited amount of expendable materials to be applied to areas of preservation and restoration. (Should this program be approved, Michigan will be eligible to receive a program implementation grant with no limitation on the amount of expendable materials used in areas of preservation and restoration. This would be a demonstration grant pursuant to Section 923.95 of program approval regulations.) The program is designed to identify adverse impacts of coastal projects and/or to provide the necessary technical expertise to avoid projects in which there may be adverse impacts.

Comment	Response
The program does not define what uses will be permitted or not permitted in biologically sensitive areas such as wetlands, nursery and spawning grounds, and commercial and recreational fishery grounds.	The program's regulatory authorities rely on performance standards rather than defining uses which will or will not be permitted. The major state authorities which will apply to wetlands, nursery and spawning grounds and commercial and recreational fishing grounds are the Shorelands Act, Submerged Lands Act, Environmental Protection Act, and the Inland Lakes and Streams Act. The State policies based upon these Acts for protecting these sensitive areas are outlined in Chapter III. The use restrictions resulting from the application of performance standards are summarized in Appendix C of the DEIS.
No method to set priorities or to implement coastal policies is specified; mechanism for defining state agency responsibility under the applicable state laws is not specified. For shoreline developments a priority system based on the following four criteria should be included: 1. Is the project water dependent? 2. Is the project in the best public interest? 3. Does a feasible alternative exist? 4. Will the project impact living resources of concern to state and Federal natural resource agencies?	MCMP policies are based on a number of existing state laws. The DNR either directly administers or plays a major role in the administration of these authorities. Since the MCMP has been adopted by the Natural Resources Commission, the Department of Natural Resources will administer the authorities used by the MCMP in a way that will be consistent with the policies, goals, and objectives of the MCMP. Several key mechanisms will insure adherence by other state agencies to the coastal policies, which are based upon existing state law, including the Governor, the MERB, the SAW Committee, and the availability of judicial review under the Michigan Administrative Procedures Act and MEPA. For any policies which may conflict, resolution will be accomplished through the mechanisms identified above. The program does not set priorities for its policies, nor does it preclude any uses of the shoreline as long as the use meets state performance standards. However, it is state policy to protect the air, water and other natural resources and the public trust therein from pollution, impairment or destruction unless there is no reasonable and prudent alternative. For all shoreline activities and development, the state uses the four criteria identified in the comment in making its permit decisions. For major state actions requiring an EIS, the proposed action is discussed in terms of the four criteria proposed in this comment.
The program lacks sufficient attention to policies that would encourage wise management and utilization of fisheries stocks and associated living resources. Particular attention should be given to promoting interstate management plans for coastal resources.	Michigan has added a broad statement of policy regarding the utilization and harvest of fisheries stocks. This is in addition to existing state policy calling for the preservation and maintenance of fish and wildlife.

NOAA (cont)

Comment	Response
It would be helpful if a description of the permitting procedures were presented.	In response to this comment the State has provided a diagram of the permitting process for a construction permit under the State Submerged Lands Act (see Chapter V). This permit is typical of other State Programs Required Permits.
Criteria to determine uses of direct and significant impact on coastal resources do not include criteria for uses having a direct and significant impact on fish species having commercial or recreational importance.	Criteria for determining uses of direct and significant impact are based on existing state laws designed to protect the coastal resources of the state. While these criteria do not specifically identify fish species having commercial or recreational importance, they do relate to activities and resources which have an impact on commercial and recreational fisheries. These criteria include the basis for protecting state environmental areas, wetlands in floodplains, submerged lands, and water quality. In addition, fisheries will be protected through the Michigan Environmental Protection Act which provides that any activity that would result in the pollution, impairment, or destruction of the air, water, and other natural resources and the public trust therein may be challenged, and if warranted halted.
The MCMP is dependent on a number of existing pieces of legislation for its authority. Yet there is little discussion which describes how adequately these programs have functioned in terms of the national policy prescribed by the CZMA. No specific mechanisms for improving coordination between local governments are detailed. Coordination programs of this type are necessary to ensure ... that activities of local government do not preclude larger-than-local benefits.	The document specifically identifies the fact that as a result of a lack of clear focus or coordination on coastal issues, state legislation and programs related to coastal problems have not in the past been effectively implemented (See Chapters III and V.) However, as indicated in these chapters one of the primary goals of the MCMP is to supply this requisite focus and improve upon and accelerate their regulatory programs and institutionalize intergovernmental coordination in order to protect coastal resources and solve coastal problems. In addition, the document addresses the specific issue of coordinating local government efforts and uses of regional benefit in Chapter V.
Concern was expressed that only those areas which are "undeveloped and unplatted" are included under the provisions of the Shorelands Protection and Management Acts since many areas which have been platted or partially developed may be environmentally sensitive and necessary for the preservation and maintenance of fishery habitats.	In areas which are platted or developed, the state or any private citizen can invoke judicial action under the MEPA for actions conducted or planned by any other party if the action may result in pollution, destruction, or impairment of natural resources. This would, of course, apply to fishery habitats. Michigan is also in the process of amending regulations under its Shorelands Protection and Management Act which will apply to developed and platted areas of its coastal zone.

Comment	Response
The program does not detail how use restrictions will be defined and the conditions under which site plans will be approved.	Use restrictions are outlined in Appendix C in DEIS for each state regulatory authority that will be a part of the program. These use restrictions are the result of the application of performance standards developed to implement these authorities. Conditions for site plan approval are not detailed in the DEIS or FEIS. However, the sections on use restrictions, implementation and enforcement, and procedures for each state regulatory authority cited in Appendix C of the DEIS summarize steps for state permit approval and the conditions they may impose on this.
The non-specific approach leaves many questions unanswered. For example, does the program intend to preserve and protect only those areas that are undeveloped and unplatted? Are management guidelines developed pursuant to state authorities over natural areas in place? What priorities does Michigan assign to fisheries and associated habitats?	See above response to question on preservation of undeveloped and unplatted areas. Management guidelines and the permitting process for state authorities which control natural areas are in place. These authorities which apply to natural areas are the Submerged Lands Act, Inland Lakes and Streams Act, Natural Rivers Act, Wilderness and Natural Areas Act, Shoreland Protection and Management Act. See the specific policies and discussion on natural areas found in Chapter III. The state has pointed out in the FEIS that for any development to occur, environmental standards must be met. It is not clear, however, the context in which the question refers to priorities with regard to fisheries and associated habitats. It should be noted that the MCMP will advance the broad objective of ensuring the wise use of the coastal area. This will necessitate preservation and management of critical habitats with a focus on fisheries as well as supporting sound economic development. A specific Action Program under Michigan's first year implementation grant will be to identify Great Lakes fish spawning areas to ensure their protection through existing regulatory authorities.
The concept of inventorying coastal zone minerals and developing them in harmony with the environment as stated in earlier program drafts has been replaced by a total preoccupation with energy. NOAA's earlier request to be included in the list of Federal agencies interested in marine minerals was ignored.	Mineral Resource Areas remain a significant concern of the MCMP. The statement of problems and issues with regard to mineral development has not been significantly lessened from the discussion paper circulated to NOAA prior to issuance of the DEIS. Development of mineral resources in an environmentally responsible manner remains a major concern of the state. The state, as part of its present grant under Section 305(d) of the CZMA, has begun to identify significant sand deposits in the beds of its Great Lakes waters, primarily for beach nourishment purposes. The section on National Interest has been revised (see Chapter VI). However, the specific interests of Federal agencies are not identified in the

Comment	Response
	FEIS. NOAA's interest in marine minerals is hereby added to the record. An increase in the emphasis on energy has been made based on the increased recognition that the coastal zone is a significant area of potential energy resources and development. The energy discussion is also enhanced because of the requirement of Section 306(c)(8) of the CZMA which requires the adequate consideration of the national interest involved in planning for, and in the siting of, facilities (including energy facilities in, or which significantly affect, such state's coastal zone) which are necessary to meet requirements which are other than local in nature. However, it should be noted that present State policy prohibits the exploitation of oil and gas in the Great Lakes unless a national emergency arises. This policy is based upon a strong state concern over potential harm to the environment.
The provision for exclusion of private lands within excluded Federal lands is questioned. These lands should be subject to the same rules and regulations that bind other private citizens, especially under circumstances where there is potential for adverse environmental impacts on the coastal zone.	All private inholdings within excluded Federal lands are now considered to be within the coastal zone boundary and are subject to the policies and authorities of the MCMP (see Chapter II of the FEIS).
Specific reference to impacts that may affect fishery resources and associated habitats is not reflected in the management policies for all developments that may impact natural coastal processes. Fisheries and associated habitats should be in all appropriate sections of the document.	The purpose of policy statements is to provide affirmative declarations of the state's intention to act in a given way on a certain issue. They are not for the purpose of discussing impacts. It is important to understand that the statutory authority upon which the policies are based are designed to prevent negative impacts to the environment from occurring. The state's intention to execute its laws for the purpose of protecting fisheries and associated habitats are stated in the FEIS under its policies in ecologically sensitive areas, natural areas and recreation areas. These policies are derived from state law designed to protect fishery habitat such as the Shorelands Act, Submerged Land Act, Inland Lakes and Streams Act, Natural Rivers Act, Endangered Species Act, and Michigan Environmental Protection Act. There is, however, no specific act which the program proposes to use which has as its sole purpose the protection of fisheries and fishery habitat. In addition, the program provides for the continued coordination with the U.S. Fish and Wildlife Service and National Marine Fisheries Service under provisions of the Fish and Wildlife Coordination Act.

NOAA (cont)

Comment	Response
The process by which a proposal is evaluated and the process by which a decision is reached with regard to use restrictions on new construction in designated Shoreland Environmental Areas should be spelled out in the document and not in Appendix C.	The permitting process for activities in designated Environmental Areas is given in Chapter V of the FEIS. The policies which guide this decision are stated in Chapter III. However, the more detailed criteria by which this permitting decision is made is not printed in the FEIS. They are found in Appendix C of the DEIS. The Shorelands Protection and Management Act which created the Environmental areas contains many of the criteria in the legislative language. Printing all the permitting criteria for one regulatory program would require that the same be done for all programs. This would create a voluminous document, burdened with legal technicalities. Persons wishing to examine the detailed regulations issued pursuant to state regulatory authority should consult with the Michigan Coastal Management Personnel.
A fishery management policy which encourages wise use of commercial and recreational fish stocks in terms of natural economic potential should be added.	Michigan has added a broad statement of policy regarding the utilization of all fisheries stocks.
The state should broaden its concern from Water Transportation Areas to Transportation Areas in Chapter III.	The state has chosen to limit its stated program concerns to Water Transportation Areas. Those concerns related to other modes of transportation which have a direct and significant impact on the coastal zone are addressed as a result of policies and statutes designed to manage coastal areas. Michigan has also indicated a concern for highways and transit planning as part of its action program.
Michigan should add protection, restoration and enhancement of fisheries in its discussion of management alternatives in Chapter V.	This section of the document has been substantially revised. Chapter III has been rewritten to describe broad program goals. Policy statement have been rewritten to be more explicit to reflect resource management concerns. Michigan has articulated policies relating to protection of its fisheries, habitat, and maintenance of a high quality and productive fishery.
NOAA suggests that the section which describes how direct and significant adverse impacts are identified should also include a discussion of how adverse impacts in coastal areas will be avoided or mitigated.	The purpose of this section is not to discuss avoidance and mitigation of adverse impacts of projects in coastal areas. Avoidance and mitigation of adverse impacts is the responsibility of the various state permitting authorities. This is achieved through the modification of project design or disallowance of the permit. For major projects which require state permits, the state EIS process will serve as a mechanism for identification of adverse impacts and alternatives to the project which can avoid or mitigate the adverse impacts.

NOAA (cont)

Comment	Response
The National Marine Fisheries Service should be added as a Federal agency which should be coordinated with under provisions of the Fish and Wildlife Coordination Act.	This has been added to the discussion of the Fish and Wildlife Coordination Act in Chapter VI.
Appendix A which summarizes Federal agency responsibilities should cover the responsibilities of the National Marine Fisheries Service.	The suggested additions are made as part of the record in this FEIS by including the responsibilities of the NMFS in Appendix A of the DEIS which is not republished.

Environmental Data Service (NOAA)
(Hughes 12/15/77)

As a coastal management program, the document seems acceptable. However, the DEIS lacks any fundamental discussion of the environment, some sort of discussion of the environment - weather, climate, oceanography, and perhaps geology - should be included in the DEIS.	The discussion of the environment to be affected by the program has been expanded. However, this expansion does not include discussion on the weather, climate, oceanography or geology of the area. A discussion of these factors would be so general for a coastline of 3200 miles that it would not be meaningful.

Department of Defense
Office of the Assistant Secretary of Defense
(Fliakas 1/19/78)

We have reviewed the MCMP and generally concur therein.	No response necessary.
Recommend Appendices be revised to note that all Federally-occupied lands are excluded, whether held in fee, easement, lease etc.	Corrections have been made for the record. However, the Appendices are not reprinted in the FEIS.
We request that the detailed list beginning at page A-8 be amended to include the Army military properties listed in the enclosure to this letter.	The list has been amended to incorporate these installations. However, as noted above, the appendices are not reprinted in the FEIS.

Department of Defense
U.S. Army Corps of Engineers
(C. A. Selleck, Jr. 1/16/78)

It is unclear why boundary refinements are ongoing now; boundary delineation should have been completed for inclusion and review in the DEIS.	The coastal zone boundary is final; methods by which the boundary may be changed are discussed in Chapter 2 of this FEIS. The criteria used for setting the boundary as described in the DEIS are the same criteria that are identified in the FEIS. The boundary refinements which were taking place at the time of issuance of the DEIS were being made by the state to assure consistency of boundary lines with the criteria and among the various jurisdictions of regional planning agencies.

U.S. Army Corps of Engineers (cont)

Comment	Response
The focus of the Program is heavily environmental. It does not seem sufficiently broad to respond to the CZMA Section 303(b) policy to give full consideration to needs for economic development. Rather, the discussion of the area of natural economic potential leads to a statement of policy emphasizing avoidance of adverse environmental impacts rather than attainment of positive economic development contributions. This does not appear to be sufficiently responsive to the Act.	The Section on natural economic potential has been revised to more clearly illustrate the State's policies with respect to economic development. For example, the document outlines the State's taxing program to encourage the preservation of agricultural lands and open space, the state policy on providing for the establishment of industrial development districts, the state policy in support of winter navigation on the Great Lakes and the authorization for dredge/fill activities and the creation of port districts. Furthermore, the state in this section has outlined action programs for areas of natural economic potential including the development of guidelines to assess site suitability and anticipate and manage impacts for planned energy facilities, development of criteria for new or expanded coastal transit systems, provide financial assistance to explore new programs in fruit and horticultural farming, actively participate on and provide input to regional commercial navigation planning efforts, including the Winter Navigation Board, and provide assistance to port districts and local units of government for design of facilities and capital improvements for ports and commercial/industrial development. It should be noted that all of the above activities form an integral part of the MCMP. However, as indicated in the beginning of Chapter III of the FEIS, the state feels that in supporting and encouraging these activities that it can and must protect the coastal land, water and air resources. In pursuring these objectives the state is following the overall Congressional intent as expressed in the CZMA (Section 303) of achieving the "wise use of the land and water resources of the coastal zone giving full consideration to ecological, cultural, historic, and esthetic values as well as to needs for economic development."
Initiation or modification of Federal policies or procedures related to coastal Federal programs and activities will be subject to the consistency review of the MCMP. This provision is not considered appropriate and should be deleted from the MCMP. Federal consistency with an individual state's coastal management program will be determined with the implementation of such rules and regulations.	This provision has been deleted. Michigan will review projects conducted pursuant to Federal rules and regulations.

U.S. Army Corps of Engineers (cont)

Comment	Response
The description of port districts listed on page IV-9 under state legislated APC's needs clarification. The first sentence mentions only specialized recreational boating needs, while the priority of uses refers to comprehensive port plans and management of the port area. It is unclear whether this legislated APC relates just to the specialized recreational boating needs in the entire port.	This legislated APC is not limited to specialized recreational boating needs but includes the whole range of commercial navigation interests. The document has been revised to reflect this more clearly, see Chapter IV.
Additions suggested to more accurately reflect that the Federal consistency process requires state consistency concurrence within a prescribed time period.	Suggested wording change was not made. However, Chapter VI is clear in pointing out that if the prescribed time period has elapsed then state consistency concurrence is presumed.
Corrections on Corps of Engineers licenses and permits cited by Michigan for consistency review.	Corrections have been made in Chapter VI.
Figure 6J regarding Federal consistency for Federal licenses and permits is confusing and misleading. A Federal permit will be granted or denied on the basis of Federal law. The program should clearly show that state approval will in no way guarantee a Federal permit.	Figure 6J has been revised for clarity. However, it should be pointed out that no license or permit shall be granted by a Federal agency until the state has concurred with the applicant's certification of consistency, or the prescribed period of time has elapsed and the State's concurrance is presumed.
The DEIS misstates certain Corps of Engineers regulatory programs in Appendix A to the the DEIS.	Changes have been made for the record in Appendix A of the DEIS; however, the Appendix is not printed as part of this FEIS.
Numerous editorial and substantive changes were presented to more accurately reflect the Corps Section 9, 10 and 404 permit programs as discussed in Appendix C of the DEIS.	Using the information supplied by the Corps with respect to these permit programs, the appropriate changes have been made to the record; however, Appendix C of the DEIS will not be printed as a part of this FEIS.
The Corps suggests that the state revise its designations of the Ordinary High Water Marks to be compatible with those established by the Corps.	The Ordinary High Water Marks for the Great Lakes have been legislatively established by the state. These levels were set as a result of field surveys over a period of ten to fifteen years. On this basis the state feels that these elevations are accurate. Any change to adopt the levels established by the Corps would require an amendment to the legislation which established them. The state would appreciate any information that the Corps has which would warrant that a change in the legislatively established standards is necessary.

Department of Energy
(Noel 1/23/78)

Comment	Response
We concur in your proposed administrative action to grant Federal approval to this program. We find that the program commits the coastal planning staff of the Michigan Department of Natural Resources to assist the Michigan Energy Administration, Department of Commerce, in the development of a Statewide energy plan to develop and maintain an energy supply which is adequate, yet environmentally acceptable and socially desirable.	No response necessary.

Department of Housing and Urban Development
(Robert C. Embry 2/8/78)

Comment	Response
HUD has questioned the adequacy of the networking of state laws as proposed for the MCMP. Care should be exercised to make certain that the "networking" arrangement proposed is adequate and carries with it the potential for legal and/or administrative appeal recourse for affected citizens and jurisdictions. Based on past experience with its Comprehensive Planning Program, HUD has found it difficult for state agencies with different legislative responsibilities to reach agreement. HUD recommends that interagency agreements be developed to formalize the networking arrangement.	The networking of the MCMP is adequatae for the following reasons: The Natural Resources Commission (NRC) has formally adopted the Program and its policies. The policies of this program are based on existing state law. Therefore, adoption of the MCMP by the NRC as official state policy has strengthened the method of applying these existing authorities and policies in the Michigan coastal zone. More importantly, all authorities which will be used by the program are administered directly by the DNR or by the DNR in conjunction with another state agency. Any conflict between state agencies will be resolved through the DNR's role in exercising its statutory authority, the MERB, the SAW Committee, the office of the Governor, or judicial proceedings under the Michigan Administrative Procedures Act and MEPA. Under the provisions of MEPA any person, partnership, corporation, association, organization, or other legal entity may seek judicial relief for any action that is likely to result in the pollution, impairment, or destruction of the air, water, and other natural resources of the state. Given this networking arrangement and methods of conflict resolution, OCZM has determined that interagency agreements at the state level are not necessary.
HUD believes there are major deficiencies in the assessment of environmental impact in the DEIS.	The discussion on impacts of the Program on the environment has been revised for the FEIS. See Part III.
The MCMP does not contain a land use element identifying the coastal strip, the existing and proposed uses with the strip, nor the existing zoning controls to protect the strip.	The FEIS discusses the explicit boundary criteria the state and regional planning agencies have used to map the coastal zone boundary. There is no requirement that the state identify the existing and proposed uses or require zoning controls for the coastal zone. The program has developed State management

Dept. of Housing and Urban Development (cont)

Comment	Response
	policies for the coastal area based on existing state regulatory authorities and incentive programs. Many of the State regulatory authorities require local ordnance adoption of minimum State standards or, in lieu of that, the State will enforce these standards on a case by case basis. Cf., the discussion on the Shorelands Management and Protection Act in Chapters III and V.
Implementation and consistency by local communities is uncertain since half the coastal communities do not have land use plans and the state proposes to develop its land use plan on an "as needed" basis. HUD approval of the Program would be in conflict with the HUD-OCZM interagency agreement of February, 1975, which purports that the OCZM land use plan also satisfies the 701 comprehensive plan land use element.	There is no requirement under the CZMA for a state to submit a land use plan for its coastal zone to receive program approval from OCZM. Michigan's program is based on coastal policies, which use existing state regulatory authorities for enforcement, and see comment above. The DNR's Land Resources Division will have the lead responsibility for implementating the Program. The regulatory authorities do not mandate land use plans for areas of the coastal zone. However, they do control activities in certain geographic and coastal resource areas through performance standards. There are priority of use guidelines for GAPC's. Some coastal counties have developed land use plans pursuant to the County Rural Zoning Act. However, the state does not intend, nor are they required to develop a land use plan for its coastal zone. States which complete comprehensive land use plans for their coastal zone and which receive program approval should be considered as having completed the HUD land use element for the coastal zone as stated in the HUD/OCZM Interagency Agreement. The agreement does not require that a state develop a land use plan for its coastal zone.
The DEIS needs to be revised to adequately address the Program's impact upon land use, state regulations, local ordinances, pollution, erosion, shoreline development, natural resources and implementation by public and governmental bodies. Major topical headings are there, but are not adequately addressed. Also, it is virtually impossible to discuss the program's impact upon the environment without a land use plan.	The discussion of impacts of Program approval has been rewritten. An attempt has been made to relate Program policies more specifically to the areas identified in this comment. As indicated in the previous response, a land use plan for the coastal zone is not a requirement of program approval. While a land use plan which is implemented by state law may make discussion of program impacts more predictable, the policies of the program are designed to provide specificity to the methods of program implementation.

U.S. Department of Interior
(Heather Ross 1/17/78)

Comment	Response
The Department has questions regarding the networking of authorities. The gubernatorial letter dated 10/21/77 in the DEIS appears to be the principal instrument which legally binds each state agency to exercise its authority in conformance with the state's coastal policies. We understand that there are also provisions in some state statutes which have the effect of requiring state agencies to conform to these policies. The MCMP does not document the legal adequacy of the letter and the applicable provisions of state statutes for assuring state agency compliance with state coastal policies. We request a detailed description of the mechanisms which will be used to bind state agencies and their authorities into an effective coastal management framework.	The gubernatorial letter is not the principal instrument which legally binds state agencies to exercise their authorities in conformance with the state's coastal policies. The Natural Resources Commission has formally adopted the MCMP. Adoption of the MCMP does not change existing state policies with respect to existing state authorities, but it does provide specific direction to state agencies on managing coastal resources in accordance with the goals and objectives of the Program. The most important method for assuring state consistency with coastal policies is based on the fact that the DNR administers directly or in conjunction with one or more state agencies all 27 regulatory programs that are incorporated as part of the MCMP. Any conflict between state agencies will be resolved through the DNR's role in exercising its statutory authority and through its representation on the Michigan Environmental Review Board, the Inter-Departmental Review Committee, and the Standing Committee on Shorelands and Water. It is through these mechanisms therefore that state agency compliance with the policies, goals, and objectives of the MCMP will be ensured. See Chapter V.
It appears that more than adequate measures exist for resolving differences through conflict resolution mechanisms. We recommend these be fully elucidated in the final program document.	These mechanisms are stated in detail in Chapter V of the FEIS.
It is difficult to assess specific consistency obligations without knowledge of the actual inland boundary line. The DEIS also indicates that the boundary is not fully delineated and that changes in the boundary will be made by refinement rather than by amendments. We recommend these boundary issues be resolved by OCZM prior to issuance of the final program document.	The final boundary is fully delineated. Maps are available for inspection at the MCMP offices in Lansing. Printing the final boundary maps in the FEIS is not possible due to varying map scales and poor reproductive quality. The criteria by which the boundary may be changed are stated in Chapter II of the FEIS.
The most fundamental concern the Department has related to the Michigan Coastal Management Program (MCMP) is the adequacy of the network of authorities and the consequent mechanism for conflict resolution. We request you clarify whether a Governor's letter is the appropriate legal basis for assuring compliance of all State agencies with the policies and program elements of the MCMP, not only at the start of implementation but also throughout the existance of the program. With the potential conflicts that effective coastal management may encounter during the implementation process, we believe it is imperative that an appropriately strong legal mechanism be used to assure that... "networking tie(s) the implementation of...	The networking of the MCMP is adequate for the following reasons. The Natural Resources Commission (NRC) has formally adopted the Program and its policies. The policies of this Program are based on existing state law. Therefore, adoption of the MCMP by the NRC as official state policy has strengthened the method of applying these existing authorities and policies in the Michigan coastal zone. More importantly, all authorities which will be used by the program are administered directly by the DNR or by the DNR in conjunction with another state agency. Any conflict between state agencies will be resolved through the DNR's role in exercising its statutory authority, the MERB, the SAW Committee, the office of the Governor, or judicial proceedings under the Michigan Administrative

Comment	Response
individual authorities (of State agencies) into a comprehensive framework that addresses more than the individual responsibilities of each agency that makes these authorities part of an overall, unified strategy for managing coastal land and water resources."	Procedures Act and MEPA. Under the provisions of MEPA any person, partnership, corporation, association, organization, or other legal entity may seek judicial relief for any action that is likely to result in the pollution, impairment, or destruction of the air, water, and other natural resources of the state. Given this networking arrangement and methods of conflict resolution, OCZM has determined that interagency agreements at the state level are not necessary. See Chapter V for further elaboration.
We believe that a strong legal basis for integrating individual agency authorities combined with the existing interagency and interdepartmental memoranda of agreement would thwart most challenges which might undermine the program during the critical early years of implementation. We, therefore, request that the final program document elucidate the legal adequacy of the mechanisms which will be used to bind the State's authorities into an effective network.	
There should be a specific single entity within the Michigan state government responsible for reviewing Federal consistency certifications and Federal agency determinations.	The Coastal Management Unit is responsible for administering the Federal Consistency Procedures (see Chapter VI).
Under what circumstances could the NRC override a DNR decision or a consistency certification?	The NRC could override the DNR if it did not act in accordance with the policies of the MCMP.
Figure 6.H (p. VI-52) needs to be revised. It does not provide for the situation where a Federal agency chooses to proceed with an activity in question.	When a Federal agency proceeds with an activity for which a consistency determination has not yet been made the state may (1) negotiate with the agency to stop the activity until the state has made determination of consistency; (2) seek assistance from OCZM to work out differences informally between the state and the Federal agency; (3) request mediation by the Secretary of Commerce; (4) seek judicial relief.
Figure 6.J (p. VI-60) fails to show potential Federal agency denial or modification of a project after state consistency approval. The logic flow for activities 8 through 15 is not clear.	This figure has been revised to show this possibility and to clarify the process for consistency review.
Recommend that computer storage tracking and retrieval system for licenses and permits computerize all licenses and permits.	Ultimately, the MCMP may seek to computerize all its permit information.
We consider that the grants-in-aid program under the Land and Water Conservation Fund Act would not require any determination of consistency beyond the current A-95 procedures.	The Division of Land Resource Programs Coastal Unit will consult with and coordinate Recreation Services Division and Administrative Services Division of DNR on A-95 certifications and will not require any determination of consistency beyond this for grants-in-aid under the Land and Water Conservation Fund.
Specific uses discussion should indicate how a decision to include a use will actually be made using the 30 criteria questions.	See the discussion on permitting in Chapter V.

DDI (cont)

Comment	Response
The Department believes that a revision of the criteria used to identify uses of direct and significant impact is vital. It recommends especially that only water dependent uses be permissible in waterfront locations, and that all uses and activities proposed in the coastal zone be evaluated in regard to the proposed project's coastal or water dependency needs.	An affirmative response to expanded criteria statements now contained in Chapter V will trigger an individual permit process. Substantive requirements of the statutes that correspond to criteria statements may be reviewed in Appendix C of the DEIS. However, it should be noted that the Michigan Legislature has decided not to preclude any use from the state's coastal areas per se, but the state does look to the impacts upon coastal areas to determine whether they are permissible or not.
The Department requests that specific details be provided as to how the state will by the use of state laws and policy identify each use activity of a larger than local significance. All wetlands are considered to have national significance and any use activity which would degrade or destroy wetlands could be considered to be of larger than local significance.	The state assures recognition of uses of regional benefit through the following means: (1) no local ordinance is enforceable against state-owned lands; (2) state review of county ordinances to assure compliance with state zoning enabling statutes and court decisions; (3) state permit or other regulation in lieu of local zoning which does not comply with state statutes; (4) state review of certain local facilities and operations; (5) the Michigan Supreme Court ruling that local ordinances may not be arbitrarily, capriciously or unreasonably exclusionary. The specific criteria which the state uses in its review of county ordinances or issuance of state permits are not detailed in this FEIS. However, Appendix C of the DEIS summarizes use restrictions imposed by state statutes either through direct state permitting or delegation of authority to local governments where local governmente meet the state standards. Criteria used in the issuance or non-issuance of state or local permits in wetlands are those developed pursuant to the Shorelands Protection and Management Act, Submerged Lands Act, the Inland Lakes and Streams Act, the Natural Rivers Act, and the County Rural Zoning Act, and see responses below.
The final coastal zone boundary has not been determined; until the inland boundary is final and available for review, it is difficult to provide comprehensive comments on the program since the effect of Federal consistency provisions will depend on the landward boundary.	The coastal zone boundary is final. The boundary criteria were final at the time of issuance of the DEIS. However, the state was still in the process of reviewing the boundary mapping done by the coastal regional planning agencies for consistency with the boundary criteria.
Review of specific landward boundary by the Department of Interior is requested prior to issuance of the final program document.	The boundary criteria have been clarified in the FEIS; the state has indicated in Chapter 2 that the boundary maps are available for inspection or purchase in Lansing, Michigan or the respective regional agencies.

DOI (cont)

Comment	Response
The Michigan Coastal Program should discuss the relationship of the state-legislated Ordinary High Water Mark (OHWM) and the OHWM established by the U.S. Army Corps of Engineers.	The Ordinary High Water Marks for the Great Lakes have been legislatively established by the state. These levels were set as a result of field surveys over a period of ten to fifteen years. On this basis the state feels that these elevations are accurate. Any change to adopt the levels established by the Corps would require an amendment to the legislation which established them. The state would appreciate any information that the Corps has which would warrant that a change in the legislatively established standards is necessary.
A process of conflict resolution for disputes regarding the OHWM should be established.	The state employs a field survey to resolve disputes regarding the location of the OHWM. In addition, the District Office of the Corps and the State of Michigan have a MOU to coordinate their permitting/EIS activities involving the waters of Michigan.
The terms "direct" and "significant" must be defined so as to ensure that the landward extent of the coastal zone captures use activities which impact the coastal area. The Department of Interior wants to review the criteria for uses with direct and significant impact prior to issuance of the final program.	The state has defined the terms "direct" and "significant" with regard to existing state regulatory programs. Chapter V of the MCMP contains a listing of the activities of uses which would have a direct and significant impact on the coast. The legal citation for regulating each activity is provided. Also, Appendix C of the DEIS outlines criteria for each activity more fully. Beyond these sources the major sources available for review are the Statutes themselves or the administrative code. Republishing these public documents as part of the DEIS or FEIS, or otherwise, would create an unreasonably expensive and voluminous document. For actions in or out of the coastal zone which are not covered by a specific piece of state legislation in which there may be an impact on coastal resources, the state or citizens may invoke the Michigan Environmental Protection Act to challenge the action in court.
Clarification of the meaning of "annual program evaluation process" as a method for boundary revisions is requested.	The FEIS has been revised to indicate under what situations changes in the coastal zone boundary may be made. These changes would be submitted to OCZM by the state in the form of refinements or amendments to the program. These refinements or amendments could be submitted to OCZM at any time and are subject to administrative procedures of the Program Approval regulations, including Federal agency review of program amendments and notification of refinements.

DOI (cont)

Comment	Response
Estuaries and coastal aquifers should be incorporated into coastal zone plans.	The boundary of the Michigan coastal zone extends up tributaries of the Great Lakes to (1) the point at which a tributary's bed elevation is higher than the nearest Great Lakes 100-year flood level, or (2) the upstream limit to which the U.S. Army Corps of Engineers maintains a deep draft navigation channel, whichever is further inland. Identification of coastal aquifers would require a large amount of data gathering and field survey. It is the judgment of Michigan and OCZM that the effectiveness of the proposed management program would not be substantially enhanced by incorporating coastal aquifers into coastal zone plans. However, for any major state or Federal action that has potential for signifi- impact on the environment or human life an EIS must be developed.
Schematic boundary illustrations failed to indicate the inclusion of certain coastal features identified as criteria for boundary delineation.	The illustrations to which this comment refers were confusing. They have been dropped from the FEIS and replaced with a single schematic boundary illustration. Michigan has explicitly stated that islands in the Great Lakes are in the coastal boundary. The extent to which other coastal resources are included in the coastal boundary are spelled out more clearly in the boundary criteria.
Status of rule change for including developed and platted lands under the jurisdiction of the Shorelands Protection and Management Act. How will damage to environmental areas in developed and platted lands be prevented?	The rule change for including platted and developed lands as erosion hazard areas under jurisdiction of the Shorelands Act is now before a joint legislative committee in the state legislature. Damage to environmental areas in developed and platted lands will be prevented by the regulatory authority conferred to the state by the Submerged Lands Act, the Inland Lakes and Streams Act, and the Michigan Environmental Protection Act.
For action programs with regard to flood-prone areas the task seems to be defining areas subject to 100-year recurrence interval flood rather than analysis of topographic maps to determine floodplain contours and boundaries.	The state uses the contour line which is nearest the elevation of the 100-year recurrence interval flood as a stable measure of identifying coastal flood plains. Michigan proposes to use these lines in conjunction with engineering studies by the Corps of Engineers and Federal Insurance Administration as they identify elevations of the 100-year recurrence interval coastal floods for the purpose of boundary delineation.
Sections (of Chapter III Program Focus and Policies) on the regulatory decision-making criteria be expanded to indicate the gist of the applicable regulations. Reference to the Appendices should only be used to indicate the location of additional detailed information.	In response to this comment, Chapter III of the document has been revised in order to provide further clarification of what is intended by the various statutory enactments upon which the Michigan policies are based.

Comment	Response
State's Proposed Coastal Policies for mineral and energy resource areas, prime industrial areas, and for water transportation areas are particularly general. For example, although the State's policy relating to mineral and energy resources is to significantly reduce the growth in energy consumption in the State, the program fails to state how this might be accomplished.	As indicated above, Chapter III has been revised to provide greater specificity concerning various policies. This is especially true for the mineral and energy resource areas and water transportation. Under the discussion for prime industrial areas it is pointed out that there is a broad state license which encourages local units of government to establish industrial districts. However, as the discussion in this Section indicates industrial development spurred by local initiative is affected by other state policies which are elaborated upon under other areas contained in the Chapter. Moreover, as to each of these specific areas, the state has provided through the APC process (discussed in Chapter IV) that specific areas will receive particular attention and support through the MCMP. With respect to the specific example on reducing consumption of energy resources, the Governor of Michigan has established the State Energy Administration to assist his office in developing energy policy and planning matters and in preparing energy conservation plans and progrms. In addition, the state legislature has provided for a coordinated statewide waste management and resources recovery program to encourage conservation of natural resources. (See Chapter III) And it has provided under Act 230 of P.A. of 1972 (Construction Code Act) that energy conservation be a major consideration in the construction of new buildings. Also the Natural Resources Commission has adopted a specific policy directing DNR employees to be energy conscious when making decisons on behalf of the Department.
The draft program does not clarify how the goal and objectives to conserve mineral lands and energy resources will meet . . . future demands, promote the reclamation of land subjected to extraction, and promote policies and regulations which would control negative environmental and social effects of mineral and energy development.	The discussion in Chapter III outlines the various mechanisms that the state has available to control the adverse effects of mineral and energy development. For example, all oil and gas drilling requires a permit from the DNR and no drilling is permitted unless it can be shown that waters, air, soils, fish and wildlife, etc. will not be seriously affected. Similarly, all mining of sand, gravel, stone, etc., will also invoke state environmental consideration and protection. Moreover, the state specifically requires the reclamation of lands subjected to the mining of minerals under Act 92 of the Public Acts of 1970, as amended.

DOI (cont)

Comment	Response
Another area of major concern is that although the coastal policy regarding water transporation areas addresses dredged spoil disposal, the program has no goal or objective directly relating to this significant coastal program. We strongly recommend that such an objective be incorporated into the program and that it address the need for the development of comprehensive, long-term (50 year) plans for spoil disposal.	The Department of Natural Resources coordinates the identification of sites for dredged polluted material through a dredge spoil committee. This committee is composed of state as well as Federal Agency representatives, including representatives of the Fish and Wildlife Service, the Army Corps of Engineers and the Environmental Protection Agency.
Paragraph three on page III-12 indicates that a coastal resource information center will be established and could provide a computer storage tracking and retrieval system for licenses and permits which have a major impact on coastal areas. We recommend that such a system be established.	The Michigan DNR has been exploring the possibility of establishing such a system. At present the Department has initiated a demonstration project involving the state submerged lands program, it is conducting this project with CZM funds. After completion of the demonstration project the feasibility of bringing in other coastal permit programs will be determined.
It is stated that ". . . the State will not issue permits for, or engage in, uses or activities where it can be determined that the use or activity will likely be damaged by shoreline bluff erosion, as long as there is a feasible and prudent alternative consistent with reasonable requirements of the public health, safety, and welfare." Does this quote mean that a permit will be issued if there is no feasible or prudent alternative regardless of the effects on coastal resources? Also, what criteria have been established to identify feasible and prudent alternatives, and who will make such evaluations?	Under the hypothetical posed, the State of Michigan is not merely limited to giving a permit if no other alternative exists. It could condition such a permit so as to minimize the adverse effects on other resources. It would do so on the basis of safeguarding the public health and safety, and protecting the navigable waters all of which are mandated by law. As to the second question, it is important to note that the words "feasible and prudent alternative etc." are taken directly from the Michigan Environmental Protection Act (MEPA). In accordance with the Act and Executive Order 1974-4 the DNR would follow the specific state guidelines on developing Environmental Impact Statements including: evaluation of alternatives to the proposed action that might avoid some or all of the adverse effects, including an explanation of why the agency determined to pursue the action in its contemplated form rather than an alternative and the possible modifications to the project which would eliminate or minimize adverse effects, including a discussion of the additional costs involved in such modifications. Furthermore it must be understood that the language in MEPA of considering "feasible and prudent alternatives" carries with it substantive requirements that have been and continue to be tested and interpreted in a judicial setting. This common law development therefore includes judicial scrutiny and interpretation of agency actions in meeting the above cited words, see e.g., Michigan State Highway Comm'n v. Vanderkloot, 392 Mich 159.220 N.W. 2d 416(1974).

DOI (cont)

Comment	Response
The last paragraph on page III-22 states in part, "It is the policy of the State of Michigan to not finance, engage in, or issue permits for new structural developments within the 100-year coastal or riverine floodplain which are inadequately elevated or flood proofed." We disagree with this statement if its effect would be to encourage filling in the floodplain so that structures would be elevated. Also, the floodplains are necessary to convey flood waters, and any further encroachment will reduce fish and wildlife habitat and increase flood damage potential.	The State of Michigan discourages development in the floodplain pursuant to the Executive Order 1977-4 by making every effort to educate the public on the hazards of such development. As the statement indicates, however, it cannot prohibit development landward of the floodway as long as it is properly elevated. This policy is consistent with the National Flood Insurance Program and its requirements as well as the President's Executive Order #11988 on floodplain management dated May 24, 1977.
The DEIS states: "It is the policy of the State of Michigan to use available authorities and incentive mechanisms to control new development in natural areas having an identified local, State, or national importance." We consider wetlands preservation of national importance, yet under existing authorities many acres of wetlands have been lost in recent years in the state of Michigan. As written, one could infer from the document that because the coastal program will be administered under existing authorities, we will continue to see a loss of valuable coastal resources. We recommend that appropriate changes be made in the final program document.	The State of Michigan concurs in the importance of wetlands (see discussion on National Interest in Chapter VI) and the MCMP as one of its major objectives will focus on preventing the loss of wetlands wherever possible. Presently the state is conducting a wetland value study with CZM funding to gather information and documentation in order to prevent additional destruction of wetlands. Moreover, the state is seeking an amendment to Act 245 of P.A. of 1970 to acquire additional management control over platted lands and thereby wetlands. In the interim the state will continue to use the Submerged Lands Act, the Shorelands Act and MEPA in order to protect wetlands wherever possible.
The discussion of incentive decision-making criteria states that it is a goal of the coastal program to help coordinate the operations of Federal, State, regional, and local programs and that one of the objectives of this goal is to strengthen, effective working relationships with the various agencies. The techniques, methods, organiztion, or coordination procedures proposed to achieve this goal and objective should be specifically explained in the final program document.	At the local and regional levels the MCMP will rely extensively on existing advisory bodies and commissions to coordinate coastal management activities including the APC nomination/designation process. For specific discussion on these points see Chapter V, program implementation roles, in particular levels II and III, and also see Chapter IV for a discussion on the APC process. At the State level several mechanisms will be used to facilitate coordination between various agencies including the INTERCOM/MERB process, the SAW committee with its inter- and intra-departmental subcommittees, the Governors Cabinet meetings, the citizens Shorelands Advisory Council, etc. The discussion on each of these mechanisms has been redrafted to clarify how they will be used in coordination with federal agencies involved in coastal activities including interagency agreements between Federal agencies and the State, the Great Lakes Basin Commission, adherence to provisions of the Fish and Wildlife Coordination Act and reliance on the the NEPA and A-95 processes, etc. for a more complete discussion on these points, see Chapter VI.

DOI (cont)

Comment	Response
The DEIS states that the A-95 review process and other instruments will be used in addressing coastal issues for overall policy direction and decision-making criteria. At the January 6, 1977 meeting, the MCMP staff indicated that existing Federal/State agreements, NFPA review, the A-95 process and new Federal/State agreements will be used for involving Federal agencies. The specific means and form of this involvement should be elucidated in the final program document, with specific information on how and at what points Federal agencies will be involved in this policy and decision-making process, especially when national interests are involved.	In response to this comment the program document has been revised to provide more detail on the process for Federal/State consultation and the mechanisms to be used, see Chapter VI.
The discussion of erosion problems should differentiate between man induced and natural erosion. Careful consideration should be given to the issue of whether the public should pay for private property protection or loss due to a lake front owners lack of prudence in locating structures, particulary if the erosion is a natural phenomenon. Similar consideration should be given to the discussion on flood protection and loss.	The discussion on the Soil Erosion and Sedimentation Act outlined under this problem area in Chapter III applies to and regulates man induced erosion problems. The Shoreland erosion planning process (Sec. 305(b)(9) CZMA) now being developed by the State will focus on both man induced and natural erosions. It will attempt through an effective planning process to direct development to areas not subject to erosion.
In the protection of Natural Areas, devices such as tax incentives and leasing were recommended as means of encouraging land or resource protection, short of outright acquisition. Application of these same incentives should be considered as a means of protecting ecologically sensitive areas, and others, before requiring or imposing environmental protection through zoning, regulations, permit requirements, or other land use controls (see discussion on page III-29).	During implementation of the MCMP methods short of outright acquisition will be explored to obtain resource protection including such techniques as lease arrangements, easements or tax incentives. In particular the Michigan Agricultural and Open Space Act (Act No. 116 of the Public Acts of 1974) encourages such actions.
The discussion in the DEIS presents prerequisites in resolving or encouraging local interest and governments to resolve land use conflicts. For completeness, the discussion should be expanded to include effective land use planning and control.	The FEIS cites several state policies which mandate assistance to local and regional government in solving land use conflicts through effective planning and the development and implementation of ordinances. The MCMP will provide financial and technical assistance to local and regional governments to further these state policies and objectives. For example, the program will assist in identifying the sources of land use conflicts e.g., density, access, multiple use of particular sites etc., and working with local governments in developing land use plans and revising ordinances and guidelines which regulate and shape development in order to counteract these problems.

DOI (cont)

Comment	Response
The APC's established by the legislature provide an opportunity for sound, legally enforceable management of certain critical areas within the state.	No response necessary.
The DEIS document states that "there is no assurance that public APC nominations will be implemented; nor will public APCs in themselves constitute a legal restriction to landowners." Discussions with state program personnel indicate that this is not necessarily the state's approach to publicly nominated APC's. The final document should reflect that management programs for some of these nominated APC's may become legally binding under existing state statutes and that others may never be adopted as APC's.	The quoted statement is correct, however, the document has been revised in Chapter IV to more clearly state that there is no assurance that publicly nominated APC's will in fact be designated as action APC's. Failure to have property owner or local government support, management recommendations inconsistent with program policies, or inadequate funding would act to prevent designation of the publicly nominated areas as action APC's. Furthermore, all legislatively designated APC's do in part impose some legal requirements as spelled out in the respective statutes upon which they are based. All action APC's receiving monies under the MCMP may also have certain restrictions on uses but these would be provided under the contract provisions, and the party entering into the contract would have to agree to those restrictions prior to entering into the specific contract with the state.
In general, the final document should expand on the criteria used to accept or reject nominated APC's and should specify how priorities will be established. It should also indicate that the specific details of the nominations, the interest in the APC, and the available governmental structure and authorities under which it will operate are vital to the selection and eventual implementation of each publicly nominated APC.	Chapter IV has been revised to reflect more clearly how both legislated and publicly nominated APC processes work. In particular, the priorities of use for legislated APC's are determined by the statutory standards. The priorities of use for publicly nominated areas will be established in large part through the management proposal. This is in recognition of the significant differences in land use patterns and problems at specific sites. However, all sites will be required to meet the criteria outlined in Chapter IV including consistency with the state policies. Additions and clarification have also been made in the chapter to emphasize the overall state priority given to areas of preservation and restoration, see p. IV-9, and the eighth element on p. IV-15. Also, private landowners and local units of governments will be directly involved in the selection and eventual implementation of each publicly nominated APC since their concurrence in such designation and management proposal is mandatory.

DOI (cont)

Comment	Response
We find no discussion as to how or when Federal agencies will have an opportunity to provide input to the decision-making process which will determine the priority a particular APC will receive. We suggest a formalized procedure be developed to allow interested Federal agencies to review and provide input into evaluating and assigning priorities to nominated APC's.	Federal agncies have been and will continue to be involved in the nomination and review processes. Chapter IV (see p. IV-11) indicates that the special technical assistance that Federal agencies can supply on specially nominated sites will be requested in accordance with the various agencies acknowledged expertise. Furthermore, it should be noted that Federal agencies have already nominated several sites for APC designation and they are encouraged to continue to do so in the future.
It is our understanding from discussion with state program personnel that the legislated APC's have priorities built in by the statutes that created them. In the case of publicly nominated APC's, priorities are established by a combination of regional commission guidelines (which have no legal basis), the use restrictions specified in the nomination, and the criteria established by Chapter IV of Volume I. We believe that clarification of these methods of determining priorities by the MCMP staff in the final program document will considerably enhance the description of the program.	The statement with respect to legislated APC's is correct. In the case of publicly nominated APC's which become designated as action APC's, low priority uses will be assigned as required by the CZMA. The specific uses of lowest priority will be determined by the particular location and will be incorporated into the nomination for that site. In the deliberations of whether the site should be designated, which follows the inventory and review process and public participation outlined in Chapter IV of the FEIS, a determination will be made at the various decision points (local, regional and state) on the merits of the proposed priority of uses. In all cases uses of a particular publicly nominated site and the management of that site will be in conformity with the MCMP policies. This consistency will be imposed through the contractual process involving funding action APC's and the legal regulations encompassed by the MCMP, and it will be monitored by the SAW committee.
A major concern of the Department of Interior is the weakness of the DEIS discussion on the national interest as it relates to wetlands conservation.	The Program has been revised substantially to reflect the state concern and interest in wetlands. The state objectives of the national interest in wetlands include avoidance of long- and short-term adverse impacts associated with the modification of wetlands and preservation and conservation of endangered and threatened species through protection of ecosystems.
DOI recommends that wetland legislation be in place prior to completion of the final program document.	The state is able to control activities in most coastal wetlands through existing state authorities. These include the Shorelands Protection and Management Act, Submerged Lands Act. Inland Lakes and Streams Act, Natural Rivers Act, and Floodway Encroachment Act. Several of these authorities are implemented at the local level subject to state criteria. Others involve a direct state permitting action.

DOI (cont)

Comment	Response
	For any wetlands which do not fall under the authority of these laws, the state or any individual may seek judicial relief for any action which may pollute, impair, or destroy any coastal wetland through provisions of the Michigan Environmental Protection Act. To alleviate the ad-hoc and time consuming use of MEPA the state is now seeking comprehensive legislation. However, OCZM has determined that in the interim this approach is sufficient.
Presidential Executive Orders 11990 and 11988 on wetlands and floodplains should be reflected in the program's goals, policies, or objectives as well as in the national interest section of the program.	Michigan has articulated program policies for both ecologically sensitive areas and coastal flood risk areas. In Michigan, wetlands are considered as ecologically sensitive areas. The program policies with regard to ecologically sensitive areas call for (1) the protection and management of undeveloped and unplatted shorelands necessary for preservation and maintenance of fish and wildlife; (2) regulation of filling and soil alteration activities which may contribute to soil erosion and sedimentation, alteration of natural drainage, removal of native vegetation, and the placement of structures in such areas; (3) protection of the public trust and riparian rights in navigable inland lakes and streams by requiring permits for all dredging, fill or spoil deposition or marina operation on bottomland; (4) and protection of the public interest in all unpatented bottomlands and unpatented made lands in the Great Lakes. For wetlands which are not under the jurisdiction of state laws from which the above policies were derived, state policy calls for protection and conservation of the natural resources of the state. Enforcement of this policy would be through the Michigan Environmental Protection Act. The program policies with regard to flood hazard areas call for protection and management of shorelands affected by flooding. More specifically, state policy prohibits the obstruction of rivers and floodways and assures that channels and floodways are not inhabited and kept clear of interference which will cause a restriction of the capacity of the floodway. There are exceptions by which a permit for structures in floodplains may be granted. However, it is state policy that the state will not finance, engage in, or issue permits for new structural developments within the 100 year flood plain which are inadequately elevated or flood proofed. The state policy on flood hazard areas is also to work with Federal agencies in carrying out the Presidential Executive Order on floodplains. OCZM has determined that these policies seek to reduce the risk

Comment	Response
	of flood loss, minimize the impact of floods on human safety, health, and welfare, and preserve the natural and beneficial values served by floodplains and therefore are in compliance with the Presidential Executive Order on floodplains.
If OCZM determines the program can be approved before a comprehensive state wetlands law is enacted, the FEIS should discuss: (1) the conflict resolution process between local, state and regional interests in the management of shorelands, particularly wetlands and floodplains; (2) how the program will conserve valuable wetlands of national interest.	See above response to similar comment. The principle authorities available to manage wetlands and floodplains are: (1) Shorelands Protection and Management Act (2) Great Lakes Submerged Lands Act (3) Inland Lakes and Streams Act (4) Floodway Encroachment Act (5) Michigan Environmental Protection Act (6) Natural Rivers Act Implementation of the Shorelands Act and the Natural Rivers Act may occur at the local level. DNR criteria are used for local implementation of both acts. Where local governments choose not to implement the Shorelands Act, permits are issued or denied by the state in designated erosion hazard, flood hazard, or environmntal areas. If a local unit of government fails to adopt zoning in the natural river district within one year of designation, or if local zoning fails to meet state guidelines, the state may promulgate a zoning rule for the river. The remainder of the laws are carried out at the state level although the Michigan Environmental Protection Act gives standing to anyone seeking judicial relief for the protection of the air, water, and other natural resources and the public trust therein from pollution, impairment, or destruction. The MCMP will conserve valuable wetlands of national interest by the existing legal means described above and the Federal consistency provisions of the CZMA. The national interest in wetland decisions will be considered through use of mechanisms listed in Chapter VI.
The Department believes that the MCMP should describe the Shorelands Protection and Management Act in more detail by answering the following questions: What is the status of the proposed rule change which would expand the authority of the Act to include developed and platted shorelands? When are rules to implement this to be officially adopted?	Proposed rules to expand the authority of the Shorelands Act have been drafted, reviewed by the public through the hearing process and approved by the State Attorney General. They are now before the Joint Legislative Rules Committee of the Michigan Legislature. By never including more than undeveloped and unplatted lands under the Shorelands Act, the state would place continued reliance on local ordinances and state permit authorities, where applicable, to prevent or restrict location of

Comment	Response
What are the consequences of never including more than undeveloped and unplatted lands under this Act? If developed and platted lands are not included, how will environmental damage resulting from development and habitat destruction be prevented?	structures in erosion hazard areas. The state would be able to directly control activities in wetlands which are located in platted and developed areas through the Submerged Lands Act, Inland Lakes and Streams Act, and Michigan Environmental Protection Act. This will allow the state to prevent environmental damage and habitat destruction by modifications to project design prior to issuance of a permit or by failure of the state to issue a permit. For major projects for which a state environmental impact statement is required, alternatives must be identified to assist in determining the way the project can be accomplished with the least amount of environmental damage and habitat loss.
Many references are made throughout the document regarding cooperation and coordination between local, State, and Federal agencies, yet no processes or methods are proposed to facilitate these arrangements. Many management and policy decisions regarding coastal resources will be made at the local-regional level, but there is no process which will facilitate local-Federal coordination. The Department views this coordination as essential where topics or areas of national interest related to our programs are concerned.	The FEIS specifically outlines the many processes that are in place that the state will rely upon to facilitate cooperation and coordination between the state and the Federal government including the Great Lakes Basin Commission, interagency agreements, Michigan's shared responsibility in administering Federally sponsored programs such as those spawned by the Fish and Wildlife Coordination Act, see Chapter VI for further elaboration. In addition to the foregoing the MCMP will rely upon the directive to all DNR employees in the Director's Letter #17 (Appendix B of the FEIS), the A-95 process (see Chapter VI) and the GAPC process (see Chapter IV) to facilitate and encourage local-Federal coordination. All of these processes and others such as public hearings held on permits or environmental impact statements on proposed actions will be utilized in order that cooperation may occur on topics of national interest, again see Chapter VI.
The document states: "...it is suggested that local programs will likely be consistent with Michigan's coastal programs." We recommend that this be addressed more positively to ensure that local and regional goals and objectives will be consistent. The first sentence of the second paragraph states: "the same philosphy is extended to State and Federal involvement during program development." The "philosophy" referred to should be explained as well as the process for Federal "involvement."	This language has been deleted from Chapter VII. Chapter V outlines the roles of local and regional units in program implementation. Local implementation of the state authorities cited in Chapter V must meet state standards and criteria or the state will assume responsibility for the administration of such statutes. Funding of local and regional agencies to do work in GAPCs will be contingent on management policies in the GAPC being consistent with the policies of the MCMP. The language of Chapter VII with regard to state and Federal involvement has been deleted. The roles of the Federal government during program implementation has been detailed in the first section of Chapter VI.

DOI (cont)

Comment	Response
In the section on Program Implementation Roles Federal agencies appear to be specifically omitted by the text which states· "The role participant at this program level is the Office of Coastal Zone Management in Washington, D.C." (p. VI-34). Since Federal agency involvement is necessary for decisions related to the national interest, this section on the Federal participants should be expanded to include Federal agencies, indicating their specific functions in the implementation of the MCMP.	This section has been revised (see Chapter V Program Level V) and recognition of the role of Federal agencies is noted. Moreover, a more complete description of how Federal agencies have been involved and will continue to be involved in programmatic decisions particularly with respect to issues of national interest is outlined in Chapter VI.
The exchange of information is encouraged between the state and Indian tribal governments on all matters pertaining to mutual land interests.	Although Indian lands are excluded from coastal boundaries, tribes are eligible to receive technical and financial assistance from the MCMP as regional entities see the discussion in Chapter II.
In working with various tribal groups all programs that affect or involve Indian trusts require approval from the trustee, the Secretary of the Interior or his designated representative.	State must exclude from their coastal management zone those lands owned, leased, held in trust, or whose use is otherwise by law subject solely to the discretion of the Federal government, its officers, or agents. While Indian lands held in trust by the Federal government must be excluded from a State's coastal zone, and while alienated (or nontrust) lands may be excluded from a State's program, it is not intended that such exclusions should deter tribes along coastal shorelines from developing and administering sound coastal management practices. Wise use and management of tribal land and water resources would complement State management efforts and would further the national objectives of the Act. Accordingly, tribal participation in coastal management efforts shall be encouraged provided that such efforts are compatible with a State's coastal management policies and are in furtherance of the national policies of section 303 of the CZMA.

Historic Preservation

The program does not adequately recognize the need for compliance with section 106 of the National Historic Preservation Act (NHPA) of 1966. as amended, Executive Order 11593, and the Advisory Council on Historic Preservation's "Procedures for the Protection of Historic and Cultural Properties" (36 CFR 800). These call for identification, evaluation, and consideration in planning of historic properties on Federal land or in the potential impact area of Federal undertakings. While the Program recognizes the need for an inventory of historic and cultural properties and for development of measures to protect them, it is not clear how these activities will be carried out.	The Michigan policies on historic preservation have been revised in the FEIS to emphasize the state's position on preservation of historic sites and structures. Any Federal activity, license or permit on funding assistance occurring in or significantly affecting the coastal zone must be consistent with state policies on historic preservation. Major state actions which may result in the alteration or destruction of historic resources are subject to state environmental impact statements. The state has done an inventory of currently identified historic and archeologic sites which are presently known. These reports have

Comment	Response
	identified management recommendations for the protection of these resources. The MCMP will act to protect and develop historic resources by the following methods: (1) identifying areas for acquisition; (2) through the GAPC process; (3) through state review of county zoning ordinances developed pursuant to the County Rural Zoning Act; (4) through technical assistance to local governments seeking to develop management measures to protect historic resources. The MCMP does not intend to undertake a statewide search for historic and archeological sites which are not currently identified. Inventory and data collection were activities done in the early stages of program development. Moreover, in its request for proposals from the Michigan History Division, the Coastal Program received no request for funds to identify additional historic and archaeologic sites in the state's coastal zone.
Role of the State Historic Preservation Officer (SHPO) in preservation concerns is not clear in the document; there is no mention of the fact that this office implements the National Register program in the state and that it participates in Federal agency project review to help agencies minimize the adverse effects of their projects on historic properties.	The role of the SHPO in the Michigan Coastal Program is primarily one of coordination and project review. The SHPO is a member of the Standing Committee on Shorelands and Water and as such recommends priority projects for Coastal Management Program consideration. In addition, the SHPO contributes input to the Michigan Environmental Review Board (MERB) by reviewing state and Federal environmental impact statements. Participation in the GAPC process is another mechanism for involvement by the SHPO. Finally, one of the state action programs calls for cooperation with the SHPO to explore and document existing and potential Federal, state, or local funding sources for preservation and restoration of historic and archaeological sites. The SHPO has also provided written concurrence with her role during program development. See Appendix C. Chapter 3 of the FEIS (Areas Fulfilling Recreational or Cultural Needs) discusses the responsibility of the State Historic Preservation Officer in carrying out the National Register Program.
It is not clear whether historic properties which are not associated with recreation or which are not included in State Historic Districts will receive adequate consideration and protection.	The Michigan coastal policies have been revised to establish the state's position that historic sites and structures be preserved. Under existing state law proposed to be used in the MCMP, such protection is ensured when a site is within a designated state historic district. Historic sites need not be associated with recreation areas or facilities to be eligible for designation in a state historic district. The program will comply with the requirements

Comment	Response
	that accompany designation of historic sites for the state and national historic registers through coordination with the SHPO. The other ways in which the state will act to carry out its policies on historic sites and structures are: (1) Review of county zoning ordinances (Note: Development of county zoning ordinances are voluntary; however, the state review of such ordinances will advocate that coastal historic sites and structures be preserved); (2) Use of the GAPC process; (3) Technical and financial assistance to communities wanting to preserve historic sites and properties; (4) Utilize the MERB review process for major state actions which would have potential for impacting historic resources.
A separate policy section on historic and cultural resources should be developed. It should discuss how historic properties will be dealt with in Hazard Areas, Sensitive Areas, Intense or Conflicting Use Areas, and Areas of Natural Economic Potential.	A separate section on historic and archeological resources was included in the DEIS and is included in this FEIS. Coastal program policies apply uniformly throughout the Michigan coastal zone. They will be followed when decisions are made concerning the other four major areas cited by the reviewer.
A separate "Action Programs" section should be included for historic properties to make treatment of historic properties parallel to treatment of recreation resources and should provide for inventory and mapping of historic resources.	The format of the Michigan FEIS combines the action programs of several areas of concern of the Michigan Coastal Program. Combining action programs of recreation and historic areas does not diminish the importance of historic resources in the program. An inventory of known historic sites has been conducted during program development. The state does not intend to conduct an inventory of unidentified historic sites in the state's coastal zone. However, major state actions requiring environmental impact statements must identify the impacts of such actions on the human environment along with alternatives to the proposed action.
There should be reference to the need to seek National Register status for historic and archeological resources through action of the State Historic Preservation Officer, and of the availability of matching grants-in-aid for historic preservation from the National Park Service.	The action program for historic and archeologic sites indicate the state's intention to work with the State Historic Preservation Officer to identify all available sources of funding for the preservation and restoration of those sites.

DOI (cont)

Comment	Response
Need for ongoing inventories and evaluation of coastal historic resources archeological sites is expressed in many areas of the Department comments in order to prevent destruction or damage to historic resources not yet identified.	Michigan has conducted surveys of known historic and archeologic sites during development of its program. Michigan cannot promise to conduct an ongoing inventory of its coastal historic resources through its coastal program. But, the MCMP has and will continue to draw heavily upon the State History Division for its advice in decisions affecting the coastal areas. Furthermore. the state GAPC process is ongoing and provides for the nomination, designation, and prioritization of coastal historic sites and properties by citizens, interest groups, and public agencies. Individual groups and agencies are encouraged to take part in this process. In addition, the state is required to issue an environmental impact statement for major state actions which may result in the alteration or destruction of a significant element of the historic resources of the state.
The Department emphasizes the importance of articulating in this early stage, the means for meeting OCZM's responsibilities under the Federal historic preservation mandates.	OCZM feels it has met its responsibilities under the National Historic Preservation Act and Executive Order 11593 by active coordination with the SHPO during program development, by ensuring that the state articulate historic preservation policies, and by making the DEIS available for review to the SHPO and the Advisory Council on Historic Preservation.
The Department urges that the Michigan DNR work in close cooperation with the State Historic Preservation (SHPO) Officer under this program of coastal resource management.	Michigan has worked with the SHPO during program development. (See letter in Appendix C to this FEIS. In addition, the SHPO is a member of the Standing Committee on Shorelands and Water and as such recommends priority projects for consideration by the MCMP. The SHPO also contributes to the review of state and Federal environmental impact statements. Participation in the GAPC process is another mechanism for involvement by the SHPO.
The program recognizes the need for consistency with statewide comprehensive outdoor recreation planning, but no process is described for assuring such consistency. Actions are recommended for emphasizing technical and financial assistance to local units to provide outdoor recreation opportunities in the coastal urban areas.	In providing assistance to local units for recreational planning the State has and will continue to use the Michigan Outdoor Recreation Plan as a guide for directing assistance to local units of government on recreational matters, see specific reference to that fact in the discussion of national interest in recreation, Chapter VI. With respect to this recommendation, the MCMP will, as one of its major areas of focus provide technical and financial assistance for recreational opportunities in coastal urban areas. For example, the DNR is presently colloborating with the National Heritage Conservation and Recreation Service to provide increased coastal urban recreation along the Detroit waterfront.

DOI (cont)

Comment	Response
We suggest that the Youth Conservation Corps program, 10.661 in the Catalog of Federal Domestic Assistance Grant Programs be deleted from the listing on page A-48 regarding Bureau of Outdoor Recreation programs Also rivers and the National Wild and Scenic Rivers Act should be listed in the tabulation of "Resources in Which There May Be A National Interest", Figure 6F, page VI-40.	The state has chosen not to list rivers and the National Wild and Scenic Rivers Act as a separate national interest resource. However Michigan has indicated that Recreation is a use in the national interest. To the extent national wild and scenic rivers are parts of the state and Federal comprehensive outdoor recreation plans, they will be considered as resources in the national interest.
We consider that the grants-in-aid program under the Land and Water Conservation Fund Act would not require any determination of consistency beyond the current A-95 procedures.	The A-95 procedures will be the mechanism for consistency determination for grants-in-aid under the Land and Water Conservation Fund Act. There are no procedures in addition to those already in place for review of this type of Federal assistance. See Chapter VI of this FEIS.
We commend Michigan's planners for their responsiveness to our earlier suggestins concerning the importance of mineral resources that occur or may occur in that State's coastal areas. We believe that Michigan's program has adequately considered mineral resources and mining; it has also presented guidelines for the possible nomination of mineral resources areas as APC's. As indicated in our comments on the Program Focus, however, we believe more specificity in the criteria should be included in the parts of Chapter VI related to mineral resource areas.	As indicated above more specificity has been provided in order to clarify the state policies with respect to mineral resources. It is important to note that the designation of APC's as described in Chapter IV, such as mineral resources and their respective management plans must be in compliance with these state policies and statutory criteria outlined in Chapter III as well as the criteria enumerated in Chapter IV. Consequently, the determining factor in deciding on the merits of a management plan for an APC involving extraction, drilling, and use of minerals in the coastal zone will rely not only on the criteria found in Chapter IV but also to what extent the objectives and criteria of Chapter III will be met and advanced with the designation of a mineral resourse area as an APC.
Environmental Impact Assessment	
Chapter VII of the DEIS is entitled Environmental Impact Assessment This should be entitled Environmental Impact Statement.	This change has been made.
Since it is proposed that Michigan's coastal program will be implemented with existing state legislative acts and policies, the EIS should explain how implementation of the coastal program will ensure that property damage, environmental degradation, economic loss, and other social costs will be minimized in the future	The Michigan Coastal Program will strengthen the ability of the state to carry out existing state law in the way they were designed to be implemented. The EIS has been rewritten to distinguish the way in which existing state laws have been carried out in the past and how the state proposes to carry them out during program implementation.
A more in-depth treatment of the proposed action the existing environment, and potential impact should be included. A more in-depth discussion of potential impacts can be written with some degree of predictability, especially since the program is based on existing statutes which have been operationally tested.	The proposed action is Federal approval of the Michigan Coastal Management Program. The Program has been revised in response to comments on the DEIS to provide a greater degree of clarity and specificity. The description of the environment has been provided in Chapter II of the FEIS.

DOI (cont)

Comment	Response
	Potential impacts have been expanded to provide a more in-depth discussion on the effects of the program. See Chapter VII.
Chapter I - Introduction	
Editorial and favorable comments.	Editorial changes made; no further response necessary.
Chapter II - Michigan Coastal Area and its Character.	
The significance of sand dunes for local catchment of precipitation and ground-water recharge should be considered in the environmental impact statement's assessment of resources and program impacts.	The significance of protecting these areas has been noted in the impact statement. See Chapter VII.
Chapter III - Program Focus	
The State should be aware that many Federal license and permit activities will not be covered under A-95 review or the Michigan Environmental Protection Act process when they occur on excluded Federal lands.	This statement is true. However, Federal license and permit activities as well as development projects "significantly affecting the coastal zone" are subject to the Federal consistency provisions of the Michigan Coastal Program. See Sections 930.21 and 930.33 of Federal Consistency regulations.
The sixth of the Essential Program Concerns indicates that. . . "the national government fully consider State and local concerns". . . while local governments must assure to a lesser degree" that their activities. . ."do not preclude larger-than-local benefits." (emphasis assed) This is inappropriate in light of the intention of the CZMA. We recommend that the phase "to a lesser degree" be eliminated from the final program document.	The recommended change has been made. See Chapter III of this FEIS.
Provisions for historic resource inventories should be made as part of Essential Program Concerns.	The section on Essential Program Concerns has been deleted from the FEIS. The state has emphasized its concern with performing management activities rather than collecting data during program implementation.
The descriptions of Action Programs are vague and unclear. These sections should be rewritten to answer the following questions: 1. Who will be responsible for conducting the activity? 2. Is this a new or ongoing activity? 3. What is the time frame for conducting the activity if it is new?	Action Programs provide an indication of the general types of activities Michigan will want to pursue during program implementation. The complete answer to the questions posed in this comment can only be answered once the state has developed its application for funding for program administration grants. However, it can be assumed that a part of program administration funds will go to regional planning commissions to provide technical assistance to local governments, to local

Comment	Response
	governments to do management work in publicly nominated GAPCs, to the DNR to more effectively carry out existing regulatory responsibilities, and to the DNR to conduct management projects in legislated GAPCs.
Both flooding and erosion may damage or destroy historic properties. This should be indicated in the list of "Specific Concern."	The state concern with shoreline erosion and coastal flooding applies to concern for damage of all land and structures including historic resources.
Action programs with respect to flood prone areas describe: ". . .analysis of topographic maps as well as engineering surveys to determine floodplain contours and boundaries." This appears to be incomplete as the information required is not so much the topographically defined flood plain as the areas subject to being inundated with a given recurrence interval (such as the 100-year flood). The task of determining such boundaries encompasses more than the activity proposed in the program.	Michigan will use the information on areas subject to flooding in a 100-year recurrence interval flood in conjunction with topographic maps to approximate the flood hazard areas of the coastal zone The state will use flood level elevations developed by the Corps of Engineers and Federal Insurance Administration in conjunction with U.S. Geological Survey topographic maps to make these determinations.
The consideration of effects of low water levels in the Great Lakes should include related effects on ground-water movement, availability, and quality. Similarly consideration of effects of periods of high water levels or of cycles of changing water levels should include ground water related effects on factors of slope and foundation stability and structural integrity.	The program proposes to make shoreline residents aware of the dangers of slope in stability and shoreline erosion as one of its action programs. The state has not discussed the effects of low water levels on ground water movement, availability, and quality because it is unable to control the level of the Great Lakes.
Editorial corrections on pages III-41 and III-43 were noted.	The document has been corrected. The other section where changes were to have been made has been deleted from the FEIS.
Many historic properties (including properties of local, State, or national significance) have not yet been identified. (Note that at present there are only six historic districts designated in the region covered by the Michigan CZM program). Hence, it is vital that a program for the protection of such resources contain provisions for their identification and evaluation. This concern should be addressed here.	Michigan has conducted surveys of known historic and archeologic sites during development of its program. Michigan cannot promise to conduct an extensive inventory of its coastal historic resources through its coastal program. However, the state GAPC process is ongoing and provides for the nomination, designation, and prioritization of coastal historic sites and properties by citizens, interest groups, and public agencies. Individual groups and agencies are encouraged to take part in this process. The State History Division has not made a similar request from Michigan CZM for ongoing inventories and evaluation of coastal historic and archaeologic sites. In addition, the State is required to issue an environmental impact statement for major state actions which have the potential for significant impact upon the environment or human life. This includes cultural resources such as historic or archeological sites.

DOI (cont)

Comment	Response
Under "Statement of Policy for Historic Areas" wording should be amended to refer to ". . .authorities and incentive mechanisms to identify (inventory) evaluate, restore, maintain . . .sites as well as structures. . ." (emphasis added)	See response above.
Under "regulatory Decision-Making Criteria," provision should be made for identification and evaluation of as yet undesignated historic properties, as well as for protection of designated ones, in areas subject to impact from proposed activities. Note that such identification and evaluation is required by existing Federal regulations in cases in which there is Federal involvement.	See response above. In addition, Federal licenses and permit activities, development activities and assistance projects with respect to historic resources are subject to Federal consistency provisions and procedures outlined in the MCMP.
Insufficient information is given on the Regulatory Decision-Making Criteria for proposed mineral or energy developments. The essence of the criteria should be cited here with reference to the Appendices only for supporting detailed information.	The format for state enforceable policies has been changed for the FEIS The state has expanded its discussion on policies for mineral and energy resource areas to clarify what each entails (see Chapter V of the FEIS).
The section on prime industrial areas should refer to the need to identify and evaluate industrial/commercial, or maritime facilities or sites (whether in urban areas or elsewhere in the coastal zone) which have historic or cultural significance. Any proposals for the alteration of significant properties of this kind should take into account the Federal mandates concerning preservation.	As indicated above, the policies developed under the MCMP's section on historic and archaeological areas apply to all sections of the program including those actions taken by the state in areas of economic potential. Thus, the proposed alteration of any significant properties which will trigger the state's EIS process will consider these policies and Federal mandates.
The wording in the "Incentive Decision-Making Criteria" for coastal lakes, river mouths, and bays should be modified as follows: "(1) identify special coastal areas with high cultural, historic, or aesthetic value". (emphasis added)	See responses immediately above.
Chapter IV - Special Coastal Areas of Concern	
Criteria for identifying areas fulfilling cultural needs as GAPCs should include the National Register Criteria for Evaluation (36 CFR 60.6) in full, or refer specifically to those criteria.	Figure IV-B of the FEIS indicates that National Historic Register Site evaluation criteria are used for identifying historic and archaeologic sites as GAPCs in combination with state criteria.

DOI (cont)

Comment	Response
Guidelines for nomination of GAPCs are not as complete or clear as they should be. The Department suggests that the guidelines should be structured to include properties "that have yielded or are likely to yield, information important in prehistory or history." The second entry in the guidelines is one aspect of the first entry and might better serve as one of several examples of the broad patterns of history with which properties may be associated. The last entry, a reference to districts, would be more generally applicable to historic districts if it referred to a significant and distinguishable entity whose components may lack individual distinction.	OCZM disagrees. The state has developed its coastal management program with coordination from the State Historic Preservation Officer. As indicated in a previous response Michigan will rely on the SHPO in evaluating projects likely to impact coastal historic resources in establishing priorities through the Shorelands and Water Standing Committee, and in evaluating GAPC nominations.
Chapter V - Management of Important Uses	
Word change suggested to tighten the method of determining uses with a direct and significant impact.	See the twelfth response to a similar comment.
Section on determining how to include a use with direct and significant impact as subject to control by the program needs further explanation. Without a clear method for Federal agencies to determine which specific activities would have, according to State criteria, direct and significant impact, it will be difficult for Federal agencies to make a consistency determination of use permissibility.	The ultimate determination of consistency is made by the state. Federal agencies are required to make initial determinations of consistency for federally conducted or supported activities. The basis for making this consistency determination are policy statements. In the case of Michigan, the policy statements are taken from existing state law and executive orders. They specify the way in which uses with a direct and significant impact on the coastal zone will be managed. In some instances the state has identified specific activities of direct and significant impact which the program will control. These include filling, grading, or alteration of soils, collection, conveyance, transport and treatment of domestic or industrial liquid wastes by municipal treatment facilities, coastal condominium development, exploration, extraction or storage of oil and gas resources. The program controls other specific activities enumerated by other criteria (See Chapter V). All of these specific activities are controlled by existing legislation. The state has chosen not to identify any other activities as permissible or not permissible because the authorities used to control such uses employ performance standards to protect coastal resources. A discussion of use restrictions resulting from performance standards is found in Appendix C of the DEIS.
The section entitled "Cultural Significance" discusses only sites, objects, orstructures "located within a designated HIstoric District." While we realize that the criteria cited here are drawn strickly from existing State legislation, we are concerned that this entry may be misleading. Our concerns are,	The questions which Michigan is using to establish activities of direct and significant impact on coastal resources are based on what can be done through existing state authorities to regulate those activities. Adding a question such as the one suggested here will not force the state through its legislative mandates to

Comment	Response
as noted in discussion of Chapter III, pp. 53ff, above, many of Michigan's significant historic properties have not as yet been identified, evaluated, or officially designated. We noted that there are only six historic districts listed in the coastal zone at present (see Appendix D, p. 8). We suggest an added query: "Has the activity area been surveyed to determine presence of sites, objects, or structures which might be eligible for designating...?"	survey the site to determine presence of sites, objects, or structures that might be eligible for designation (as historic districts). There is no single authority in the proposed program which requires a survey of historic and archaeologic sites, objects, or structures eligible for designation as a state historic site or historic district However, for any major Federal or state action which may impact historic or archaeologic resources, an environmental impact statement is required.
Many sites or structures of historic significance, including some already listed in the National Register of Historic Places--and thus included in the State Historic Preservation Plan--may lie outside of the designated historic districts. This section should take note of their existence, and afford them the same protection it provides for sites within such districts.	Historic sites outside of designated coastal historic districts established pursuant to State Act 169 Historic District Act can be protected if they are part of local historic zoning districts.
The criterion for waste disposal used to identify uses of direct and significant impact should be broadened to include, in item 11, all aspects of waste disposal through wells. For example, consideration should be given to those activities under the Water Resources Commission Act of 1929 and the subsequent amendments as well as those under the Mineral Wells Act. The present wording seems to limit consideration to wells related to mineral development.	The criteria used by the state to identify uses with direct and significant impact in the coastal zone are based on what can be controlled under existing state authority. Therefore, the regulation imposed by the Mineral Wells Act as reflected in the state's criteria on direct and significant cannot be changed by the coastal management program. Limitations on control of water quality by the Mineral Wells Act are reduced by the use of the Water Resources Commission Act, which provides a broader mandate for water quality.
The Department of the Interior, Office of Archeology and Historic Preservation, should be included in the lists of Associated Federal Agencies concerned with Historic Sites and Districts in the national interest.	This table has been dropped. The state has indicated the sources of consultation for determining archaeological and histroic areas in the national interest. Among these sources are federal agency nominations for GAPCs. This would facilitate the Department's participation in the Coastal Program with regard to historic resources.
Federal legislation should be one of the principal sources of statements by which Michigan will determine the national interest.	The FEIS has been substantially revised to indicate specific pieces of Federal legislation which Michigan uses to determine the national interest in facilities and resources. See Chapter VI.

DOI (cont)

Comment	Response
Chapter VI - Organization of Michigan's Coastal Program	
The section of the DEIS describing the functions of state agencies only addresses the responsibilities of the Attorney General, Department of State and Department of Management and Budget. The coastal responsibilities of the Departments of Public Health, Agriculture State Highways and Transportation, Commerce and Labor should also be described.	The chapter dealing with organization of the Michigan Coastal Program has been substantially revised as Chapter V of the FEIS. The chapter focuses chiefly on decision-making and advisory mechanisms that will be used in the program. These include the Natural Resources Commission, Department of Natural Resources (the lead state agency) Citizens' Shoreland Advisory Council, the Standing Committee on Shorelands and Water (SAW) the Inter-Departmental Review Committee (INTERCOM) and the Michigan Environmental Review Board (MERB). With the exception of the Attorney General, all agencies listed in this comment are members of the SAW. Detailed responsibilities of other state agencies with respect to CMP is provided in Appendix C of the DEIS.
Use of the term "Negative Declaration EIS" with regard to the state EIS process may mislead others where Federal environmental impact statements are being considered.	This term has been used as a part of the state EIS review process. Use of a different term would not reflect an accurate description of the EIS process in Michigan. A Negative Declaration EIS in this instance is a short EIS on a major project or program with very little or no negative impact.
Regarding the role of citizens, agencies and groups during program implementation, it is proposed that they assist in the amendment of goals rather than refinement of goals and objectives for coastal management.	The state has revised the roles of these groups to provide for formulating local goals for coastal management. To the extent any new local goals represent a basic change in state program goals these are subject to the procedures for amending approved management programs.
Lands which are not owned by the federal government but which are subject to federal mineral ownership should be included in the discussion on relationships of federal interests to coastal management. The existing statements are inaccurate and should be modified to reflect the CZMA	The state has used the language of Section 923.33 of program approval regulations to indicate excluded lands from the coastal boundary. Lands which are not owned by the federal government but where federal mineral ownership exists are subject to the regulatory policies of the management programs Moreover, any Federal licenses and permits required for such mineral extraction which the state has indicated will be subject to Federal consistency, will be subject to the regulatory policies of the program.
The Department of Interior, Office of Archaeology and Historic Preservation, should be included in the lists of Associated federal agencies concerned with historic sites and districts in the national interest.	The table to which this comment refers has been dropped. The state has indicated the sources of consultation for determining archaeological and historic areas in the national interest (See Chapter V). Among these sources are Federal agency nominations for GAPCs. This would facilitate the Department's participation in the GAPC process with regard to historic resources.

DOI (cont)

Comment	Response
The reference to existing processes to ensure consideration of national interest during program implementation should include the consultations required under Executive Order 11593 and the National Historic Preservation Act of 1966.	Michigan includes consultation under the National Historic Preservation Act of 1966 as a method for consideration of historic and archaeologic sites in the national interest. See Chapter VI.
Editorial comments on the Federal consistency matrix.	Matrix has been dropped. A revised section on Federal consistency has been developed for the FEIS.
How are Federal agencies to know which of the six criteria identified in Chapter VI are applicable in making their consistency determinations.	The Federal agencies must be consistent with the enforceable states policies as described in Chapter III. For policies which are nonenforceable there is no requirement that federal agencies be consistent with them. However, they should be considered by the federal agencies as part of the consistency process.
Federal agencies cannot presume concurrence by the state CZM agency for federally conducted or supported activities in 45 days. The Department requests that the state refrain from using a "no response" action.	For Federally conducted or supported activities, Federal agencies make the initial determination if the activity is consistent with the management program. The state must concur with or object to this determination. One way of concurrence is by allowing 45 days to pass from the point at which the state is notified by the federal agency of its consistency determination. This is a legitimate means for state concurrence with federal agency consistency determinations.
Corrections are necessary on the flow chart for federal consistency.	Necessary corrections have been made. See Chapter VI of this FEIS.
The discussion of consistency review for Federal permits should cover State consistency processing of items where a State or local permit is not required.	In cases where state permits are not required for activities requiring federal licenses or permits the applicant is responsible for certifying in its application to the federal agency that the proposed action is consistent with the Coastal Management Program. See Chapter VI of this FEIS.
Editorial changes suggested.	Revisions to the FEIS have corrected these errors in the document.
If the Federal mineral leasing permits are to be subject to certification by the Michigan Coastal Management Program then the following should be added under the list of those licenses and permits which will be subject to federal consistency determinations under Department of Interior: 16 USC 520 Leasing of hardrock minerals (including iron nickel and copper) under Bankhead-Jones Farm Tenant Act lands and Federal Farm Mortgage Corporation lands with National Forest or non-Federal surface ownership.	Michigan has not indicated it will apply federal consistency to this federal permit.

DOI (cont)

Comment	Response
The responsible agency within the State Department of Natural Resources for determining state concurrence with a proposed federal action should be identified.	The Division of Land Resource Programs within the State Department of Natural Resources is responsible for determining, affirming, or denying federal consistency decisions.
Appendix A - Federal Contribution	
The legal description of Federal Mineral Ownership for Alpena County appears twice. One should be eliminated.	This correction has been made. However, Appendix A is not being reprinted in the FEIS.
The Department suggests splitting the acreage column in the table which outlines Federal Mineral Ownership in Michigan. The columns would read Acres, Federal Surface and Acres, Federal Mineral.	The state has the information in the format in which the Department suggested it be printed. However, Appendix A is not being reprinted.
Explanation of the National Historic Preservation Act should be expanded. The description should explain that through the Office of Archeology and Historic Preservation, the National Park Service maintains and expands the National Register of Historic Places, administers the grants program for State survey and planning programs as well as for acquisition and restoration of historic sites, and provides technical assistance and information on historic preservation technology.	This correction has been made, however, Appendix A is not being reprinted in the FEIS.
Role of the Advisory Council on Historic Preservation should be described in Appendix A.	See, Supra.
The Geological Survey no longer routinely reviews geologic and hydrologic aspects of license applications to the Nuclear Regulatory Commission nor prepares feasibility studies for potential sites for nuclear power plants as stated in Appendix A. In the past, the Survey has participated in hydrologic and geologic investigations of potential sites, but these studies were not overall evaluations of feasibility.	See, Supra.

U.S. Department of Transportation
U.S Coast Guard
(R.L. Andrews 1/4/78)

Comment	Response
The CZMA excludes Federal lands from the Michigan coastal zone. The state should indicate that it identifies rather than excludes these lands.	This change has been made in Chapter II.
It appears something was omitted from this sentence (p III-11). If so it should be added or the words "identify areas where and" eliminated.	This section of the document has been revised.
CZMA program approval regulations require that where more stringent requirements are incorporated, they should be explicitly referenced as such in the management program. The mandatory installation of holding tanks should be so referenced.	Michigan has made the necessary addition under the water transportation discussion of Chapter III.
Changes to either type of APCs should be treated as refinements to the approved management program and require concurrence of affected agencies and the Associate Administrator.	Under existing regulations, any changes to an approved coastal management program must undergo the procedures of the amendment/refinement process. OCZM will determine on a case by case basis whether a proposed change is an amendment or a refinement. Under existing procedures, Federal agencies will have an opportunity to review the change in an EIS developed for the amendment in a copy of the proposed amendment distributed by OCZM, or through notification and consultation with appropriate Federal agencies with OCZM where the change represents a refinement.
Search and rescue should be added to uses in which there may be a national interest in Figure 5A.	The uses of regional benefit requirement is distinguished from the national interest requirement. Michigan has determined that these are not uses it considers to be in the national interest within the scope of its coastal management program.
U.S. Coast Guard facilities and the Federal Boating Safety Act are proposed as additions to the table which lists facilities and resources in which there may be a national interest in Figure 5A.	This table has been substantially changed. Coast Guard facilities have been added. The reference to the Act has not. See the response below.
Department of Transportation should be added as a Federal agency associated with National Defense and Aerospace, Recreation, Search and Rescue, Water, and Wetlands in Figure 5A.	This table has been substantially revised. No identification of Federal agencies associated with uses resources and facilities in the national interest is made. However, the state has indicated Federal laws, executive orders, and Federal agency policies which will be used in the state's consideration of the national interest. See Chapter VI.
Federal activities should be reviewed for consistency rather than evaluated for consistency.	This portion of the document (Chapter VI) has been revised to indicate the State's "review" responsibilities.

U.S. Coast Guard (cont)

Comment	Response
The discussion concerning the OMB A-95 review process does not reflect the process used in the Boating Safety Financial Assistance Program. The Coast Guard adheres to Part III of the A-95 process which permits the state governor to decide whether or not a Federal assistance project must be reviewed by an areawide clearinghouse.	As you have indicated the Boating Safety Financial Assistance Program is not subject to areawide clearinghouse review, it is subject only to review at the state level. The discussion in the document is in reference to the more common situation where the A-95 review process utilizes areawide clearinghouses.
Editorial comment suggested for clarification of discussion on Federal consistency.	Changes made.
Add U.S. Coast Guard as a Federal agency consulted with during program development.	This addition has been made.
Editorial correction change G.F. to read 6.F.	Correction made.
Suggested changes for Figure 5.A.	Correction made.
The National Transportation Plan should be added to sources used by the state in consideration of the national interest.	This addition has been made.
Editorial comments with respect to NEPA.	Suggested changes made.
The terms MERB and INTERCOM should be identified.	MERB - Michigan Environmental Review Board INTERCOM - Inter-Departmental Review Committee An explanation of the functions of these entities is found in Chapter V.
Columns 3 and 4 in the Consistency Table are reversed. Editorial changes are also suggested for the Table.	This Table has been dropped from the FEIS.
Recommend that the A-95 or Federal Register be used to notify state of Federal activities and recommend rephrasing of types of activities for consideration.	The MCMP request that Federal agencies use the A-95 mechanism or issue a specific notice to the Division of Land Resource Programs of the DNR to notify the state of Federal activities. The activities for consideration have been revised (see Chapter VI).
Figure 6.H. Process for Review of Federally Conducted or Supported Activities is difficult to follow.	The Figure has been revised to reflect a more accurate accounting of the review process.
Suggested wording changes for determining consistency of Federally supported activities.	This section of the FEIS has been substantially revised. See Chapter VI.
Pagination error.	Error corrected.
P.L. 92-75, Federal Boating Safety Act, should be added to the list of Federal planning assistance grants which have received MCMP attention due to their impacts on coastal resources.	This section of the document has been substantially revised. However, the list of planning assistance grants which received MCMP attention have been deleted. Apparently, grants under the Federal Boating Safety Act were not considered during program development.

U.S. Coast Guard (cont)

Comment	Response
Recommend clarifying that a single reviewing agency is authorized to declare a disagreement with a Federal agency consistency determination or object to a Federal license permit or assistance activity.	Any disagreement with a Federal agency consistency determination will be made by the Michigan DNR, Division of Land Resource Programs. See Chapter VI of this FEIS.
Pagination error.	Error corrected
Changes in the Federal permits which the state will review for consistency can follow only after consultation with the affected Federal agency and approval by the Associate Administrator.	This change has been made in Chapter VI of this FEIS.
Suggest deletion of 33 USC 419 Hazardous Substances and Materials from permits to be reviewed for Federal consistency from under Department of Transportation.	This permit will be reviewed for Federal consistency purpose. However, it is a Corps of Engineers permit and is referenced as such in the FEIS.
Delete the following under permits to be reviewed for Federal consistency: a) 33 USC 1221(8) (Water Safety Zones) b) 33 USC 180(c) (anchorage grounds) c) 33 USC 471 (anchorage grounds) d) 33 USC 1224 (ports and waterways safety) e) establish fishing grounds	Deletions made
These references do not apply to permitting activities.	
There are inconsistencies in Figure 6.J. - Process for Assuring the Consistency of Federal Licenses and Permits.	This has been revised in the FEIS.
Editorial comments with respect to Federal consistency.	Document has been revised in line with these comments in Chapter VII.
The list of excluded Federal lands identifies only those reported by Federal agencies.	Regardless of those currently identified, the CZMA requires that all Federal lands are excluded from the coastal zone.
Numerous acreage changes for U.S. Coast Guart lands and facilities are given.	These changes have been made, however, the appendix is not reprinted in the FEIS.
Agency contact is changed.	See, Supra.
A paragraph making it a policy to promote boating safety, education and enforcement resources to keep pace with the increase in recreational boating regulations from this program would be desirable from the Coast Guard's point of view.	In the revision of Chapter III the position with respect to this issue has been clarified. The MCMP will continue to support the overall state effort to educate the public on boating safety under the Marine Safety Act. Moreover the state is fully cognizant of the growing conflict between commercial and recreational use particularly in harbor areas, and is working with Federal agencies and local units of government to regulate these activities in order to reduce these conflicts.

U.S. Department of Transportation
Federal Highway Administration
(W.G. Emrich 12/22/77)

Comment	Response
Earlier comments forwarded by the Michigan FHWA Division apparently were not received and therefore, not responded to in the preparation of the DEIS. The present comments include most of these earlier concerns.	An effort has been made to respond to these comments in this FEIS. Not all comments, however, were able to be accommodated in the FEIS.
These comments also apply to the development of Federal regulations concerning Federal Consistency with Approved Coastal Management Programs issued as proposed regulations.	Correspondence regarding proposed Federal consistency regulations should be directed to the Policy and Evaluation Section, Office of Coastal Zone Management.
The MCMP is confusing and inconclusive in describing procedures and mechanisms by which Federal agencies are to obtain a review and consistency concurrence on all types of Federal assistance projects (or if all types of projects require such a review).	Chapter VI has been rewritten to clarify the state's consistency procedures for Federal assistance projects.
The reliance on the A-95 review process is unrealistic because it is conducted at such an early stage of project development that detailed location and design information may not be available. Recommd use of existing EIS/Negative Determination process for analyzing consistency of major actions, and, A-95 or "general permit" for non-major actions.	The state will rely on the environmental impact statement process for determining consistency of major state actions directly affecting the coastal zone and A-95 review for non-major actions at all stages of project development unless there is sufficient information available for a consistency determination of the overall project. If this is the case, only one consistency determination is required. Federal agencies shall consider all development projects within the coastal zone to be activities significantly effecting the coastal zone. All other types of activities within the coastal zone are subject to Federal agency review to determine if they affect the coastal zone.
Express concern that projects which undergo multiple consistency reviews will be found consistent with the MCMP in early reviews but inconsistent in late reviews. We are also concerned that multiple A-95 consistency reviews for all project phases would overload various review agencies and cause project delays.	Federal consistency regulations 15 CFR 930.37 require that for Federal activities where Federal decisions will be made in phases based upon developing information, a consistency determination will be required for each major decision. However, where a Federal agency has sufficient information to determine the consistency of a proposed development project from planning to completion, only one consistency determination will be required.
Recommend that use of term "major action" be made consistent with NEPA and Circular A-95 use. Request response regarding whether or not MCMP will accept the "major action" determination of the FHWA. What is to be done for the consistency determination and concurrence/objection for non-major actions.	Chapter VI of the FEIS indicates that Michigan's use of the term "major action" corresponds to the use of that term pursuant to the National Environmental Policy Act. Therefore, Michigan will accept the "major action" determination of the FHWA if it adheres to the use of the term as defined by NEPA and Circular A-95. For non-major actions, consistency determination and concurrence/objection are made through the A-95 process. All Federal development projects in the coastal zone are considered activities significantly affecting the coastal zone. All other types of activities within the coastal zone are subject to Federal agency review to determine whether they significantly affect the coastal zone.

FHWA (cont)

Comment	Response
Columns three and four in Figure 6G have been reversed.	This Figure has been deleted from this FEIS.
Recommend that consistency apply to acquisition and construction phase of highway projects with regard to vetoing funding assistance; DOT does not agree that funding assistance for earlier project development phases (planning and programming preliminary engineering and final design) should be halted by consistency objections.	In cases where the Federal agency responsible for the project has sufficient information to determine the consistency of a proposed development project from planning to completion only one consistency determination will be required. Depending on that determination the transportation planning, environmental assessment, and preliminary engineering processes may or may not receive funding. Where major Federal decisions related to a proposed development project will be made in phases based upon developing information, each phase will be subject to consistency determinations. This means that the early phases of highway planning will still be subject to review and determination for Federal consistency, see 15 CFR 930.37.
The consistency criteria are not well-defined in the MCMP It will be difficult for FHWA to determine if its projects are consistent or not with the MCMP Chapters V and VI are loose and not definite in proposing standards by which the FHWA state transportation agency could evaluate projects for consistency.	The MCMP policies are the criteria Michigan will use to determine Federal consistency. These are contained in Chapter III of this FEIS. Federal consistency procedures have been clarified in Chapter VI.

U.S. Department of Transportation
St Lawrence Seaway Development Corporation
(Robb 11/30/77)

We are primarily interested in promoting commercial navigation on the Great Lakes - St. Lawrence Seaway System. We are satisfied that the MCMP contains adequate port and shipping considerations.	No response necessary.

U.S. Environmental Protection Agency
(Walker 1/17/78)

Comment	Response
Areas of Natural Hazard to Development - Shoreland Erosion Areas (III-15) In the section "Statement of Policy", the EIS indicates that the State will not issue permits for activities where it can be determined that the use or activity will likely be damaged by shoreline bluff erosion. It should be added that permits would be denied for activities which may compound erosion problems in the immediate or adjacent areas.	This change has been made.
Consideration should be given to encouraging rezoning of high risk areas as developments or residences may be vacated. Mitigation in the form of relocating structures which continually experience property damage due to erosion should be assessed.	The MCMP will provide technical and financial assistance to illustrate the merits of rezoning high risk erosion areas, see the action program which specifically provides for this in addition to the manadatory setback requirements. Moreover another one of the action programs of the MCMP will explore the purchase of specific coastal areas with erosion histories in order to eliminate the cycle of rebuilding in hazardous areas.
It was indicated (page III-26) that counties, townships cities or villages may adopt and enforce State-approved building setback restrictions. It should be explained if localities may adopt more restrictive standards than those promulgated by the State.	Localities may adopt more restrictive standards if there is a reasonable basis for doing so.
In the section, "Statement of Policy", it appears that for issuance of permits for Shoreland Environmental Areas, the burden of proof that environmental harm may occur is on opponents to the permit rather than on the applicant. We believe permit issuance should be contingent upon the applicant's ability to demonstrate that no significant environmental harm will occur. Unless guidelines for permit issuance exclude harmful activities, the approach to the permit program described in the DEIS may not be restrictive enough to prevent environmental harm. Also, it should be explained if such permits will be subject to the State EIS process.	The applicant must demonstrate that the proposed activity will not cause environmental damage. See for example, the discussion of the Shorelands Protection and Management Act, p. C-6 of the DEIS (this appendix is not published in the FEIS). As to the second question such permits will be subject to the EIS process for all major activities that may have a significant impact on the environment or human life.
In the second paragraph under "Specific Concerns" (p. III-30), it should be included that there has been a failure to recognize the value of coastal ecosystems for water storage and flood control.	This concern has been added to this particular section of the document.
The type of use restrictions on new construction in designated shoreland Environmental Areas that would be used in implementing regulatory decision making criteria should be explained.	Appendix C of the DEIS (p. C-6) provides an indication of some types of uses regulated or restricted under the Shorelands Protection and Management Act such as: filling and grading or similiar soil alterations, activities which contribue to soil erosion and sedimentation; drainage alteration; vegetative removal; placement of structures, etc.

Comment	Response
Our same "burden of proof" comment on issuance of permits for Shoreland Environmental Areas applies to issuance of permits for activities on Great Lakes Islands. Under "Specific Concerns" the adequacy of sewage treatment should be included along with the quantity and quality of drinking water supply. It should be included in the section. "Statement of Policy", that developments must satisfy existing Federal standards and criteria with respect to controlling air and water pollution etc., as well as State standards and criteria.	As to the first point see the response above. The suggested addition to the specific concerns has been made. A statement has been added to the document reflecting this point in the policy section under mineral and energy resource areas.
In the section on "Regulatory Decision - Making Criteria", it is indicated that it will be State policy that proposed mineral or energy development activities must be explored... according to guidelines as specified in program instruments such as plans, permits and other agreements between the State and private industry. The types of other agreements between the State and private industry should be clarified.	This portion of the document has been revised, the reference to "other agreements between the state and private industry" was alluding to conditions or modifications placed upon certain proposed activities with respect to the issuance of a permit or an approval of a plan.
Under "Specific Concerns", it should be noted that there is a lack of guidance for conflicts which may arise in assessing various development alternatives which involve trade-offs between prime agricultural and wetland impacts.	Conflicts which may arise between this category and sensitive areas will usually be resolved with the application of the various statutory mandates that underlie the entire program, in this case it would be statutes designed to protect sensitive areas. For example, a proposed development or certain agricultural practices within the coastal zone could, if permitted, adversely affect a sensitive area such as a wetland or water quality. However, such development would normally require a permit under a variety of State Statutes, e.g., The Shorelands Act or the Soil Erosion and Sedimentation Control Act, and as a result of these Acts the proposed activity could be denied or conditioned to minimize the adverse effects. Consequently, the administration and implementation of the Statutes themselves would act as a major source at providing specific guidance in resolving potential conflicts.
Include under "Specific Concerns" To ensure that new industrial growth is restricted or modified in areas where severe pollutional problems have already been identified or may impact adjacent land uses that are environmentally sensitive or not compatible with industrial development.	Under the revised policy statement of this section this concern is addressed.
"Specific Concerns" section should mention that the need for enlarging canals and channels for deep vessels has to be evaluated on a case by case basis for Michigan harbors and should take into consideration other alternative transportation modes.	In the permit process required under Michigan and Federal Law for such action the development of an EIS would be necessary where both State and Federal law requires that other alternatives to the proposed action be considered.

EPA (cont)

Comment	Response
Under the APC category of ecologically sensitive areas a new subcategory should be added: a marsh area that has been identified as important for filtration of water pollutants and sediment.	Marsh areas that have been so identified may be nominated under the ecologically sensitive category. Since the category is defined to include marshes, the state has made a decision that addig the specific subheading is not necessary.
It should be explained if local authorities can enact and enforce local ordinances or laws that are more restrictive than State guidelines for minimum performance standards in regulating land and water uses within the coastal area.	Local units of governments may usually adopt more stringent requirements if there is a reasonable basis for doing so and after State review.
Does Michigan regulate underground well injection.	Yes, under Act 294 of P.A. of 1965, as amended, and Act 61 of P.A. of 1939, as amended.
Page V-13, Figure 5.A. Add the U.S. Environmental Protection Agency to the list for Associated Federal Agencies for Energy Production and Transmission Transportation, and Recreation uses. Also, Regional Waste Disposal Facilities should be added to the "Associated Facilities" column.	The listing of Associated Federal agencies has been deleted however, in Chapter VI under examples of related facilities regional Waste Treatment plants are cited.
Item 2. U.S. EPA programs for 201 and 208 planning for grants for construction of treatment works and areawide waste treatment management (P.L 92-500) respectively, should be discussed in more depth.	Pursuant to Section 307(f) of the CZMA the State Program will fully incorporate into the program all existing State laws which address the mandate of the Federal Clean Air Act and Water Act. See discussion at end of Section on direct and significant impacts in Chapter V. Furthermore, the program will incorporate any changes modifications or amendments to these programs or plans (such as SIPS or 208 plans) developed pursuant to the Federal Act. The MCMP recognizes the national interest in air and water quality in Chapter VI and in the Director's Letter Appendix B and that the State air and water quality program and future modifications to them are a fundamental component of the MCMP. In addition, all activities within the coastal area will be consistent with these Federal/State standards.
It should be explained if NEPA will apply to any aspects of the Coastal Program once it is implemented.	Whether an EIS will be required in the future will depend on the circumstances and magnitude of the proposed changes to the MCMP.
Statements made in the first and second paragraph that "Implementation of the Program will influence positive trends..." and "Implementation of this coastal management program will insure that... mistakes are not repeated..." are vague and can not be substantiated and, therefore, should be deleted.	This Section of the document has been revised, it is felt however, that the overall effects of implementing the program will be positive.

EPA (cont)

Comment	Response
In the impact statement itself some recognition should be given to the economic value of wetlands in their function for water purification and flood control.	This portion of the EIS has been revised and such recognition is now provided.
It should be recognized that the Coastal Program could give impetus to development that will result in some adverse impacts associated with growth.	This section of the document has been revised, and it is noted that there will be some negative impacts in the short run that will occur from implementing the program.

Federal Energy Regulatory Commission
(Curtis 1/13/78)

The DEIS document does not describe how the Program will function.	The DEIS document has been revised to more clearly state how the MCMP will function. See Chapters V and VI in particular.
The DEIS document provides no indication that State laws or regulations will be tailored to the MCMP, or that State agencies administering the various programs will adhere to the MCMP. It appears that approval of the MCMP will result in no significant change in present State practices concerning coastal zone matters. Federal agencies have been given only an outline of a coastal management program from which to determine all the possible effects that could result from implementation of that program.	The Michigan legislature has enacted a number of different laws which address all significant concerns in the Michigan coastal zone, 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. What is needed in Michigan is the establishment of a greater emphasis on effective implementation of these programs in the Great Lakes Area. All 27 different regulatory programs that are incorporated as part of the MCMP are administered directly by DNR or by DNR in conjunction with one or more other State agencies. Several key mechanisms will insure adherence by other state agencies to the coastal policies, which are based upon existing State law, including the Governor, the MERB, the SAW Committee, and the availability of judicial review under the Michigan Administrative Procedures Act and MEPA. Approval of the MCMP will provide funds which will enable Michigan to provide this Great Lakes coastal focus to the implementation of these regulatory programs.
The planning and siting procedures in the MCMP for new electrical energy facilities are restrictive and lack the broad considerations required to meet national interests in the siting of facilities which are other than local in nature. Essentially, the planning and siting State statutes should be modified to include consideration of interstate dependency of existing and new electrical energy facilities in Michigan with similar facilities in adjacent states. We strongly urge that, for the purposes of regional and national interest in power plant siting, the discussion on Page VI-46 of the Main Document include an effort by the State to consider the planning and forecasting activities of the East Central Area Reliability Coordination Agreement Organization. This organization consists of a membership of 23 major electric utilities covering eight states, including Michigan. It provides an overview of the planning and operating activities in the region with respect to the reliability of electric generating and transmission facilities.	This comment refers to two separate requirements of the CZMA. One is the need for a state to provide for adequate consideration of the national interest; the other is the need for a state to assure that uses of regional benefits or facilities which are other than local in nature are not excluded from the coastal zone. The laws and regulations upon which the MCMP is based are not restrictive to any specific use. Any use or activity is permissible in the Michigan coast so long as it meets the standards under the law of the state. (See comments below). Planning and siting procedures are those established pursuant to state regulatory authority for the protection of air, water, and other resources. In addition, all major state actions affecting the environment requiring state permits are reviewed by the Michigan Environmental Review Board (MERB). The Board makes recommendations to the Governor on the merits of these proposed actions. These recommendations are made on the basis of alternatives discussed in the environmental impact statements developed for the proposed action. As

FERC (cont)

Comment	Response
	indicated in the FEIS, the MERB is directed by Executive Order to consider all interests in decisions relative to resources protection and management. This encompasses interstate dependency of existing and new electrical energy facilities in Michigan with similar facilities in adjacent states.
	The FEIS has included the FERC recommendation that the program include a discussion by the state to consider the planning and forecasting activities of the East Central Area Reliability Coordination Agreement (ECAR) Organization. This is indicated in Chapter III in the state's energy needs. It is also referenced in Chapter VI in which Michigan indicates it will use ECAR data in consideration of the national interest in energy facilities and needs.
Concern that state conform to six months time period in complying with 307(c)(3)(A).	The State intends to fully comply with the requirements of the CZMA see discussion on Federal consistency in Chapter VI.
Concern that Figure 6.3 implies that internal processing by a Federal agency for a license or permit is not to be done while a state is reviewing same.	For clarification on this point see the discussion in Chapter VI.
The concept of designating certain coastal areas as APC's if properly implemented, should aid in balancing of development and preservation interests that are advocated by OCZM However there is some concern about the mechanism for APC nominations as described in the MCMP It is not clear how this process will accept nominations or concerns from the energy companies How will proposed sites for electric power plants and interstate gas pipelines be handled by the APC process?	The process for public nominations for APC designations is outlined in the inventory and review description of Chapter IV. Copies of the specific forms for such nomination are supplied in this chapter as are descriptions of the types of areas which may be nominated. All energy companies are encouraged to place in nomination as early as possible sites that may be used for energy production or transmission.
Within the "Private Sector" only the Edison Electric Institute received copies of the MCMP and DEIS documents for review and comment. Copies of these documents should be sent to Consumers Power Company and Detroit Edison Company for review and comment.	This is incorrect Both Consumers Power and Detroit Edison have received the DEIS and they have commented upon it.
Guidelines should be developed and presented for the designation of energy resource areas as areas of natural economic potential.	The FEIS document has been revised to include such areas under the natural economic potential category.
Change "Federal Power Commission" to "Federal Energy Regulatory Commission." Also the reference to General Services Administration should be a separate agency listing.	Changes have been made in Chapter VI.
Changes in energy responsibilities.	Changes have been made in Chapter VI.
Change Appendices of DEIS pp. A-63 and 64 to reflect current responsibilities of the Commission.	The appendices have been changed, although they will not be reproduced as part of the FEIS.
The following information should be provided:	
- specific legal or physical descriptions of the proposed boundaries of the coastal zone;	- A description of the coastal boundary is provided in Chapter II.

FERC (cont)

Comment	Response
- a description of the permissible uses proposed for each APC and for the rest of the coastal zone;	- The MCMP does not prohibit any uses per se from the coastal zone. It may condition and in some instances prohibit certain uses in certain locations because they have a direct and significant adverse impact on the coast. These direct and significant uses are discussed in Chapter V and the policies that address them in Chapter III. The APC process which is discussed in Chapter IV provides an additional avenue to focus on the use of certain specific coastal areas All APC's and the uses permitted within them will be managed in accordance with the MCMP policies.
- a detailed discussion of how Michigan has addressed the concept of national interest. OCZM has indicated that each state has particular areas of national interest concern and, therfore, the generalized list such as that shown in Figure 6.F of the MCMP is inappropriate.	- A detailed discussion on consideration of the national interest has been provided in the revised Chapter VI.
- The Coastal Zone Management Act specifically mentions energy facilities in Section 305(b)(8). Any discussion of the national interest should include a section directly addressing the siting of energy facilities within Michigan's coastal zone area.	- The siting of energy facilities is specifically discussed in Chapter VI along with other areas identified as being in the national interest. Moreover, the planning process for energy facility siting (305(b)(8)) will link the consideration of national interest with the planning element.
- Request that the document discuss the proposed mechanism for the determination of the consistency of Federal license and permit applications describe the equivalent state permit procedure; identify the standard to be used when equivalent state permit procedure will not be used.	- See Chapter VI on Federal consistency where these points are addressed.

U.S. Nuclear Regulatory Commission
(Ryan 1/12/78)

Comment	Response
This Program is addressing only the 1972 CZMA, and does not address the 1976 amendments to the Act. Michigan has no present agency with statutory authority for energy generation facility siting. Provision for this authority would considerably strengthen the Program.	The Department of Natural Resources has major responsibility for determining the appropiateness of a proposed energy site for energy generation. It exercises this authority as a result of several different statutory mandates, see for example the discussion in Chapter III under energy and mineral resource areas, also Chapter V where the management of direct and significant uses is discussed. In addition note the DNR's role in ensuring the consideration of national interest in energy development as outlined in Chapter VI. Other state agencies which work closely with the DNR in this area are the PSC and the State Energy Administration. Moreover, each of these agencies is working closely with the DNR in developing the energy facility planning process pursuant to the requirements of Section 305(b)(8) of the CZMA.
One category of Michigan Coastal Areas is Areas of Natural Economic Potential which embraces mineral and energy resource uses. Then in the discussion on APC's there is a category Areas of Natural Economic Potential, that mentions mineral and energy resources but speaks only to mineral extraction. This omits areas for energy facility siting; this omission should be corrected.	Changes have been made in the document (see Chapter IV, figure IVb) to add the category under Areas of Natural Economic Potential in accordance with the reviewers comments.
Need to base consistency determination on something other than the NEPA-EIS because NRC does not issue its DEIS within 6 months of receipt of an application.	The NEPA/EIS reference applies to the MCMP's proposed method for continuing to consider the national interest during program implementation. The MCMP will use the Federal consistency mechanisms described in Chapter VI to implement the consistency requirements with NRC.
Generally, the Federal consistency discussion would benefit from a clarification of when (1) Federal actions, (2) Federal permits, and (3) Federal grants and aid are referenced.	In line with this comment this portion of the document has been revised to provide added clarification (see Chapter VI).
The NRC mission and official agency contact as presented in the appendix should be changed.	Corrections to the appendix concerning NRC's mission and contact have been made, however, the appendix is not reprinted in this FEIS.
The environmental impact statement follows the content of the program. and therefore contains very little that is relevant to NRC. However, according to current usage the phrase "positive impact" means that there is an impact, whether good or bad. Positive impact is used in this EIS to mean good or beneficial impacts (see Page VII-3 and elsewhere) To be consistent with current EIS usage, it should say something like "positive impacts that are beneficial to the coastal area."	OCZM has checked with the Council on Environmental Quality that agency informed OCZM that the phrase as used in the document is correct.

Monroe County Planning Department and Commission
(Richard G. Micka/Max M McCray 1/11/78)

Comment	Response
The state should spell out the communication and coordination process that is to be implemented in the MCMP.	Chapter V clarifies the local role during program implementation. Chapter IV also spells out the critical role that local participation will play in the APC process in determining consistency of nominated sites for APC designation.
Staff feels that communities and counties affected by state or Federal plans should be involved at the beginning of the program or planning process and not at a time when their comments would have little or no bearing on what has already been determined.	OCZM, the Natural Resources Commission, and DNR officials agree. Starting with the development of the MCMP in 1975, the state has made every effort to involve the local and regional governments. Since that time, local governments were relied upon to accumulate data and inventory information on coastal issues and problems. In a more formalized setting local involvement has been and will be represented through the Citizens Shoreland Advisory Council and the nomination of APC's. In addition, Michigan has held 20 public meetings and 13 public hearings on the program throughout the state. Documentation in this regard can be found in Appendix E of the Draft Document published 11/77.
Staff is concerned about state and Federal coordination and communication among its own agencies, especially now, in areas nominated as having particular concern where conflicts arise over economic vs. ecological concensus such as in the Port of Monroe.	The state has developed numerous lines of communication both formal and informal to minimize conflicts between the state and Federal agencies. (See for example the discussion in Chapter VI, and note that the state has developed memoranda of understanding with several Federal agencies including the U.S. Army Corps of Engineers.) Within the state several mechanisms such as the SAW Committee are available to improve coordination and communication. For elaboration on these mechansims, see Chapter V. As to the specific concerns over the Port of Monroe it should be noted that it has been nominated for APC designation. In considering the most appropriate plan for the Port the state will work closely with local governments and Federal agencies such as the Corps of Engineers and the U.S. Maritime Administration.
Staff feels that Monroe's percentages of ownership and land use are not adequately shown when grouped with Wayne, Macomb and St. Clair Counties and the City of Detroit. Also, Lake Erie's coastline and land use figures should have the same individual status as the other three Great Lakes which touch Michigan.	Revisions have been made to the document to include this information. See p. 2 Chapter II of the FEIS.

Monroe County Planning Department and Commission (cont)

Comment	Response
Commission staff wants to comment on lack of current local nomination data on areas of particular concern. They were present in the previous draft of the MCMP, except they were not the latest nominations but rather those of 1976. Staff feels these are extremely important in the Federal review process, especially in areas where Federal grants may be used. Areas nominations of priority interest to this region are i. Port of Monroe ii. North Shore of Sterling State Park iii. Woodtick Peninsula	The state staff is presently updating all information on currently nominated APC's and is sending that information to all RPC's in order to double check on the accuracy of APC information (nominators, management recommendations, etc.). Chapter IV explains how Federal agencies will be notified of APC nominations and designations so that applicants for Federal licenses and permits are aware of APC use priorities and so that Federal agencies are advised of assistance that would be welcome in the area. The MCMP has not designated any nominated APC's at this time. When nominated APC's are designated, notification will be given to affected parties.
Staff feels that the intent of the MCMP is geared to local participation and input... It is hoped that this is still the intent of the program.	It is.
Endorse the MCMP with the comments above for the economic and ecological well-being of the county, this state and the United States.	No response necessary.

Northeast Michigan Council of Governments (NEMCOG)
(Lew Steinbrecher 12/20/77)
(Forwarded comments from the public hearing in Traverse City on December 14, 1977.)

Encourage the Michigan Department of Natural Resources to provide technical and financial assistance to coastal communities to foster coastal management.	The action programs in Chapter III and the role of local government described in Chapter V show the program's provisions for assistance to local governments.
NEMCOG policy statement "The Northeast Michigan Council of Governments believes that just compensation in tax relief and/or purchase of development rights be given to any property owner whose use of land is unduly restricted through the development and implementation of the Federal Coastal Zone Management Act of 1972 (P.L. 92-583) and the Michigan Shorelands Protection and Management Act of 1970 (P.A. 245). If the Department of Natural Resources, as mandated by the Michigan Legislature designates certain land for preservation, provisions should be made for the fee simple acquisition of all designated property by these agencies and bodies representing the public."	The enforceable policies of the MCMP are based upon State law. They do not call for arbitrary or unreasonable restrictions being placed upon the use of property. Private property rights are protected under the Federal and State Constitutions and the MCMP will not erode or eliminate these protections.
The APC process is achieving positive results in implementing the MCMP.	OCZM agrees.
The approval and implementation of the program will do much to preserve, protect and manage this state's valuable coastal resources.	OCZM agrees.

Southeast Michigan Council of Governments
(Michael Glusac 12/30/77)

Comment	Response
Endorse intent of MCMP but cannot fully evaluate effects on state policies and programs.	Chapters III V and VI have been expanded to clarify these effects. Also, the environmental impact statement, Part III. addresses this concern.
Endorse coordination elements of programs will observe impact of same as potential effectiveness cannot be ascertained using available information.	Chapter VI has been added to clarify coordination responsibilities for purposes of consultation, consistency, and consideration of national interest. OCZM will monitor the effectiveness of these mechanisms during program implementation.
Environmental impact statements or negative declarations compiled by state agencies proposing projects affecting coastal areas should be submitted to areawide and local interests in the affected area.	The Michigan EIS process in following the Michigan Environmental Review Board (MERB) guidelines makes every possible effort in obtaining the widest review and comment on proposed actions requiring an EIS. Part of that process involves distribution of an EIS to areawide and local interests in the affected area along with public hearings. Furthermore, MERB maintains a list of interested individuals, groups, or representatives of governmental units to which a monthly EIS status list and Board agenda is distributed. In order to be placed on the mailing list contact: MERB, P.O. Box 30028, Lansing, Michigan 48909.
The state also should submit to local and regional officials for review the area descriptions and management plan for State legislated GAPC's.	On the request for legislated APC's, changes in the areas and the management plans will be the subject of public hearings. In the case of nominated APC's, affected property owners and local jurisdictions will have the opportunity to endorse nominations or veto designations. Also, regional agencies will continue to inventory and review APC's during the program implementation.

West Michigan Regional Planning Commission
(Daniel E. Strobridge 12/30/77)

Policy statements are very good.	No response necessary.
The need for local participation should be emphasized in the document.	Chapter V clarifies the local role during program implementation Chapter IV also spells out the critical role that local participation will play in the APC process and in determining consistency of nominated sites for APC designation.

American Petroleum Institute
(Sawyer 1/17/78)

Comment	Response
The cover letter of the Governor of Michigan transmitting the Coastal Management Program and DEIS to NOAA indicates that the Michigan DNR has been gubernatorially designated as the lead agency. However, there is no reference to an executive order, executive directive or any other type of formal document by which the Governor accomplished the designation of the DNR as the lead agency. Article 5, Section 2 of the Michigan Constitution and MCLA 16.101 et seq. govern the manner in which the Governor must deal with the Department of the Executive Branch of Government. Since no formal document accomplishing the designation of the DNR as lead agency has been furnished, it is impossible to determine whether the requirements of state law were satisfied in this regard.	The letter of transmittal to NOAA is sufficient for designating a State agency. The Governor's authority under Article 5, Section 2 of the Michigan constitution is quite extensive and his exercise of authority in this manner was pursuant to the Constitution and statutes and normal State practice.
It is questionable whether the Governor of Michigan has the legal authority under State law to designate a single agency to manage the State's coastal program and to give it the power to resolve conflicts between other state and local agencies in the coastal area without legislative approval.	Under Article V, Section 2, Michigan Constitution, certain powers were granted to the Governor concerning the reorganization of State government. Pursuant to this charter the Governor issued Executive Order 1976-8 which allocated and assigned broad functions to the Department of Natural Resources (DNR). That Executive Order was not overturned by the legislature as specified in the Constitution and therefore the DNR does have the capacity under these broad functions and powers to resolve conflicts as outlined in Chapter V. The Governor's designation of the DNR as the lead agency therefore was done in recognition of the DNR's broad authority and powers.
The Circuit Court of Ingham County has recently held that the provisions of the Executive Order creating MERB and MERB's own rules could not serve as the basis for a cause of action by private citizens to enjoin an activity licensed by the State. At least in the opinion on one Michigan Court, MERB does not have the legal status to accomplish what the Michigan Coastal Program expects it to do.	Even assuming that this statement reflects the intent of the lower court's partial summary judgement it is not controlling cf., Highway Comm. v. Vanderkloot, 392 Mich. 159 (1974).

API (cont)

Comment	Response
When evaluating the MCMP in regard to the CZMA requirements (Sections 306(c)(5) and 305(b)(6) on organization) it is difficult to ascertain how these requirements will be satisfied. Chapter VI (of the DEIS) makes these administrative processes and authorities appear complete, but they are lacking severely in specificity.	The MCMP has been revised to more clearly state the organizational structure that will be used to implement the management program. However, it should be understood that the Department of Natural Resources, Division of Land Resource Programs, is the lead coastal management program agency, and it either directly administers or plays a major role in the administration of all significant state coastal programs and authorities. See Chapter V for further elaboration.
The MCMP does not describe which agency or department will receive and process permit applications for coastal activities and what permit information will be required.	A description of the permit process is provided in Chapter V and see Figure V-E which is a typical example of how a permit is processed.
The MCMP does not discuss what administrative process will be used by the lead agency to certify consistency with local, regional and state regulations.	The administrative procedures for certifying consistency is outlined in Chapter VI.
MCMP does not describe how permit conflicts will be resolved on the local and state level.	See discussion of conflict resolution and intergovernmental coordination in Chapter V on organization.
A permit applicant should be able to determine how his application will be processed in the "networking" system and by whom.	See response to similiar comment above.
A timeframe for processing permits should be designated. Because six months are allowed for the state to act on an applicant's consistency determination, the states should be expected to set the same or shorter deadlines for themselves and their localities on applications only requiring state permits.	A primary objective of the program's implementation is to improve the coordination and reduce the time involved in permit reviews. The Program's progress in this regard will be evaluated specifically after the first full year of implementation. Permit review deadlines will be considered as part of this evaluation.
The proposed MCMP does not contain the required degree of specificity or predictability for an applicant to properly evaluate whether an application is certifiable.	The criteria for Federal consistency determinations have been revised. See Chapter VII. Also, as a practical matter, any applicant for a Federal license or permit selected for review by Michigan should obtain the views and assistance of the Division of Land Resources Programs' Coastal Management Program Unit.

API (cont)

Comment	Response
The agency which acts on consistency certifications must have authority to administer land and water use regulations, control development in accordance with the management program, and to resolve conflicts.	The "state agency" designated pursuant to Section 306(c)(5) of the CZMA or an agency which has been delegated consistency review authority may act on consistency certifications (see 15 CFR Part 930, Section 930.18).
The petroleum industry is vitally concerned with providing for the proper location of coastal dependent energy facilities.	OCZM and the State of Michigan share similar concerns.
No program is approvable without satisfying the requirement of Section 306(c)(8) of the CZMA. This means that the national interest in energy facility planning and siting must be dealt with adequately in the original program submission. The Michigan DNR has not yet addressed this requirement and promises only to develop a planning process for the siting of energy facilities.	The MCMP meets the requirements of 306(c)(8) with regard to energy facilities in particular see Chapter VI where: . The state has identified energy as a category of national interest in its program; . The State has established a process for continued consideration of the national interest in energy facility by consulting with Federal agencies and reviewing Federal legislation, by consulting with groups from the private sector, by working with the Energy Administration and PSC, through formal policy statements of the Michigan Natural Resources Commission, review of environmental impact statements by the Michigan Environmental Review Board, and by the actions of the Department of Natural Resources in the administrtion of its regulatory and resource management responsibilities. It should be noted that the Director of the DNR has directed the agencies within the DNR to consider the national interest in the discharge of their responsibilities. See Director's Letter #17, Appendix B. The state has indicated concerns over energy facilities and supplies and has articulated state coastal policies and action programs with regard to energy, see Chapter III. The State will use existing conflict resolution mechanisms detailed in Chapter V of this FEIS to resolve disputes on matters concerning the national interest in Michigan. With respect to the planning process required under 305(b)(8) a state must describe the process for continued consideration of energy facilities during program implementation; indicate where energy facilities are reflected in the substance of the management program; indicate when and where energy facilities may conflict with national interests in resource conservation and how the program resolves or proposes to resolve such conflicts; and describe the status of the energy facility planning process required to be developed pursuant to the Act. The State is presently collecting

API (cont)

Comment	Response
	data on the expected supply and demand for energy in the development of the planning element. API's assistance and any information it may have pertaining to energy resources that would support the Michigan effort to develop a viable planning element would be greatly appreciated. Michigan intends to complete the planning element by October 1, 1978, as required by the CZMA.
API believes the program should indicate the criteria by which energy facilities which are greater than local in nature are to recieve adequate consideration for siting in the coastal zone. API contends the criteria must be based on a specific policy and backed by legal enforcement procedure.	Criteria for energy facility siting in the coastal zone are based on the substantive requirements of state authorities. The policy statements on energy resources and resource protection are also based on existing state authorities. Criteria issued pursuant to state authorities are summarized in Appendix C of the DEIS and policy statements on energy have been clarified in the FEIS. The FEIS does not include this appendix.
The DEIS does not establish a method to assure protection of national interests in connnection with the location of coastal-dependent energy facilities.	Program approval regulations do not require a method to assure protection of national interests in coastal-dependent energy facilities. They do require that planning for and siting of such facilities be given adequate consideration. The process for such consideration is discussed in Chapter VI.
API believes Michigan has attempted to use its method for assuring the uses of regional benefit not be arbitrarily excluded from the coastal zone as a method for consideration of the national interest. This method is considered inadequate for the purpose of protecting the national interest and uses of larger than local impact.	The program approval requirements for uses of regional benefit and consideration of the national interest are different. Michigan has attempted to illustrate this distinction in the FEIS more clearly than was done in the DEIS. See Chapters V and VI of the FEIS for explanation of these methods.
Michigan's proposed method for adequate consideration of the national interest is questioned. Use of the Michigan Environmental Protection Act is not sufficient under OCZM program approval requirements with regard to protecting the national interests. The Michigan Environmental Review Board and the A-95 review process have no statutory authority and cannot be used for legal enforcement of the protection of the national interest.	Program approval requirements say that a state must adequately consider the national interest in planning for and siting of facilities. The FEIS has been substantially revised to demonstrate more clearly this process for considering the national interest. To begin with API should note that the FEIS outlines other important mechanisms to be used for considering the national interest beyond those cited. These are the Natural Resource Commission and the Department of Natural Resources. The Natural Resources Commission is clearly mandated to consider all interests in its decision on DNR program policy. It provides that any citizen, interest group, private firm, etc. may appear before the Commission to present views on matters pertaining to Department policies, actions or contested case hearings. It has also gone on record in its decision-making as acting in the national interest in permitting energy development within state forest lands.

API (cont)

Comment	Response
	The DNR has been directed through a "Director's Letter" to consider the national interests in carrying out all its administrative responsibilities. The Standing Committee on Shoreland and Water was organized by the DNR and is comprised of nine state agencies including the DNR. Its recommendations on priority projects and activities for the program will be influenced by the DNR considertion of the national interest.
	The Michigan Environmental Review Board (MERB) considers all interests in making decisions as to state actions subject to environmental impact statements. The Inter-Departmental Environmental Review Committee (INTERCOM) performs the initial review of these impacts statements and as such is required to consider all interests in its recommentation to the MERB.
	The Michigan Environmental Protection Act through its broad mandate to consider all impacts on the environment allows standing for any person to seek judicial relief for damage to the environment, including the human environment.
	A-95 review will be a method used in determining consistency of Federal actions with state coastal policy and not as a method of considering the national interest.
	API should also note that the DNR is a member of INTERCOM, and MERB and will provide where necessary national interest considerations in the decision making of the committee and board.
DEIS states that delineation of the coastal zone boundary is not complete and therefore it is premature to ask for Federal program approval by NOAA.	The coastal zone boundary is final; at the time of the issuance of the DEIS, the boundary criteria were final; the actual mapping of the boundary was not complete since the State was in the process of reviewing the boundary maps compiled by the coastal regions planning agencies for consistency with the boundary criteria.
The MCMP should include maps identifying the coastal zone boundary for the entire state. Specific boundaries must be defined in the DEIS to allow citizens and special user groups to determine how they are affected by the program.	OCZM agrees that the coastal zone boundary must be defined to allow citizens, special user groups, and public agencies to determine how they are affected by the Program. However, it is impossible to include boundary maps in the DEIS or FEIS for the following reasons: (1) the variability in scale of existing maps of coastal areas; (2) the scale of map necessary to make the boundary line meaningful with respect to land area covered would be very large; (3) the volume of any document depicting 3200 miles at a meaningful scale would be extremely large. Therefore, the state has tried to indicate the boundary criteria as specifically as possible and indicate the time required for the state to make a

Comment	Response
	determination of whether a piece of land is within or outside the coastal boundary. The boundary maps are also available for public inspection or purchase from the state or appropriate coastal regional planning agencies.
The MCMP has designated a few legislated APC's (which incidentally are not shown on programs maps), but DNR is still in the process of approving nominated APC's. As a consequence, public or private groups cannot determine from the Michigan DEIS whether or not they will be affected by inclusion of additional (nominated or as yet un-nominated) APC's in the MCMP.	Under the legislated APC's well over 160 sites have in fact been designated, in addition about 50,000 acres under the Farmland/Open Space Act and 197 miles of high risk erosion and 100 miles of environmental areas have been designated (see Chapter IV where these figures have been added). The general location of these APC's have been provided on maps in Appendix D of the DEIS. APC nominations and designations will be ongoing in Michigan. However, there are as indicated in Chapter IV two sources of APC designation. Legislated APC's that are designated as a result of specific legislative enactments. Each site under these categories will be identified by the DNR. The criteria imposed for permissible uses of these APC's is provided by the statutes, appropriate notice, hearings and if necessary, judicial review are available. Publicly nominated and designated action APC's, i.e., those that involve funding by the state must, in order to be so designated, have the endorsement of the landowner before a management contract will be effectuated.
The CZMA (section 305(b)(3) states: "the management program for each coastal state shall include ... (a) an inventory and designation of areas of particular concern within the coastal zone." This section of the Act implies that APC's must be designated after inventory has been conducted and before submittal to NOAA for aproval. Before NOAA approves this program finalized maps depicting legislated and nominated APC's should be submitted in the DEIS for public evaluation and comment. Until this is done, this aspect of the program violates the intent of the CZM Act.	As noted above, the legislated APC's are in fact designated which satisfy the CZMA requirements. At present the other source of APC's (publicly nominated) and its process are being implemented. Maps for GAPC's are not a requirement of the Act, however, as indicated above the general location of the legislated APC's is provided in Appendix D of the DEIS. Public notice has been given when any site has been designated under the legislative process, pursuant to Act 306 of 1969 Michigan Law. The opportunity for review, evaluation and endorsement is also provided for all publicly nominated APC's see above response.
The draft statement issued by OCZM has two essential deficiencies. First it fails to provide a balanced and thorough discussion of both the costs and benefits of the proposed action. Second, the DEIS commits itself to one particular course of action-full approval under subsection 306 and fails to meaningfully discuss possible alternatives, including continued program development funding under subsection 305.	The alternatives have been rewritten to clarify the considerations of the Assistant Administrator. The impacts of giving Federal approval to the Michigan Coastal Management Program have been re-evaluated to identify short- and long-term impacts which are positive, negative, and neutral.

Consumers Power Company
(Rittle 1/16/78)

Comment	Response
The "program consistency' requirement of section 307 implies that more than vague statements are required of a coastal zone program. For this statutory requirement to be meaningful and workable, a state program must clearly identify the requirements the program will impose on persons who propose to conduct activities within the coastal zone Until these requirements are identified, the Michigan program should not be approved.	In line with this comment the program document has been revised to more clearly illustrate what authorities will be exercised in advancing the overall MCMP goals. In particular see the revised Chapters III and V where the policies, statutory criteria, and action elements of the program are discussed, also note the revisions to Chapter VI where consistency is addressed and the fact that Federal consistency applies only to the extent of the coasdtal policies. Thus if an issue is not directly addressed Federal consistency cannot be used to reach it.
Although it is aware that the States have been given additional time to develop the energy facility planning programs, the Company is concerned that proper assessments of both the regulatory effects and environmental impacts of the Michigan Program cannot be made until the State has developed its energy facility planning program.	The Congressional intent allowing the States until October 1, 1978, to develop an energy facility planning process was to permit those States which were approved prior to that date the added time to develop an effective planning process. However, it should be noted that in following the requirements of Section 305(b)(8) and Section 923.14 of the regulations the State of Michigan which is developing its planning process at this time will coordinate this element with the overall MCMP. The planning element is designed to complement the MCMP, the effects that it may have on the coastline and the program are now being considered. Public input to this entire process is encouraged, and public hearings on the planning element will be held in the summer.
Several times in Chapter VII, the advantages of Michigan developing its coastal zone management program through "administrative procedures" are alluded to. The use by the state of its administrative procedures to develop a coastal zone management program would have the additional advantage of complying with the Michigan Administrative Procedures Act. The numerous policy statements that are made in Michigan's coastal zone management program appear to fall within the definition of a "rule" under this Act: "'Rule' means an agency regulation, statement, standard, policy, ruling or instruction of general applicability, which implements or applies law enforced or administered by the agency, or which prescribes the organziation. procedure or practice of the agency..." (Michigan Administrative Procedures Act, section 7 MCLA subsection 24.207 (supp. 1977)). According to this Act a rule "hereafter promulgated is not valid unless processed in substantial compliance" with the procedural requirements of the Act.	The MCMP relies upon existing statutory law and regulations adopted pursuant to that law for its enforceability. The program policies are based on this existing legal foundation. The reference to administrative procedure was not intended to convey that it was a rule making function. The MCMP will provide a concentrated focus on coastal issues and an improvement in the State administrative and management processes which will facilitiate a more effetive use of the existing laws and regulations. If at some time in the future it becomes apparent that existing regulations need to be changed or amended then Michigan of course would follow the prescribed legal procedures for making these changes.

Comment	Response
Section 306(e)(2) requires that an approved State coastal management program provide a method of assessing that local coastal zone regulations do not unreasonably restrict or exclude land and water uses of regional benefit." Similarly, section 306(c)(8) requires that a state program provide for "adequate consideration of the national interest" in the siting of facilities which are "other than local in nature." The Company does not believe that Michigan's plan provides these assurances.	It should be noted that the two cited requirements of the CZMA are separate and distinct from one another. The MCMP outlines in Chapter V several mechanisms that will be used to ensure that local land and water use regulations within the coastal zone do not unreasonably restrict or exclude uses of regional benefit. The CZMA does not require that local units of government must provide for uses of regional benefit. It does require that the State ensure that arbitrary or unreasonable exclusions are not made by local governments. Michigan meets this requirement. As to the second part of this comment (adequate consideration of the national interest) the MCMP in Chapter VI provides an extensive discussion of how the national interest was considered in the development of the program and it also outlines the formal processes by which the State will continue to consider the national interest in the future, including the directive to all DNR employees to ensure the ongoing consideration of national interest, see Appendix B.
Need to allow concurrent processing of applications at different government levels.	In response to this comment see the general summary on consistency and the discussion on Federal Consistency (Chapter VI) which has been clarified on this point.
Although it recognizes that states are obligated to develop planning processes for energy facilities as part of their coastal management programs, Consumers Power Company believes that one aspect of energy facility planning, the assessment of energy supplies and expected demand should be left to the Michigan Public Service Commission. The "need for power" is an issue which the MPSC is best suited to resolve. Wasteful and time-consuming duplication of state regulatory efforts under the Coastal Zone Management Act can be minimized if the energy facility planning process developed by the state under this Act is focused primarily on anticipating and managing the environmental impacts that energy facilities may have on the coastal zone.	In the development of the energy facility siting planning process the MCMP is making every effort to eliminate time consuming duplication, which is one of the major objectives of the program. In making the assessment of energy supplies and expected demand the MCMP staff members are working closely with the PSC, the State Energy Administration, Federal agencies and the private sector in developing the planning element. Regulatory authority used to implement objectives of the planning process will continue to be exercised by the agency vested with such authority.
The policy on mineral and energy resource areas overlooks the significant contribution that nuclear power makes to the energy needs of Michigan's deficient energy resources focus of the state's energy policy must be related to those facilities which import energy sources or convert energy sources into forms that are usable by the citizens of the State.	The MCMP specifically recognizes its dependency on outside sources for energy by citing in Chapter III the fact that the state is energy poor. Moreover, within that Chapter the state has extensively discussed the state laws and policies which support the use of its own limited energy resources and the use of its coastline for the location of facilities which convert energy sources into useable forms. It is imperative in understanding the state's position with respect to mineral and energy

Comment	Response
	development, that none of the policies and laws of the state prohibit the location of facilities for energy generation, including nuclear power facilities in the state's coastal zone. In fact, as indicated in Chapter VI the state has taken a strong and affirmative stance to consider the national interest in energy facilities. The state's policies with respect to such facilities is to ensure that the location of such facilities will not cause the destruction or impairment of important national resources as mandated under various state authorities discussed in the DEIS and FEIS. This position is in full accord with the Congressional intent as expressed in Section 303 of the CZMA of ensuring the wise use and protection of the Nation's coasts.
Although designations of areas as "areas of particular concern" would not have any legal significance under this Act it is possible that such designations will assume much practical importance. Therefore it should be clearly stated that APC designations are (1) legally of no significance, (2) are intended solely to facilitate the identification of the environmental characteristics of coastal areas, and (3) in the absence of conflict of the proposed use with existing statutes or regulations, may not be used to justify withholding any action on a proposed use. In addition. a procedure should be established to inform owners of property when their property has been proposed for such a designation. Finally, the Department of Natural Resources should establish a procedure by which regional and national interests are required to be taken into account in the process of designating APC's.	APC's may in fact have legal significance. Depending on the type of APC's designated and the management scheme designed for each site there may well be specific legal requirements that attach to a particular site, see the response to Detroit Edison's comment. All APC's are not designed solely to identify environmental characteristics of coastal areas, see those categories of sites which may be designated under Natural Economic Potential or Areas of Intensive or Conflicting Use. Conflicts between legislated APC's and existing statutes or regulations would not be possible since legislated APC's are as their name indicates, designated by the Michigan Legislature. Certain proposed uses for publicly nominated sites may be restricted beyond that required by existing law through a contractual arrangement. In those instances the landowner's agreement to such restrictions is mandatory. As to the last point, the DNR has and will continue to consider regional and national interests in all aspects of implementing the program for the designated categories listed in Chapter VI. For a more thorough discussion on that point refer to that chapter's section on national interest. Moreover, Consumers Power is encouraged to provide comments on regional and national interests whenever it deems necessary.

Consumers Power Company (cont)

Comment	Response
The quoted statement (from MEPA) "will not result in pollution ... to the extent" there are feasible and prudent alternatives is not clear, and it provides little guidance to either state agencies or those seeking state agency approvals. The language on which this statement is based is taken from a statutory provision designed to be applied by a court in assessing the reasonableness of a proposed use of the resources of the state. By their nature courts tend to take a broader view in assessing the merits of a controversy. Therefore. the general language of the Michigan Environmental Protection Act may be suited for use by a court. Agencies, however, are likely to view controversies largely in terms of their statutory areas of concern, and may disregard important concerns outside these areas.	An agency does not have the liberty of disregarding important concerns outside of its other statutory mandates. The Michigan EPA is designed to eliminate such a narrow focus. In additon the DNR in accordance with the Act and Executive Order 1974-4 would follow the specific state guidelines on developing environmental impact statements including: evaluation of alternatives to the proposed action that might avoid some or all of the adverse effects, including an explanation of why the agency determined to pursue the action in its contemplated form rather than an alternative and the possible modifications to the project which would eliminate or minimize adverse effects including a discussion of the additional costs involved in such modifications. Furthermore it must be understood that the language in MEPA considering "feasible and prudent alternatives" carries with it substantive requirements that have been and continue to be tested and interpreted in a judicial setting. This common law development therefore includes judicial scrutiny of agency actions in meeting the above cited words, see e.g., Michigan State Highway Comm. v. Vanderkloot, 392 Mich. 159, 220 N.W. 2d 416 (1974).
A statement should be added to the policies that recognized the importance of assuring the continued availability of reliable and economical sources of energy for the state.	The document has been revised to more clearly reflect this concern, see Chapter III under the section on mineral and energy resource areas and Chapter VI where the program document discusses the national interest in energy.
Although the Company recognizes that environmental considerations play a large role in the development of energy facilities it is concerned that additional involvement of state agencies in energy planning could if not coordinated to avoid duplicate efforts, prove counter-productive to the interest of the state in providing "adequate, ... environmentally acceptable, and socially desirable" supplies of energy for the state.	OCZM and the State agree. Consequently one of the major objectives of the MCMP is to supply such coordination and reduce duplicative efforts. One example, with respect to energy facilities is the state DNR development of an energy facility planning process (as required under 305(b)(8) of the CZMA) in close cooperation with the PSC and the State Energy Administration.

Copper County League of Women Voters
(1/17/78)

The Michigan Coastal Management Program insures citizen involvement, protects the rights of individuals, groups and local units of government in land use decisions, and will help to insure that coastal lands are used wisely.	No response necessary.

Detroit Edison
(Dennis Leonard 12/29/77)

Comment	Response
A principal purpose of the State program should be to provide for the economic and social well-being of the people. Thus the program should provide for the orderly growth and development of the State as well as the environment.	OCZM agrees.
The initial purpose of the Program is to provide for the protection and development of Michigan's coastal areas. It cannot be used as a springboard for potentially oppressive and unjustified regulation of inland activities. The result could be that overzealous application of the program would result in economic and environmental hardships being imposed on the residents of Michigan. Moreover such a broad approach to regulation can result in abuses of personal rights, including abuse of due process rights and governmental confiscation of private property.	The MCMP policies focus on coastal issues and problems with the overall intent of insuring the wise use of the coastline. The Program policies and objectives are based upon statutory authorities duly enacted by the State legislature. This Program cannot, and makes no attempt to, undermine the constitutional safeguards which surround the rights of private property owners.
Use activities of direct and significant coastal impact which are proposed to be controlled by the Michigan coastal program are so all-inclusive that there are some which have no possible bearing on the coastal zone. Examples of such uses include the collection of sewage or the construction of a two-acre parking lot in Lansing. Edison maintains that the program must identify the coastal zone and control only uses in the coastal zone so as to be consistent with the legislative intent of the CZMA's Federal consistency certification. This legislative intent is reflected in the Senate Rep No. 753, 92nd Congress, Second Session.	The uses which the program proposes to control are subject to statewide regulation. Several of the authorities that will be used in the program are, however, specific to certain geographic areas or specific resource types. The state has provided specific criteria for the coastal zone boundary many of which are derived from the jurisdictional extent of state legislation. The program will serve to improve the implementation and enforcement of these laws in the coastal area. Determinations of Federal consistency will be made for Federal licenses, permits, and activities significantly affecting the coastal zone, as well as for Federal licenses, permits, and activities within the coastal zone which the state proposes to review for consistency. The procedure for this consistency review is found in Chapter VI of this FEIS.
Although APC's themselves will not constitute a legal restriction to private landowners, there is not assurance under the present program that the APC process will protect private property rights.	The MCMP will in no way undermine the constitutional safeguards of notice and due process with respect to private property rights. It should be understood, however, that legislated APC's will in certain instances impose restrictions on various uses of property. Prior to such action, appropriate legal notice and hearings will be given. Publicly nominated APC's that might involve agreed upon uses for the site through a contractual process would require the concurrence of the landowner. This latter point is now more clearly stated in the FEIS.

Detroit Edison (cont)

Comment	Response
Limit consistency implementation to new uses. Need to define new use.	See general revisions of that section of the document dealing with consistency found in Chapter VI.
There is a failure to develop a procedure consistent with Section 307(c)(3)(A) of the CZMA. The discussion does not inform potential applicants of their duties under the program.	See response above.
Concern has been addressed over use of State permit issuance as state consistency review.	See response above.
There is concern over logic and correctness of Figure 6 J on Page VI-60 specifically, concerned that reviews should occur simultaneously, and that only the issuance of a permit is contingent upon state concurrence.	See response above.

Manistee County League of Women Voters
(Wanda Joseph 1/6/78)

Coastal Zone Management plans must maintain shoreline environmental integrity and protect special habitats and fragile shoreline.	The MCMP incroporates these considerations in its policies. See for example those policies which are designed to protect ecologically sensitive areas in Chapter III.
Provisions for more recreation facilities should be made in a coastal zone plan. Careful thought is important to achieve more public access and protect a recreational site from overuse.	The MCMP recognizes the importance of adequate recreational facilities both in Chapter III where specific policies are developed under Areas Fulfilling Recreation or Cultural Needs. Also, see the discussion in Chapter VI on the state's recognition of the national interest in recreation. In addition, the League should take note that Michigan is now developing its planning element for public access pursuant to Section 305(b)(7) (CZMA) which is designed to help eliminate many of the state's coastal access problems. Public hearings will be held on this element this summer.
Increased emphasis is needed for water pollution control measures.	The MCMP has adopted the state's strong water quality control standards; it will, through implementation of the program, ensure greater vigilance and enforceability of these standards.

SUMMARY OF PUBLIC HEARINGS

Responses were received from the following individuals at the public hearings held on the DEIS. (* denotes written statement delivered at public hearings.)

Public Hearing held at Marquette Michigan on December 13 1977:

Marla Buckmaster
James Dooley representing the Central Upper Peninsula Planning and Development Region
Arne Heikkila representing Northland Builders Inc.
Emil Groth, representing the Upper Peninsula Federation of Landowners
Viola Brown
*Lynn M Emerick, representing Citizens to Save the Superior Shoreline

Public Hearing held at Traverse City Michigan on December 14 1977:

*Lew Steinbrecher, representing the Northeast Michigan Council of Governments
Mike Adams. representing the Northwest Michigan Regional Planning and Development Agency

Public Hearing held at Lansing, Michigan on December 15, 1977:

David J. Brouwer representing the Southeast Michigan Council of Governments
*Patrick Doyle, representing Outboard Marine Corporation, the Boating Industry Associations, and the Outboard Motor Manufacturers Association
*Richard B. Micka, representing the Lake Erie Advisory Committee
*Wayne Schmidt representing the Michigan United Conservation Clubs

Below is a summary of the comments received at the public hearings held on the Draft Environmental Impact Statement for the Michigan Coastal Management Program and the responses to those comments.

OCZM PUBLIC HEARINGS
Marquette, Michigan Dec 13, 1977

Comment	Response
Marla Buckmaster Society of American Archaeology	
Noted that a report prepared by the Michigan Coastal Program entitled "The Distribution and Abundance of Archaeological Sites in the Coastal Zone of Michigan" is part of the DEIS She emphasized that this report is based on existing archived data and did not involve field research. On site archaeological inspection should be a part of all projects in the coastal zone	It is unlikely that on site archaeological inspection can be performed for all projects in the coastal zone for the following reasons: (1) Not all projects will require a state or local permit; (2) projects which do require permits require them for reasons other than archaeological site preservation. For major state actions involving a state permit, an environmental impact statement must be prepared in order to identify the impacts of such actions on the natural and human environment. Preparation of these impact statements may involve field inspection of archaeological sites. In addition the State Historic Preservation Officer is a member of the Michigan Environmental Review Board which reviews environmental impact statements for major actions which have the potential to significantly affect human life or the environment. This process helps to insure the consideration of archaeologic sites for projects in the coastal zone.

Comment	Response
Jim Dooley Manager of Development and Planning for the Central Upper Peninsula Planning and Development Commission (CUPPAD)	
Archaeological surveys for projects in the coastal zone should be conducted: the Federal government should share the costs of this work as it would be too costly for local governments.	See previous answer; also, the coastal program is designed to manage coastal resources Research will not be encouraged.
Mr. Dooley presented the seven recommendations adopted by the full CUPPAD Commission at their September 1977 meeting. CUPPAD: 1. appreciates the direct involvement of regional planning commissions and local units of government in the development of the program and hopes it continues into the implementation phase of the program, 2 thinks the primary focus and emphasis of the implementation effort should be action oriented. It should solve problems and help realize opportunities in Michigan's coastal zone. The previous draft of Michigan's coastal zone program overly emphasized continued planning, inventory, and study The revised draft tends to redress the tendancy to recommend continuing studies and CUPPAD supports that effort. 3. thinks a major portion of the implementation funds should be made available to local units of government for projects which will improve the useful management of the coastal zone, 4 thinks future land acquisition in the CUPPAD region should be discouraged unless there is local support for such action, 5. thinks the DNR should consider funding the priorities for action which have been established through the efforts of CUPPAD, 6. feels a major objective of the program should be to streamline permit processes, and that, 7. tax relief and compensation should be provided in the event the coastal management program infringes on the rights of private property owners.	In response to these comments (1) Implementation of the Michigan program will continue to provide for direct involvement of the regional planning commissions and local units of government Roles of local governments will include: (a) formulating and periodically evaluating local goals and objectives for coastal management; (b) identifying, screening and prioritizing area of particular concern nominations for management consideration; (c) establishing citizens and agency coastal advisory bodies; (d) developing annual work programs to address identified coastal problems and opportunities; (e) submitting project proposals to the Michigan Coastal Management Program for funding consideration; and (f) administer certain state-delegated authorities at the local level, such as provisions of the Shorelands Protection and Management Act. Major roles of regional planning commissions will include: (a) providing technical assistance related to zoning and planning matters to local governments; (b) identification of priority areas of particular concern for management assistance; (c) participating with coastal management training and information sessions. (d) Assisting in the development of and coordination of the Coastal Management Program and the state's "208" program. See Chapter 5 of the FEIS for more detail on the roles of these governmental units. (2) The primary focus of the program is action oriented. CUPPAD should note the action programs stated in Chapter 3 of the FEIS. These programs focus on attempts to provide for implementation of existing state laws which have not been operating at peak efficiency, develop tax incentives for protection of coastal resources, establishment of a native lake trout breeding population, and many others.

Comment

Response

(3) Given the previously stated role the local units of government can expect to receive a substantial portion of program implementation funds.
(4) Michigan program policies call for (a) state environmental areas designated under the Shorelands Acts to be eligible for a development rights easement with the state in return for income or property tax benefits, (b) state creation and regulation of wilderness areas, wild areas, and natural areas. Such an action does not necessarily mean that such land must be purchased from the private property owner.
It is also state policy to provide for the acquisition of harbors and channels land and structures for historic purposes, and the creation of a state recreational land acquisition trust.

Certain action programs propose to study the feasibility and best method of state acquisition of such areas as hazard areas and sensitive areas and to provide assistance in planning recreational demand. However, any actions to pursue such action programs and acquire such lands will be subject to the review and recommendations of local units of government, the Citizens Shoreland Advisory Council the state Shorelands and Water Standing Committee, the Natural Resource Commission, and the Michigan Environmental Review Board.

(5) Funding priorities established by CUPPAD will be carefully considered in the grant application preparation process described in Chapter V.
(6) The Michigan program is actively involved in developing and implementing joint permit processing between the state DNR and the Corps of Engineers through a memo of understanding. This agreement provides for joint application forms, public notices, public hearings, and environmental summaries and is reducing duplication which results from processing permit applications independently Submerged Lands Management Section is completing a computerized permit information system for Act 247, Act 346 and Act 245 permits. This system is scheduled to be operational in September, 1978, and will improve the efficiency of application review procedures and reduce the application processing backlog. The Department is preparing a permitting process manual as technical assistance for persons needing state coastal management permits This manual will be completed by September, 1978. (7) Michigan efforts to

Comment	Response
	regulate coastal resources are done to assure that public benefits or resource utilization are not destroyed and to protect private property owners from the bodily harm and loss of property. There is no tax relief or compensation for state implementation of these regulations However, for environmental areas designated under the Shorelands Protection and Management Act, a landowner is entitled to certain income tax or property tax benefits if he/she enters into a development rights easement with the state for the purpose of maintaining the land as open space.
Mr Arne Heikkila, Northland Builders Inc.	
Local initiative in planning efforts is supported However, Federal and state governments tend to satisfy themselves and overlook the needs of private landowners. Landowners are not adequately compensated for the diminishing land values that result from rezoning.	Local governments will continue to establish local goals and objectives for their coastal areas, develop local work programs, and participate in the GAPC process (see Chapter IV and Chapter V). The Michigan Coastal Program is not a zoning program for the Michigan Coastal area. Regulatory controls are based on performance standards. Counties may develop zoning ordinances which will be reviewed by the state Department of Natural Resources. The DNR will provide technical assistance to the counties and any other local government to reflect sound resources management and conformity with state laws and judicial rulings. Zoning and rezoning is not a requirement of Michigan law. Counties, townships, or municipalities which choose to zone do so in order to protect property owners from incompatible development which may decrease property values.
Emil Groth Upper Penninsula Federation of Landowners	
The Michigan Coastal Program must respect the rights of property owners Landowners must be informed of potential GAPC designation of their land. Property tax procedures are in disarray.	Michigan has been outspoken in its concern to respect the rights of property owners. Regulatory programs which affect property owners are designed to protect the public health, safety, and welfare. The GAPC process in Chapter 4 provides for contact of property owners whose land has been nominated as a GAPC They are invited to participate in the APC review process, and must concur with APC nominations in order for their property to be designated as such. The state provides for tax benefits to those individuals who have entered into a development rights easements with the state for maintaining their property as environmental, wilderness, wild or natural areas.

Comment	Response
Viola Brown Copper Country League of Women Voters	
The Western Upper Peninsula Planning and Development Regional Agency was criticized for its automatic disapproval of all GAPC nominations which property owners object to.	The state procedure for GAPC designation involves a criterion calling for property owner support prior to GAPC designation. This procedure is supported by the Western Upper Peninsula Planning and Development Regional Agency.
Lynn M Emerick Citizens to Save the Superior Shoreline	
Ms. Emerick spoke in favor of the program.	No response necessary.
Traverse City Michigan Dec 14 1977	
Lew Steinbrecher, Northeast Michigan Council of Governments (NEMCOG)	
NEMCOG supports Michigan's Coastal Management Program However the following points should be emphasized: (1) Successful implementation of the program must occur at the local level. DNR technical and financial support will assist in this effort. (2) The issue of private property rights must be respected by the program. Just compensation in tax relief and/or purchase of development rights should be given any property owner whose use of the land is unduly restricted by implementation of the Federal Coastal Zone Management Program in Michigan. Provisions should be made for the fee-simple acquisition of all designated properties for preservation as mandated by the Michigan legislature.	Several state laws which are part of the Michigan program provide for local implementation subject to state criteria. These include the Shorelands Protection and Management Act County Rural Zoning Act, Soil Erosion and Sedimentation Control Act Natural Rivers Act, and the Historic Districts Act. In addition, the state will provide funds for local units of government to implement management recommendations of nominated GAPCs. As indicated previously, state policy calls for income or property tax benefits for landowners who enter into a development rights easement for land designated as an environmental area under the Shorelands Act. Fee simple acquisition of these areas is not a mandate of the state legislation.
Mike Adams Northwest Michigan Regional Planning and Development Agency	
Planning and Development Agencies should be provided the opportunity to review projects proposed for implementation by local units of government	The Michigan Coastal Program has several mechanisms whereby regional planning and development agencies receive the opportunity to comment and recommend on programs in the coastal area which will affect them. These include the review of environmental impact statements through procedures established by the Michigan Environmental Review Board, A-95 review process, the Citizens Shoreline Advisory Committee, direct participation in the GAPC process, and establishment of citizens and local agency coastal advisory bodies.

Comment	Response
Lansing Michigan 12/15/78	
David J. Brouwer Southeast Michigan Council of Governments (SEMCOG)	
SEMCOG supports state efforts to protect and manage its coastlines but is uncertain about the effectiveness of the program because it does not appear the state will provide for major input at the local level during implementation	Chapter V of the FEIS indicates the roles of local governments during program implementation. These include: 1) formulating and evaluating local goals and objectives for coastal management; 2) identifying, screening and prioritizing GAPC nominations; 3) establishing citizens and agency coastal advisory bodies; 4) developing annual work programs to address identified coastal problems and opportunities; 5) submitting project proposals to the MCMP for funding consideration; 6) administering certain state-delegated authorities at the local level such as provisions of the Shorelands Protection and Management Acts.
Prior to initiation of the GAPC process the state should attempt to formally communicate with regional and local officials These officials should be provided with opportunities to advise the state of local attitudes. Specifically, Environmental Impact Statements should be submitted to local and regional officials in the affected areas.	A detailed description of the GAPC process is given in Chapter 4. As part of the state level inventory and review process of nominated GAPCs the Coastal Management Program will insure that affected land owners and governmental units support the proposed action. There is also a local and regional agency inventory and review process for GAPCs. This process is heavily dependent on the participation and involvement of the property owners and local units of government Based upon the reviews of local agencies, property owners, and citizens groups, a local or regional agency will recommend to the state whether or not a nomination should be formally endorsed Michigan will evaluate the process for local/regional request and review of environmental impact statements in an attempt to improve this process. With respect to local review of environmental impact statements, the MERB attempts to make the widest possible distribution for public review and comment on these statements. Any local or regional unit of government may be placed on the MERB mailing list to receive a monthly EIS status report. From this report, local and regional units may request those EIS' they wish to review.

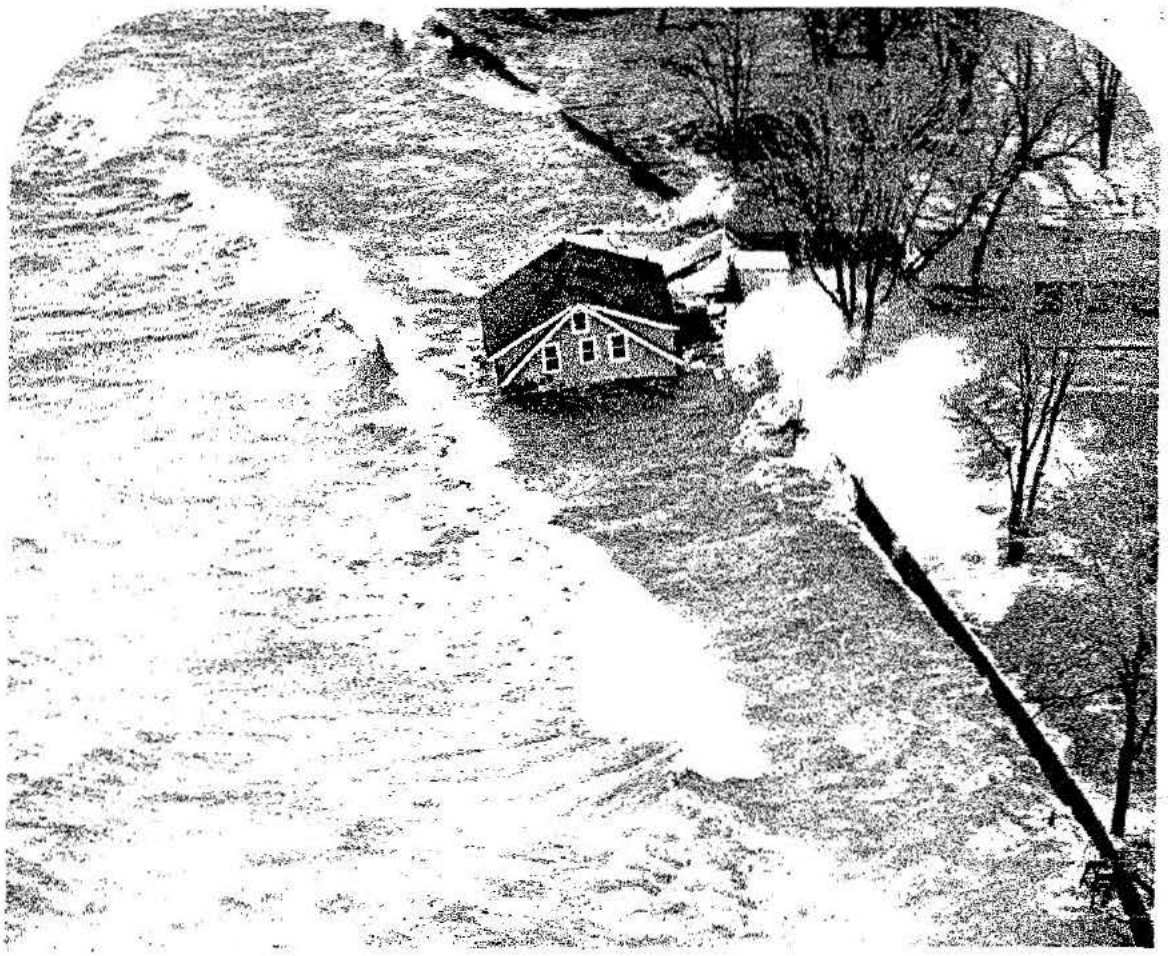
Comment	Response
Richard B Micka Lake Erie Advisory Committee	
The Committee supports the Michigan Program. The nomination of Monroe Harbor as a Marine Sanctuary should be incorporated in the FEIS to satisfy the federal consistency requirements.	There is no requirement that the nomination of Monroe Harbor as a Marine Sanctuary be included in the FEIS to satisfy the federal consistency requirements. The nomination is not included in the FEIS because it is uncertain whether the site will be designated as a marine sanctuary, and Federal consistency procedures are not enforceable through the program until an area is actually designated.
An attempt should be made to separate the description and data for Lake Erie from that of the connecting rivers.	This change has been made in Chapter II of the FEIS.
Significant work at the local level using MCMP funds has not filtered through to the state.	The MCMP will insure that annual work programs and project proposals which address the unique attributes and development problems along Lake Erie will be fully considered during implementation. As a result of the work of the Monroe County Advisory Committee the MCMP is now reviewing a proposal for a harbor management and development plan for the Port of Monroe for 1978-79 funding consideration.
Wayne Schmidt. Michigan United Conservation Clubs	
This organization supports the program. However, it is concerned about a lack of statutory authority as a basis for the program. Failure of the state to implement the Sand Dune Protection and Management Act as of July 1, 1977, is cited as an example of this failure to provide sufficient authority.	OCZM has determined that the state has sufficient authority to implement a coastal management program. Federal approval of its program will allow Michigan to fully implement existing state authorities which it has been unable to implement such as the Sand Dune Mining Act. See Chapters III and VI of this FEIS. Under a Section 305(d) grant from OCZM, the MCMP has provided funds to the Michigan Geological Survey to implement provisions of the Sand Dune Protection and Management Act.
The authority and role of the Michigan Environmental Review Board (MERB) is overemphasized since it has no veto power over coastal activities incompatible with the Michigan Coastal Management Program	The MERB is empowered to recommend to the Governor those actions of state agencies that should be suspended or modified because the quality of the state's environmental or human life may be in jeopardy. MERB also makes policy recommendations on specific issues for the Governor's consideration In making its recommendations the MERB will abide by the state coastal policies articulated in Chapter III of the FEIS. In the judgment of OCZM, the degree of reliance on MERB as part of the MCMP organizational structure and means of conflict resolution is adequate.

Comment	Response
It is not clear how Michigan will consider the national interest.	Chapter 6 of the FEIS has been substantially revised to reflect the way Michigan will consider the national interest as well as the resources and facilities it considers to be in the national interest The decision making mechanisms the state will use to consider the national interest are the Natural Resources Commission, the Michigan Environmental Review Board (mandated to consider all interests by a Governor's executive order) and the administrative decision-making of the DNR. (Note, the DNR has been mandated by its Director to consider the national interest in its decision-making).
The program has not yet succeeded in systematically identifying APCs. Virtually no APCs have been identified in the Eastern Upper Peninsula.	Under the legislative APC's well over 160 sites have in fact been designated, in addition about 50 000 acres under the Farmland/Open Space Act and 197 miles of high risk erosion and 100 miles of environmental areas have been designated (see Chapter IV where these figures have been added). The general location of these APC's have been provided on maps in Appendix D of the DEIS; these include APCs in the eastern Upper Peninsula. APC nominations and designations will be ongoing in Michigan. However there are as indicated in Chapter IV two sources of APC designation. Legislative APC's that are designated are a result of specific legislative enactments. Each site under these categories will be identified by the DNR. The criteria imposed for permissible uses of these APC's is provided by the statutes by which they have been established. Publicly nominated and designated action APC's, i.e those that involve funding by the state must, in order to be so designated, have the endorsement of the landowner before a management contract will be effectuated. Thus, any restriction on use of that property will be sanctioned by the respective owner prior to designation.
OCZM should give immediate consideration to the area near U.S. Route 2 as a marine sanctuary.	Marine Sanctuary nominations are the responsibility of the Office of Ocean Management, National Oceanic and Atmospheric Administration. This office has been advised of this request by OCZM.

Comment	Response
The state needs to resolve the issue of competing demands for Monroe Harbor; it has not been adequately addressed under the category coastal lakes, river mouths and bays in Chapter IV.	The state proposes to use its existing authorities relating to air and water quality, resource recovery flood plain management, regulation of bottomlands, and others to protect resources in places such as Monroe Harbor. The coastal program will focus planning and regulatory efforts on these types of areas to identify and reduce conflicts related to overcrowding water pollution, and vessel movements.
There is a lawsuit pending which has resulted in suspension of environmental area designations under the Shorelands Protection and Management Act.	The lawsuit has resulted in no injunction against the state of Michigan to cease in its designation of environmental areas under the Shorelands Act. The state, however, chose to stop such designations due to a number of reasons. Among these were rule changes in regulation for activities in designated environmental areas, appeals of affected property owners, and the outcome of the state wetlands values studies.
The Kammer Recreation Land Trust Fund Act is a useful mechanism for preserving valuable coastal areas of land	If the coastal program determines certain areas of the coastal zone are worthy of acquisition to carry out state policies of preservation or recreation action, the state may turn to this program as a source of funds. Michigan has submitted several areas nominated as GAPCs to the Kammer Board for acquisition funding under this fund.
Dennis Leonard, Detroit Edison	
Several points regarding the Michigan Coastal Program were raised. They are: 1) program scope is too broad; 2) the definition of "new use" as applied to Federal Consistency needs to be defined; 3) designation of legislated APCs should be made site specific; 4) property rights should be protected and recognized.	(1) Program scope is defined by the policies which the state has articulated OCZM has determined that they are sufficient because they address the concerns of section 302 and 303 of the CZMA. Moreover, the state has the option of going beyond the requirements of Federal regulations to broaden its scope of the program. (2) The state does not apply a criterion of "new use" to make a determination of Federal consistency Federal licenses and permits and applications for Federal grants and other assistance will be subject to Federal consistency if they are initiated after Program approval. Ongoing Federal activities, as defined in the Federal consistency regulations, should be shown to be consistent 120 days after approval or sooner. (3) Under the legislative APC's well over 160 sites have in fact been designated, in addition about 50,000 acres under the Farmland/Open Space Act and 197 miles of high risk erosion areas and 100 miles of environmental areas have been designated (see Chapter IV where these figures have been added). The general location of these APC's have been provided on maps in Appendix D of the DEIS.

Comment	Response
Dennis Leonard Detroit Edison (cont)	APC nominations and designations will be ongoing in Michigan. However, there are as indicated in Chapter IV two sources of APC designation. Legislative APC's that are designated are a result of specific legislative enactments. Each site under these categories will be identified by the DNR. The criteria imposed for permissible uses of these APC's is provided by the statutes. Appropriate notice, hearing and if necessary judicial review are available on any restriction on uses of GAPCs. Publicly nominated and designated action APC's, i.e., those that involve funding by the state must, in order to be so designated, have the endorsement of the landowner before a management contract will be effectuated. Thus, any restriction on use of that property will be sanctioned by the respective owner prior to designation. (4) Private property rights are guaranteed by the state constituion and state law. The Michigan Coastal Program will not undermine these rights since it is based on state law. The program also respects property rights through the GAPC process Designation of privately owned property as a GAPC through public nomination does not constitute a legal restriction of the property unless it is also subject to state control as a result of legislative enactments. Publicly nominated GAPCs must have the support of the landowner prior to state designation of the site as a GAPC.
Patrick Doyle Outboard Marine Corporation Boating Industry Association, and Outboard Motor Manufacturers Association	
Issued a written statement in support of the program.	No response necessary.

Appendix C



Appendix C

State Regulatory & Incentive Programs

* * policies and programs which regulate uses of direct and significant impact on coastal areas

* * incentive programs which address coastal concerns

Appendix C

STATE REGULATORY AND INCENTIVE PROGRAMS

The following pages describe state regulatory and incentive programs. These programs: (1) control direct and significant impacts to coastal waters through state mandates for licensing, permits and zoning; and (2) provide incentive mechanisms through such means as taxation, property acquisition, technical assistance, cooperation and coordination.

This Appendix is divided into two parts: (1) State Regulatory Programs; and (2) State Incentive Programs. Preceeding the two portions of this Appendix are indexes which group programs according to coastal area category and by the primary focus of the authority and programs described. The Appendix material should be used extensively in reviewing the details of Chapter 3, Potentials for Program Focus, to provide the reader with information about the content and scope of state agency responsibilities which may be used to address the specific concerns of the Coastal Program.

The first part of the Appendix details the legal and organizational elements of 30 authorities in order to identify: (1) under what situations or conditions coastal waters will be impacted; (2) what impacts on coastal waters will be regulated; (3) what land and water uses will be regulated; (4) how certain agencies are involved in the administration of authorities; and (5) regulatory programs which will address specific concerns of this Program.

The second portion of this Appendix provides brief descriptions of 84 state agency programs which provide for such program needs as: (1) partnership among state and local governmental units to provide a coastal focus in ongoing program operations; and (2) identification of program areas where the specific concerns of this program may be addressed.

AREAS OF COASTAL PROBLEMS ISSUES AND OPPORTUNITIES related to STATE LEVEL REGULATORY AUTHORITIES	AREAS OF COASTAL PROBLEMS, ISSUES OR OPPORTUNITIES					
STATE REGULATORY PROGRAMS (arranged under categories of resource use/impact by legislative mandate)	AREAS OF NATURAL HAZARD TO DEVELOPMENT	AREAS SENSITIVE TO ALTERATION/DISTURBANCE	AREAS FULFILLING RECREATIONAL/CULTURAL NEEDS	AREAS OF INTENSIVE OR CONFLICTING USE	AREAS OF NATURAL ECONOMIC POTENTIAL	PAGE NUMBER
NATURAL OR ENVIRONMENTAL SIGNIFICANCE						
Act 245, P.A. 1970 Shorelands Protection and Management, Environmental Areas		*		*		C-5
Act 231, P.A. 1970 Natural Rivers	*	*		*		C-9
Act 203, P.A. 1974 Endangered Species		*		*		C-13
NATURAL SIGNIFICANCE						
Act 169, P.A. 1970 Historic Districts Act		*	*	*		C-17
AIR QUALITY						
Act 348, P.A. 1965 Air Pollution Control		*		*	*	C-21
WASTE DISPOSAL						
Act 87, P.A. 1965 Solid Waste Management		*		*	*	C-31
Act 136, P.A. 1969 Liquid Industrial Waste Hauler		*		*	*	C-37
Act 243, P.A. 1951 Domestic Waste Haulers		*		*		C-37
Act 245, P.A. 1929 Water Resources Commission		*		*	*	C-41
Act 98, P.A. 1913 Control of Waterworks and Sewage Treatment Systems		*		*	*	C-53
Act 315, P.A. 1969 Mineral Well		*		*	*	C-57
Act 61, P.A. 1939 Oil and Gas Drilling		*		*	*	C-63
LAND USE						
Act 245 P.A. 1970 Shorelands Protection and Management, Erosion Areas	*			*		C-69
Act 347, P.A. 1970 Soil Erosion and Sedimentation	*			*		C-73
Act 247, P.A. 1955 Great Lakes Submerged Lands		*	*	*		C-77
Act 346, P.A. 1972 Inland Lakes and Streams		*	*	*		C-81
PL 92-500, Section 404 Federal Water Pollution Control Act Amendments of 1972		*	*	*	*	C-85
Act 245, P.A. 1970 Shorelands Protection and Management, Flood Risk Areas	*			*		C-89
Act 167, P.A. 1968 Floodway Encroachment	*			*		C-93
Act 288, P.A. 1967 Subdivision Control (Plats)	*			*		C-97
Act 229, P.A. 1963 Horizontal Real Property	*			*		C-101
Act 243, P.A. 1959 Mobile Home Parks	*			*		C-107
Act 171, P.A. 1970 Campground Development			*	*		C-111
Act 183, P.A. 1943 County Zoning Approval	*			*		C-115
Act 92, P.A. 1970 Mine Reclamation		*		*	*	C-119
Act 222, P.A. 1976 Sand Dune Protection and Management		*		*	*	C-123

AREAS OF COASTAL PROBLEMS ISSUES AND OPPORTUNITIES related to STATE LEVEL REGULATORY AUTHORITIES	AREAS OF COASTAL PROBLEMS, ISSUES OR OPPORTUNITIES					
STATE REGULATORY PROGRAMS (arranged under categories of resource use/impact by legislative mandate)	AREAS OF NATURAL HAZARD TO DEVELOPMENT	AREAS SENSITIVE TO ALTERATION/DISTURBANCE	AREAS FULFILLING RECREATIONAL/CULTURAL NEEDS	AREAS OF INTENSIVE OR CONFLICTING USE	AREAS OF NATURAL ECONOMIC POTENTIAL	PAGE NUMBER
WATER SUPPLY AND WATER QUALITY						
Act 98, P.A. 1913 Waterworks and Sewage System...		*				C-127
Act 245, P.A. 1929 Oil and Hazardous Materials...		*		*	*	C-131
Act 143, P.A. 1959 Mining Water Diversion.....		*		*	*	C-135
OTHER						
Act 127, P.A. 1970 Environmental Protection	*	*	*	*	*	C-139

CRITERIA: DOES THE USE ACTIVITY INVOLVE NEW DEVELOPMENT IN A DESIGNATED SHORELAND ENVIRONMENTAL AREA?

OVERVIEW

The Michigan Legislature enacted the Shorelands Protection and Management Act (Act 245, P.A. of 1970) to regulate environmentally sensitive areas of the Great Lakes shoreline. The act's basic objective is to prevent environmental damage resulting from development and habitat destruction. More specifically Act 245 directed the Department of Natural Resources (DNR) to delineate environmental areas and to implement use restrictions for such areas. Use activities are restricted to prevent further alteration of existing conditions necessary to maintain fish and wildlife. The basic management technique used to implement use restrictions in designated environmental areas is a DNR-approved local zoning ordinance, or in the absence of local zoning, a DNR-approved site plan permit system.

DETAILED PROVISIONS OF LEGISLATION

The major elements of the environmental areas provisions of Act 245 and its rules are explained in the following sections.

Authority. Act 245 was enacted in 1970 and later amended by Act 270, P.A. of 1974. The 1974 amendments have been in effect since July 1, 1975 as the Part 14 Amendments to the Water Resources Commission Act (Act 285, P.A. 1929). Rules implementing the Act's environmental area provisions were promulgated and became effective on January 11, 1974, as Rule 281.631 through 281.645 of the Michigan Compiled Laws. Only the rules and regulations now in force will be described here.

Scope of Authority. The environmental area provisions of Act 245 and its rules apply to the land in this state which borders or is adjacent to a Great Lake or a connecting waterway which is "situated within 1,000 feet landward from the ordinary high water mark established in Section 2 of Act 247 of the Public Acts of 1955, as amended, ..." (Section 1).

In addition, the land must be "undeveloped and unplatted" at the time the area is designated (Rules for Act 245 provide MDNR authority for designating environmental areas only on undeveloped and unplatted shorelands. Currently, MDNR is proposing rules which would expand this authority to include developed and platted shorelands.) Undeveloped lands are defined to mean any 330 feet or more of environmental area located within the shoreland zone, which is not developed with permanent structures. Unplatted lands mean lands which are not part of an official plat registered with the Plat Section of the Michigan Treasury Department.

Environmental Area Designation. Section 2(d) of Act 245 defines an environmental area as "an area of the shoreland which is determined by the Department of Natural Resources, on the basis of studies and surveys, to be necessary for the preservation and maintenance of fish and wildlife." Department of Natural Resources fish and wildlife biologists initially proposed environmental areas within their respective districts. Additional areas have been identified by the DNR's Environmental Areas Committee, local units of government and by private citizens. Formal designations are made only after extensive field analysis of proposed areas is completed, and information meetings with affected township governments and property owners are held. Criticism, changes or suggestions for altering environmental areas are considered at each step in the designation process.

Use Restrictions. The principal management tools used to implement use restrictions in designated environmental areas are regulations set forth by the Director of the Department of Natural Resources. These regulations classify each environment area according to the area's shoreland features, the importance of fish or wildlife maintenance, and the use restrictions that apply to that individual area. Rule 4 of Act 245 requires that in designating an environmental area, the Director must recommend use regulations necessary to protect that area. Rule 5 adds that regulated use shall include operation of off-road vehicles; filling and grading or similar soil alterations; activities which contribute to soil erosion and sedimentation; drainage alterations; certain vegetative removal; placement of structures; and any other uses as deemed necessary by the Director.

The use restrictions described in these regulations will be controlled either by local governments through DNR-approved local zoning ordinances or directly by the DNR through site plan permit requirements. Both local zoning ordinances and DNR site plan permits must comply with the Act and these regulations in order to be approved.

Implementation and Enforcement. Use restrictions in environmental areas can be implemented by County, Township or municipal zoning ordinances which have received DNR approval, or in the absence of such ordinances, directly by the DNR through site plan permits.

In each designated environmental area, the Director of the Department of Natural Resources must define use restrictions appropriate to the area and the boundary in which they will apply. Local (county, township or municipal) zoning ordinances for environmental areas must not be less restrictive than the Director's designation. The Director will approve those ordinances, which, in his view, adequately meet the requirements of this designation and the procedural conditions of the Act. Minor modifications to management plans may be granted by the local unit subject to previously established guidelines. Proposed modifications that exceed those guidelines must be submitted to the DNR for review.

In the absence of an approved environmental areas zoning ordinance, a proposed shoreland use (defined by Rule 5 above) must apply directly to DNR for approval. This approval is based upon DNR review and approval of site plans which must, as a minimum, describe the existing shoreland area; the nature and extent of the proposed alterations; the time span and the procedures used in completing work; and otherwise ensure that the proposal

will not damage the environmental value of the area. The Director will approve those site plans, which in his view, adequately meet these requirements and the procedural conditions of the Act. As soon as local zoning is approved, however, this requirements is dropped and controls are implemented locally.

Any individual or local government agency determined by the Natural Resources Commission to be in violation of these provisions may be prosecuted in the circuit court proceedings (Section 10). The court may furthermore issue any order necessary to correct or restrain such violations.

Appeal Procedures. Affected property owners or local governments may appeal the disapproval of any of these provisions by petitioning the Director of the Department of Natural Resources. Both informal and formal hearings may be requested. Appealing the designation of environmental areas or their accompanying use restrictions occurs under Rule 6, while appealing the disapproval of local zoning ordinances occurs under Rule 7, and appealing the disapproval of site plans under Rule 8. These rules provide for timely hearing determination which is made by the Natural Resources Commission and enforced by the above circuit court powers.

Another avenue of appeal is available in circuit court to property owners, local governments and also to the Department of Natural Resources after the hearing determination. If unsatisfied with the hearing determination, either party may request an immediate and binding circuit court decision which must be granted. DNR will be represented by the State Attorney General in such proceedings.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures. Act 245 is administered by the Department of Natural Resources. Its authority to designate environmental areas, approve local zoning ordinances and approve site plans is exercised by the Director. Administrative staff work in field studies undertaken in regard to this Act are conducted by the Shorelands Management and Water Resources Planning Section, Land Resource Programs Division, Michigan Department of Natural Resources.

Environmental areas will be regulated by DNR approval of local shoreland zoning or in lieu of such zoning, by Department review of site plan applications. Local zoning review and approval is based on the passage and enforcement of ordinances which effectively protect the environmental areas designated in their jurisdiction. Ordinances which the DNR determines adequately enforce environmental protection provisions of Act 245 will be permissible.

Status of Implementation. Field work to identify environmental areas and develop management recommendations began soon after the Shorelands Act was

enacted by the Legislature and is continuing at this time. A series of local public information meetings were held in the Lower Peninsula to discuss the environmental areas program and the ramifications to property owners of designated shorelands. Field work in the Upper Peninsula and remaining designations will likely be completed in 1978.
Of 150 properties designated, 21 contested case appeals were filed by property owners in disagreement with the environmental area designation. To date 14 of these appeals have been resolved with hearings yet to be held for the remaining seven. Decisions from the contested case hearings thus far have been in favor of the environmental area designations.

Administrative Policies. Michigan's experience with Act 245 has led to an operational policy that State approval of local shorelands zoning is the regulation technique first choice in all cases. Though not required by the Act, this policy allows the most efficient, effective and acceptable program in Michigan's governmental structure and its current political climate regarding land use.

CRITERIA: DOES THE USE ACTIVITY INVOLVE A DESIGNATED SHORELAND NATURAL RIVER AREA?

OVERVIEW

The Michigan Legislature, recognizing that the natural scenic rivers in Michigan are a limited fragile resource and that the existence of unspoiled stretches is diminishing, enacted the Natural Rivers Act (Act 231, Public Acts of 1970). The Act's main objective is to protect the natural quality of rivers of "statewide significance," and to regulate their use and development. The basic management technique utilized to implement the use restrictions in the designated natural river corridor is adoption of local zoning ordinances. Should local governments fail to adopt zoning, the Department of Natural Resources may zone the river frontage by adopting administrative rules.

DETAILED PROVISIONS OF LEGISLATION

The major elements of Act 231 and its approved guidelines are explained in the following sections.

Authority. Act 231 was enacted in 1970 and became effective in April 1, 1971, as Rule 281.761 through 281.776 of the Michigan Compiled Laws. Guidelines for designating natural rivers were presented to the Natural Resources Commission and approved in June of 1971.

Scope of Authority. The Natural Rivers Act applies to any designated Michigan river or a portion thereof for the purpose of preserving and enhancing its values for water conservation, its free flowing condition, and its fish, wildlife, boating, scenic, aesthetic, floodplain, archeologic history, historic and recreational values and uses, including adjoining or related lands as appropriate to the purpose of the designation.

The zoning ordinance or rule establishing a natural river system promulgated by the Natural Resources Commission controls land up to 400 feet from the river's edge.

The Department of Natural Resources staff and field personnel, local groups, and private organizations recommend thirty rivers for study. Additional rivers may be added upon strong local support for river protection.

Natural River Designation. Following nomination of a natural river, a long range management plan for the river system is developed jointly by the DNR, local governments and local citizens. The "Natural River Plan" is then reviewed by the public through hearings and meetings and revised

to reflect citizens' concerns. Upon acceptance of the plan by the Natural Resources Commission, the river may be designated as a natural river.

Natural rivers are designated in one of three categories depending on the general setting, degree and kind of development of the adjacent and surrounding lands, accessibility, water quality and free flowing condition of the stream. The categories listed below are determined by the characteristics of the river's mainstream.

> Wilderness River: a river in an extensive wilderness area mostly in government or corporate ownership, which is primitive and unspoiled and extends well beyond the visual river corridor. The river system should be free of impoundments or modifications, inaccessible except by trail and contain waters of high quality unaffected by man's activities.
>
> Wild Scenic River: A river of wild character with a wild or forested corridor, relatively broad or confined to a narrow band in close proximity to human development. The river should be essentially free-flowing with limited access by trails or road and contain waters of high aesthetic quality meeting established water quality standards.
>
> Country Scenic River: A river with an overall appearance of a pleasant country scene; a peaceful river with bordering trees or thickets, pastures and meadows often with views through unwooded borders to upland farmsteads. The river system may have an occasional impoundment, be readily accessible by road, contain waters of high aesthetic quality meeting established water quality standards and may be moderately developed along the shorelands.

Use Restrictions. Act 231 requires in Section 3 that "the (Natural Resources) Commission shall prepare and adopt a long range comprehensive plan for a designated natural river area which shall set forth the purposes of the designation, proposed uses of lands and waters, and management measures designated to accomplish the purposes."

Authority is delegated in Section 10 of Act 231 which restricts "the placement of structures of any class, or designates their location with relation to the water's edge, to property or subdivision lines, and to flood flows, and may limit the subdivision of lands for platting purposes." Specific authority is also delegated to control "the location and design of highways and roads," to "prohibit or limit the cutting of trees or other vegetation," within 100 feet of the river's edge, to "prohibit or limit mining and drilling for oil and gas," within 300 feet of the river's edge, and also may contain other provisions necessary to accomplish the objectives of this Act."

Implementation and Enforcement. The principal management technique employed to implement the use restrictions of the designated "natural river district," is zoning, either by local governments or the Department

of Natural Resources. If a local unit fails to adopt zoning within one year after natural river designation, the Natural Resources Commission may promulgate a zoning rule for the river. A zoning rule may also be established if a local zoning ordinance fails to meet guidelines consistent with this Act or does not fully recognize the purposes and objectives of designation of the river as established by the Natural Resources Commission.

Section 11 of Act 231 requires that "any conflict (in establishing a zoning ordinance) shall be resolved in favor of the provisions of this Act" and also states "the powers herein granted shall be liberally construed in favor of the local unit or the Commission exercising them in such manner as to promote the orderly preservation or enhancement of the values of the rivers and related land resources . . . to ensure the greatest benefit to the State as a whole."

Section 15 of the "Natural Rivers Act" in part mandates that the Natural Resources Commission approve preliminary and final plans for site or route location, construction of utility transmission lines, publicly provided recreation facilities, access sites, highways, roads, bridges or other structures and for publicly developed water management projects within a designated natural river corridor.

Any person determined by the Natural Resources Commission to be in violation of a rule promulgated under Act 231 may be prosecuted in circuit court proceedings. The court "shall issue any necessary order to the defendant to correct the violation or to restrain the defendant from further violation of the rule." (Section 213 of Act 231).

Appeal Procedures. Section 13 also provides that a zoning rule of the Natural Resources Commission must include procedures for receiving and acting upon applications from local units of government or land owners for change of boundaries or change in permitted uses. "An aggrieved party may seek judicial review in accordance with and subject to the provisions of Sections 101 to 106 of the Administrative Procedures Act (Act 306 of the Public Acts of 1969).

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures. Act 231 is administered by the Department of Natural Resources. The authority to designate natural rivers and to promulgate and approve rules and ordinances is exercised by the Natural Resources Commission. Administrative staff work and field studies undertaken in regards to this Act are conducted by the Natural Rivers Unit, Land Resource Programs Division, Department of Natural Resources.

Designated natural rivers will be regulated by Commission approval of local natural rivers zoning or in lieu of such zoning, by rules adopted by the Commission. Zoning ordinance review and approval is based on the

passage and enforcement of the affected local zoning ordinances for designated natural rivers. Ordinances based upon local master plans which the Natural Resources Commission determines adequately promote the preservation or enhancement of the designated values of the rivers and related land resources and their use will be permissible.

Status of Implementation. The effective date for granting authority for designating natural rivers pursuant to Act 231 was December 3, 1970. Since then, six rivers have been designated as natural rivers, and fourteen others are currently under study for designation. An additional fourteen rivers are now proposed for future study. Of the six designated natural rivers, three are regulated by approved local zoning ordinances and ordinances for portions of a fourth river are presently being drafted and processed for approval by the Natural Resources Commission. On two remaining designated natural rivers the local government declined to zone and the Natural Resources Commission either has adopted or is in the process of adopting, zoning by administrative rule. Rivers now proposed for study will be elevated to the study group as staff time and local interest permits.

Due to the cooperative effort used to designate the first six natural rivers with strong public support, no court test of Act 231 has been conducted.

Administrative Policies. Act 231 defines the procedure and criteria for designating natural rivers in detail, but does not contain an explicit definition of the three categories of natural rivers (Wilderness, Wild Scenic, Country Scenic). The definitions and management goals of these categories were formulated by DNR staff and approved by the Natural Resources Commission.

Public involvement and local planning group participation are considered essential in formulating a viable long-range natural river management plan.

A copy of Act 231 and a map of Michigan's designated Natural Rivers are included in the Authorities Appendix of this chapter.

CRITERIA: ACTIVITIES IMPACTING ANY FISH, PLANT LIFE OR WILDLIFE ON THE STATE OR FEDERAL LISTS OF THREATENED OR ENDANGERED SPECIES.

OVERVIEW

The Michigan Legislature, recognizing the numbers of threatened or endangered species in need of special protection, enacted the Endangered Species Act (Act 203, Public Acts of 1974). The Act's basic objective is to provide for the conservation, management, enhancement and protection of fish, plant life, and wildlife species endangered or threatened with extinction. More specifically, Act 203 directed the Department of Natural Resources (DNR) to conduct investigations on fish, plants and wildlife to determine management measures needed to successfully continue their ability to sustain themselves. The most important management technique employed to protect threatened or endangered species was the promulgation of rules by the Natural Resources Commission listing those species which on the basis of studies, consultations, and scientific data are threatened or endangered within the state. In light of these goals and rules, the Director of the DNR may establish programs, including land acquisition, that he determines necessary for the protection and management of threatened or endangered species.

DETAILED PROVISIONS OF LEGISLATION

The major elements of Act 203 and the Administrative Rules list of Threatened or Endangered Species are explained in the following sections.

Authority. Act 203 was enacted in 1974. Administrative rules comprised of the official list of Michigan's threatened or endangered species are presently being reviewed by the Joint Rules Committee of the Michigan Legislature for approval and then must meet final approval by the Natural Resources Commission, probably late this summer. The effective date for State regulation authorized by Act 203 was September 1, 1974. Due to the fact that rules are not yet approved, no court litigation has taken place concerning Act 203.

Scope of Authority. The provisions of Act 203 apply to all designated threatened and endangered species living on or in the land and water area within the jurisdiction of the State of Michigan.

Determination of Threatened or Endangered Species. Section 2(d) defines an endangered species as "any species of fish, plant life, or wildlife which is in danger of extinction throughout all or a significant part of its range . . ." Threatened species identified in Section 2(l) as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

Species of fish, plants and wildlife are investigated "to develop information relating to population, distribution, habitat needs, limiting factors

and other biological and ecological data to determine management measures necessary" for their survival (Section 4).

Two committees were formed to assist the Director in the development of the list of threatened and endangered species of Michigan. A technical advisory committee comprised of experts from each of several professional fields and a committee of knowledgeable citizens assisted the DNR staff in drafting the proposed list. Each committee may make studies and submit nominations to the Director--either on their initiative or at the Director's request--for the Director's final consideration.

Use Restrictions. Act 203 requires in Section 6 that the Department shall not allow a person to "take, possess, transport, import, export, process, sell or offer for sale, buy or offer to buy . . . any species of fish, plants or wildlife" appearing on the threatened or endangered species list of the State of Michigan or the United States government pursuant to Public Law 93-205, 87 Stat. 884.

The Commission may, by rule, treat a species as an endangered or threatened species, even though it is not on the official list, if it finds that (a) the species so closely resembles in appearance an endangered or threatened species that enforcement personnel would have substantial difficulty in differentiating between the two; (b) the effect of this difficulty poses an additional threat to the endangered or threatened species; or (c) the treatment of an unlisted species will substantially facilitate the enforcement and further intent of this Act.

Section 6(5) of Act 203 allows the Director to "permit the taking, possession, purchase, sale, transportation, exportation, or shipment of species of fish, plants, or wildlife which appear on the State list of endangered species for scientific, zoological, or educational purposes, for propagation in captivity of such fish, plants, or wildlife to insure their survival."

Section 6(6) further states that "upon good cause shown and where necessary to alleviate damage to property or to protect human health, endangered or threatened species found on the state list may be removed, captured, or destroyed, but only pursuant to a permit issued by the Director."

Implementation and Enforcement. Several steps are involved in implementing the provisions of Act 203. Initially, a statewide survey of population and habitats of threatened or endangered species will be conducted. Extensive coordination efforts with many agencies, groups, and individuals will be vital to the validity of this survey.

The principal management techniques employed to implement Act 203 are safeguarding key habitats by land acquisition, monitoring of the location and abundance of populations of threatened and endangered species to effectively provide for their protection, and by strictly regulating exploitation of threatened or endangered species via the permit system described above.

Section 7 of Act 203 states that "a law enforcement officer, police officer, sheriff's deputy or conservation officer shall enforce this Act and the rules promulgated under this Act." Section 8 provides that "a person who violates any provision of this Act and a person who fails to procure any permit issued under this Act is guilty of a misdemeanor and shall be fined not more than $1,000 nor less than $100 or imprisoned for more than 90 days or both."

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures. Act 203 is administered by the Department of Natural Resources. The authority to conduct investigations, acquire land, implement programs and issue special permits for scientific research is exercised by the Director. The authority to amend these rules listing the threatened and endangered species rests with the Natural Resources Commission. Department field staff and conservation officers will be responsible for monitoring, enforcement and permit coordination.

Status of Implementation. The provisions of Act 203 became enforceable on September 1, 1974. Since that time, administrative rules have been written and are nearing approval and action programs have been initiated for the protection and management of several native fish, plant, and wildlife species. Kirtland's Warbler habitat acquisition, management and population studies are ongoing. A federal recovery team for the Eastern Timber Wolf has been assembled and is headed by a DNR biologist. In addition, a statewide survey of populations and habitat analysis is to be undertaken in the next year and management efforts intensified in critical areas. A computerized recording system is being developed giving the Department the ability to monitor and record sightings, habitat programs, and mortalities of threatened or endangered species.

Administrative Policies. Administrative policies of the Department and Commission will be directed toward full protection and management coordination of those threatened and endangered species listed in the administrative rules of Act 203 of 1974. A current list of State and Federal endangered species is included with a copy of Act 203 in the Authorities Appendix of this chapter.

Supplementary Regulatory Tools. Though not directly connected with Act 203, recent legislation creating a recreational land trust fund gives this and other environmental regulatory tools new opportunity, utility and financial support. The Recreational Land Trust Fund Act (Act 204, P.A. of 1976) was signed in July of 1976, and made effective immediately. The Act establishes a fund of up to one hundred million dollars; its interest and part of the principal can be used to buy prime recreational lands when and as they become available. Contributions to the fund come from oil and gas revenues along with lease and royalty income from mineral

activities on state lands. Contributions begin with the Act's effective date. When the fund reaches one hundred million dollars, access revenues will go into the State General Fund or the State Game and Fish Protection Fund, as appropriate. These revenues are expected to grow steadily from two to three million dollars annually during its early years, to ten million dollars a year by 1985, reaching the hundred million target by 1990 or possibly sooner.

If invested at the most conservative interest rates, one hundred million dollars should yield an annual return of five million dollars. In addition, up to 2.5 million dollars of direct income to the fund may be used each year subject to legislative approval for land purchases. Thus, Michigan anticipates a regular, dependable source of financing on the order of at least 7.5 million dollars per year once the fund becomes fully operative.

The fund will be administered by a Board of Trustees composed of the Chairman of the Natural Resources Commission, the Director of the Department of Natural Resources and three citizen members appointed by the Governor for staggered three year terms. The Board is required to meet at least every two months in open, public session to determine priorities for land purchases.

Creation and continued support of this fund comes from many sources, but the idea originated with Michigan United Conservation Clubs, whose officers and directors first proposed that oil and gas revenues from certain state forests be marked for purchase of public recreation lands. Later, an administrative report from the Governor and other state agencies proposed that a fund be established which could be financed from all state land mineral revenues and which included provisions from other DNR-supported legislation. It is significant, however, that without the spur of public interest, it would undoubtedly have taken many more years to focus attention on need for the fund.

CRITERIA: DOES THE ACTIVITY ALTER A COASTAL SITE, OBJECT OR STRUCTURE LOCATED WITHIN A DESIGNATED HISTORIC DISTRICT?

OVERVIEW

Of several state acts for historic preservation, the most significant in regulating coastal site alteration is the Historic Districts Act (Act 169, P.A. 1970). The broad goal of the Act is to preserve the historic character of sites and structures having specific local, state or national importance by controlling external changes in the district's appearance. More specifically, Act 169 enables local governments, with the help of the Department of State's Division of History, to delineate districts of significant historic value and to regulate use restrictions which preserve those values within the district. The basic management technique used to regulate structural changes to historic districts is the local permit requirement.

DETAILED PROVISIONS OF LEGISLATION

The major elements of Act 169 are explained in the following sections.

Authority. Act 169 was enacted in 1970 without amendment, and went into effect immediately as Rule No. 399.201 through 399.212 of the Michigan Compiled Laws. Effective date of the State regulations authorized in the Act was August 3, 1970.

Scope of Authority. Provisions of this Act apply to any designated historic district within the state. The Act does not, in spite of similar terminology, apply to historical commissions which were organized under the Municipal Historic Commission Act, Act 213, P.A. of 1957, as amended. (Section 12)

Historic District Delineation. Section 1 of the Act defines a historic district as "an area of group of areas not necessarily having continguous boundaries, created by a local (county, city, village or township) unit." This section further requires that the purpose of establishing the historic district is "the protection, rehabilitation, restoration, or reconstruction of districts, archaeological or other sites, buildings, structures and objects" for historic purposes.

In delineating historic district boundaries, a Historic District Study Committee must first be appointed by the local governmental unit of jurisdiction (Section 3). This committee is charged with recommending historic features to be included in the district and with recommending ordinances to preserve the value of those features. Draft reports done by the committee contain the results of studies and research on the historical significance of features, structures and objects as well as the surroundings of each historic district. After input from local planning commissions, the Michigan Historical Commission, the State Historic Preservation Review Board, the general public, and owners of the included properties, the study committee issues its final report. Final designation of a historic district and

enacting ordinances to protect it can only occur after the government units have considered each of these recommendations. To alter either the boundaries or ordinances the same process is used except that it is the Historic District Commission - a management body which supercedes the Study Committee - that acts for the local governmental unit.

Use Restrictions. Depending on specifics of the local preservation ordinances, any construction, alteration, repair, moving or demolition other than ordinary maintenance or repair may be controlled. The purpose of this control is to (a) safeguard the heritage of the local unit by preserving elements of its cultural, social, economic, political or architectural history; (b) stabilize and improve property values in such district; (c) foster civic beauty; (d) strengthen the local economy; and (e) promote the use of historic districts for education, pleasure and welfare of the citizens (Section 2). The management technique which implements these controls is a permit requirement based upon the study and ordinances mentioned above.

Implementation and Enforcement. Use restrictions within historic districts may only be implemented locally. Since the State has interpreted its role as more consultor than regulator, the State's major responsibility is in reviewing reports prepared by the local historic district study committees. Though the State has not been directly involved in drafting, administering, or approving ordinances, Department of State staff have drafted model regulations, procedural guidelines, and sample ordinances which have been well used by local districts.

Once the Study Committee's boundaries are enacted, any party proposing an exterior or structural change within a historic district, must submit a construction plan to the local Historic District Commission for approval. Plan approval depends upon the plans conformance with local ordinances (Section 5). No work may begin unless and until approval is filed with the local building code authorities. The Commission may, like the Study Committee, request assistance from Department of State's staff on any of these matters.

The local District Commission has no explicit enforcement powers under this Act. They may, however, seek court enforcement after finding an activity in violation of the Act through either building code or zoning regulations.

Appeal Procedures. Any party unsatisified with the decision of the Historic District Commission has the same rights of appeal as in an appeal to the local zoning board of review (Section 11).

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures. The authorities of Act 169 are administered locally. Authority to draft reports and propose ordinances for historic districts is executed by

the local Historic District Study Committee. State interests are involved in reviewing the Study Committee report, but they are not involved formally in drafting or administering the ordinance. State of Michigan staff work and field studies undertaken in regard to the Act are conducted by the History Division of Michigan's Department of State.

Once the Study Committee issues its final report, they are dissolved and the local government unit appoints a Historic District Commission. The Commission has ongoing authority for implementing and enforcing elements of a study, as directed by local government. This Commission has specific authority to propose changes in district boundaries or local preservation regulations, review plans and applications, and conduct public meetings. But the major Commission responsibility is to review plans and applications for construction permits within the historic district. Contents of the plans and criteria for permit approval are determined in the ordinances of each local governmental unit. Depending on the details of these ordinances, the Commission may consider in their review: (a) historical or architectural values and significance of the structure in question as well as its relationship to the surrounding area; (b) the general compatibility of the proposed change in terms of design, texture and materials to be used; and (c) any other factor, including the aesthetic, which the Commission deems pertinent. Interior features may be considered only if the local governmental unit specifically directs the Commission to consider them.

The Commission may disapprove construction plans only on these grounds. The Commission may nontheless, approve applications which, in addition, "improve or correct situations that are a public safety hazard, are a deterrent to a major improvement program, could cause financial hardship to the owner, or are otherwise against the clear interest of the majority of the community" (Section 5).

Since counties, townships and municipalities may appoint their own historical commission, cases of overlapping commissions are possible. Section 8 of the Act requires that where a county historical commission exists concurrently with local commissions, coordination must be maintained. Activities of larger than local significance such as large scale historic preservation plans or significant permit decisions must be submitted to commissions of all the local governments involved.

Status of Implementation. Provisions of Act 169 became enforceable in August 1970. Since then, more than two dozen communities have either established local historic district ordinances or are considering such an ordinance. At this writing, three-quarters of all ordinances submitted to the Department of State for review have been approved. The constitutionality of the Act and its provisions were upheld in 1972 in the circuit court case Hall vs The Village of Franklin.

Administrative Policies. Since the Department of State and the Historic Preservation Review Board have each interpreted their mandate under Act 169 as more consultor than regulator, direct state level involvement of historic district controls is now limited to comments and answering requests for assistance. Rules to implement the act are being drafted at this writing. If promulgated, these rules will likely formalize state guidelines and models now in use without adding to current levels of direct state involvement with local regulations.

CRITERIA: DOES THE USE ACTIVITY INVOLVE THE COASTAL INSTALLATION, CONSTRUCTION, RECONSTRUCTION OR ALTERATION OF ANY PROCESS OR SYSTEM WHICH MAY BE A SOURCE OF AIR CONTAMINATION?

OVERVIEW

Air pollution impacts are either the direct result of contact with air born contaminants or the indirect result of changes in elements of the environment such as soil character, water quality, or weather. Most impacts involve both mechanisms together, however. Michigan has documented a variety of these damages (2 million dollars annually in terms of health, safety, economic losses and nuisances) to plants, wildlife, humans and their artifacts in every region of the state.

Primary responsibility for overseeing Michigan's ambient air quality and air emissions is given to an Air Pollution Control Commission (APCC) within the Department of Natural Resources (DNR) by the Air Pollution Act (Act 348, P.A. of 1965) and its subsequent amendments. In broad outline, this act authorizes the state to control air pollution and, through the Commission, empowers the State to:

* Make and enforce ambient air quality standards (compatible with federal guidelines);

* Make and enforce standards for visible air contaminants, particulate matter, open burning, sulfer dioxide and other gaseous contaminants;

* Make and enforce emission standards for certain activities involving air uses such as power plants, electricity generating facilities, waste treatment or disposal facilities, air cleaning facilities; and disposal of wastes collected from then; and incinerators or other fuel burning facilities;

* Determine what processes, activities, systems or equipment require a permit before construction, reconstruction, or alteration is allowed;

* Issue, modify or deny permits to install the above facilities or activities after reviewing application materials and ambient air quality standards;

* Issue, modify or deny permits to operate after evaluating compliance with installation permit conditions and ambient air quality standards;

* Determine and designate case-by-case variances in requirements for granting permits:

* Make voluntary contractual agreements with air users outside of permit programs to reduce emissions;

* Define standards and conduct monitoring programs for air pollution episodes;

* Collect surveillance fees from use activities which discharge contaminants to the atmosphere and distribute these fees to approval, local air pollution control programs;

* Suspend APCC's enforcement activities within areas having approved local air pollution control programs.

General provisions of the Act further empower the Commission to investigate complaints, establish and conduct programs for air quality surveillance and monitoring; conduct training programs; conduct regional air pollution studies and plans; review environmental impact statements; issue compliance orders; initiate litigation and enforce compliance.

This criteria focuses on an air use approval program based on emission limitations and prohibitions. This program is administered by the APCC as part of the support functions listed above. These air use approvals involve a two-stage permit program which regulates (a) installation of potential sources of air contaminants; and (b) operation of these and other facilities. Both programs evaluate performance using ambient air quality standards which are defined or approved by the Commission, and which comply with minimum federal air quality guidelines. Each program is administered to support the others in preventing new sources of air pollution and reducing air pollution from existing sources.

DETAILED PROVISIONS OF LEGISLATION

Basic provisions of Act 348 and its rules as they relate to installing and operating potential air pollution activities follows below.

Authority. The Air Pollution Control Act (Act 348 P.A. of 1965) has implemented a permit system compatible with the Federal Clean Air Act (42, USC (1) 1857, et. seq.), since the Environmental Protection Agency approved Michigan's program in compliance with federal rules in 1972. The state legislature amended that version of Act 348 (through Act 257, P.A. of 1972, effective July of 1975) to add provisions for state collection of surveillance fees and related matters such as annual reports from owners of emission sources. In today's form, the Act is cited as R366.1 through R366.36 of Michigan Compiled Laws.

Rules to implement the Act are cited as R366.11 through R366.508 and have also been amended from their original 1965 form. These amendments have added provisions for state control of sulfur dioxide emissions; for a state surveillance fee system; for state protection against deteriorating air quality; and for APCC to request information related to environmental impact and environmental reviews.

Scope of Authority. Act 348 provisions and rules apply statewide. Any

release of contaminants to the ambient air within state borders (including shipping) which may cause or result in air pollution or violation of air quality standards will come under purview of these requirements.

Definitions within the Act and rules specifically limit these requirements in that contaminants are any "dust, fume, gas, mist, odor, smoke, vapor, or any combination thereof" (Section 2). Ambient air is "that part of the atmosphere, outside of buildings, to which the public has access" (Rule 11). "Air pollution means the presence in the outdoor atmosphere of air contaminants in quantities, of characteristics and under conditions and circumstances and of a duration which are or can become injurious to human health or welfare, to animal life, to plant life, or to property, or which interferes with the enjoyment of life in this state" (Section 2). Air quality standards mean the "concentration and duration of an air contaminant specified by the (APCC) as the maximum acceptable . . . in the ambient air or by the National Ambient Air Quality Standards . . . whichever is more restrictive" (Rule 11).

Use Restrictions. Goals of the Act to prevent and abate pollution are met by regulating both new and existing sources of air contaminants. These regulations require that emissions to the atmosphere are compatible, within standards for both ambient air quality and the specific type of emission source being considered. Each source must demonstrate compliance in two types of permits: permits to install, which apply to all air using facilities, and permits to operate, which apply to facilities that have begun or changed their operation since 1967.

No air using facility may "install, construct, reconstruct, or alter any process, fuel burning, or refuse burning equipment which may be a source of air contaminant, or control equipment pertaining thereto before issuance of a permit by the commission. This will be known as a permit to install and will cover construction, reconstruction and alteration of equipment where that is involved" (Rule 21). Furthermore, no air using facility may operate a process, fuel burning, or refuse burning equipment which may be a source of air contaminant nor an air cleaning device pertaining thereto before issuance of a permit to operate by the commission" (Rule 29). These permits require that such facilities may not cause or allow contaminants to be discharged into the atmosphere from a single source of emission unless it conforms to the technical emission restrictions detailed in permit conditions or rules of the Act.

The Act categorizes these restrictions by type of use activity, type of emission, or both, Regulated use activities include but are not limited to uses such as fuel burning, refuse burning, or open burning (Rule 45); power plants (Rule 49); air cleaning devices and disposal of their wastes (Rules 61 and 62). Restrictions which are categorized by emission parameters include but are not limited to rate discharge (Rule 44); composition (Rules 42 through 44, 46, and 49); concentration (Rule 41 and 47); source (Rule 45, 48 and 49); and density, opacity, and duration (Rules 41 through 43). Taken all together, these rules and Section 14 of the Act require the DNR to regulate air use and air quality by reducing the total release of contaminants to the atmosphere which may harm the health, safety, welfare, or comfort of any person,

or which will damage property or business.

Rule 28 adds that APCC must deny permits to install for activities proposing uses which in its opinion: (a) include equipments which would not operate in compliance with or would interfere with the attainment or maintenance of air quality standards for any contaminant; (b) would violate provisions of the Federal Clean Air Act, (c) would result in substantial deterioration of air quality; (d) has insufficient information submitted with the application; (e) has inadequate information for preparing requested Environmental Impact Statements; or (f) has unsatisfactory plans for reducing emissions during air pollution episodes. Under Rule 29, the APCC must likewise deny permits to install if: (a) equipment does not operate in compliance with the Federal Clean Air Act; (b) equipment interferes with attainment or maintenance of air quality standards for any air contaminant; (c) is not completed in compliance with an approved permit to install; or (d) results in substantial deterioration of air quality in the operation of equipment.

Regulated activities in addition to obvious transport, industry and manufacturing uses include public and private utility installations, institutions, salvage and recycling, solid or liquid waste disposal, sludge burning in sewage treatment, grain elevators and wood mills. There are, however, several provisions for exemptions and variances in these restrictions. Section 2 exempts in its definition of air pollution "all aspects of employer-employee relationships as to health and safety hazards, as well as "those usual and ordinary animal odors associated with agricultural pursuits and located in a zoned agricultural area . . ." Both permit programs also exempt most types of (a) cooling and ventilating (Rule 31); (b) cleaning, washing and drying (Rule 32); (c) furnaces, ovens and heaters (Rule 33); (d) testing and inspection equipments (Rule 34); (e) containers; and (f) a number of miscellaneous activities and equipment "which do not involve any significant change in the quality, nature or quantity of contaminant emissions" (Rule 36).

Implementation and Enforcement. Air use restrictions will be implemented and enforced by APCC review and approval of permits to install or permits to operate, when it determines that local enforcement under local ordinances would result in compliance with the provisions of state permit programs. APCC may, however, suspend state enforcement within designated areas.

Under state implementation, any party proposing a restricted air use activity must apply to the APCC for a permit to install new air using activities (Rule 21), and within 30 days of completing that installation, must apply to the APCC for a permit to operate (Rule 29). Existing air use activities or facilities must only apply for operating permits, however. Typically, each of these permits specifies conditions for performance.

Under local implementation, units of county, city or village government may implement and enforce their own restrictions using a locally established, APCC-approved, air pollution control program (Section 14(a)2 and Rule 92). Commission approval depends upon how adequately APCC determines the local ordinances, rules and regulations are consistent with state air pollution controls--particularly in terms of surveillance, enforcement,

and penalty provisions for specific types of violations (Rule 93). State approval is evaluated by APCC annually (Rule 97) based upon APCC records, hearings, and semi-annual reports provided to the Commission by the local government unit (Rules 96 and 97). So long as a local program maintains Commission approval, state permits to install or operate are not required.

"The Commission may bring any appropriate action . . . necessary to carry out the provisions of this Act and to enforce any and all laws, rules and regulations relating to the provisions of this Act" with individual dischargers (Section 17) or with political subdivisions and enforcing officials (Section 26). "A person who, or a governmental unit who fails to obtain or comply with the permit or comply with the final order or Order of Determination of the Commission made unter this Act is guilty of a misdemeanor and shall be fined not more than $10,000 and in the discretion of the court, an additional amount of not more than $2,000 per day if violation continues." APCC may also petition local circuit courts and/or the State Attorney General for restraining orders and recovery of full value of damages done to the State's natural resources, plus costs of surveillance and enforcement. In addition, the courts may impose probation on violators (Section 16).

Enforcement variations may be granted by the APCC if the aggrieved party shows that enforcement is inequitable, unreasonable, or would cause unreasonable hardship and would be out of proportion to the benefits obtained. In either of these cases, the APCC may grant a partial variance or entirely withhold enforcement actions at its discretion (Sections 19-23). As with variances to permit requirements, requests for enforcement variances: (a) must be granted for renewable periods of up to one year and require the grantee to make periodic reports to the Commission (Section 22); (b) may be revoked or modified after a hearing by the APCC (Section 23); and (c) must not be granted in cases where air pollution is injurious to the public health (Section 21).

APPEAL PROCEDURES

Aggrieved parties or local governments may appeal Commission rules or orders on any of these procedures by initiating a civil action in circuit court (Section 13). Appeals involving surveillance fee amendments or other provisions of the Act are handled under the Administrative Procedures Act (Act 306, P.A. of 1969), specified in Part 11 Rules describing hearings (Rule 13 and Rule 8 of Part 13).

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of this legislation are described in the following sections.

Procedures. Provisions of Act 348 are administered within the Department of Natural Resources' Air Pollution Control Commission. Authorities directly and indirectly related to air use permits are exercised by the Commission's Chairman, who is also the Director of the Department of

Public Health. Briefly, these include: (a) field investigations; (b) sampling of contaminant sources; (c) ambient air sampling; (d) community air pollution studies; (e) emission inventories; (f) tax exemption approval program; (g) operating district air pollution offices; (h) maintaining a field staff of district engineers; (i) laboratory support services; (j) complaint investigations; (k) operating surveillance fee collection and distribution programs; and (l) public consultation. Administrative staff work and field studies in reviewing and approving both installation and operation permits are conducted by the Air Quality Division of the Michigan Department of Natural Resources, acting as staff of the Commission. Related functions such as surveillance and special studies are conducted in close cooperation with other DNR divisions acting as APCC staff (Rule 101).

Air quality and emissions to the atmosphere will be regulated by DNR either directly in Department review and approval of air use permits or indirectly by DNR review and approval of local air pollution control programs for monitoring, surveillance and enforcement. Permit reviews are based upon air use applications and related information sent to APCC by those proposing emissions. Local program review is based upon air pollution control program applications and status reports sent to APCC by local units of government. Both options must assure that emissions and ambient air standards meet required minimums in state and federal air quality legislation. Information the Act requires in making this determination invludes but is not limited to: effluent composition; character of air contaminants; location and elevation of emission point; engineering details of air cleaning devices and their expected performance; method of waste disposal; plan for reducing emissions during air pollution emergency conditions; and environmental impact statement requirements (Rule 24).

Under these criteria, proposed air uses which the Commission determines adequately protect the public health, safety, comfort and economic welfare from detriment, without inequitable or unreasonable hardship will be granted permits. Those uses will be permissible so long as the terms and conditions specified in each permit are met. Local air pollution control programs which APCC determines will, at minimum, adequately enforce these same criteria will be permissible as approved. Both state permits and approved local air pollution programs remain in effect at the pleasure of the Commission, although only local programs receive periodic annual evaluation.

Status of Implementation

Since the first permit was reviewed in 1967, over 5,500 permits to install and 4,000 permits to operate have been processed under Act 348 and its rules. These applications represent essentially all major existing and new sources of air contamination. Nearly all applications for both permits are granted with detailed stipulations and/or qualifying conditions for maintaining permissibility. Any applications which receive initial denial are revised by the applicant to meet APCC requirements and resubmitted. To date, nearly all applications have been revised as required. Less than 100 applications have been denied or terminated from both programs since 1967--none of these denials have led to adjudicatory hearings or circuit court review.

Court enforcement action has occurred, however, in a very few instances of violating permit conditions or air quality standards. The most notable example of these, Michigan Air Pollution Control Commission vs. Hillsdale Foundry, 1975, resulted in a plant shut down due to the facility's noncompliance with APCC air pollution standards. This action was initiated by APCC as a criminal action in circuit court, and the plant has not reopened.

Four municipalities (serving the metropolitan areas of Detroit, Grand Rapids and Muskegon) have now received APCC approval of local air pollution control programs. None of these programs has ever been cited or prosecuted for unsatisfactory performance.

In addition, some 150 voluntary compliance agreements have been contracted APCC and discharges not required to obtain either a permit to install or permit to operate. (This is due to "grandfather" exclusion of facilities operating without charge as they have before Act 348's 1967 enforcement date.) Very few (less than 10 percent) of these agreements have been appealed or violated; but of those that have, APCC has never lost a decision. These actions have typically enforced provisions for operating without a compliance agreement, violating compliance schedules and in the 1976 circuit court case of Michigan Air Pollution Control Commission vs. The Lima Company of Chelsea, Michigan's violation of an APCC order. In this example enforcement entailed a plant shut-down, a fine, court costs and placing a company officer on probation.

In summation, all major (defined as having the potential of 100 tons or more of annual discharge before permit conditions) sources of air pollution in this state are either now in compliance with Act 348 provisions or are under an enforceable compliance schedule. Air Quality Division determines that Michigan will be able to meet all requirements, schedules and deadlines in Federal Air Pollution Control legislation.

Administrative Policies. In the APCC's 12 year history, several formal and informal policies have been used to help implement State, DNR, and air quality goals. Many of these policies have led to legislation, as evidenced in each of Act 348's amendments. Many have also been important to the APCC's role in granting air use permits, as well as its role as a quasi-judicial and management agency.

The most significant policy to our concern here is formal. Of all tools made available in Act 346 provisions (installation permits, operating permits, ambient air quality standards, hearings, emergency and other orders, and voluntary performance contract agreements) the tools of first choice in preventing and abating air pollution are permits and the voluntary, but enforceable performance agreement. This approach reaches literally all air discharge and emissions uses, including those which do not fall under permit requirements. According to the 1975 state plan for air pollution control, this policy has been responsible for the fact that (except for one pending enforcement action) every

known source of air pollution in the state has been brought under control of Act 348 provisions.

Another more formal policy was drafted to control open burning in Department Letter No. 207 dated May 10, 1974. This letter, like other Department Letters, was signed by the Director of DNR and distributed to all staff as a formal statement of policy. The letter specifically states that certain types of opening burning are not allowed, whether proposed in permit programs, or conducted in other activities: refuse from multiple dwellings or commercial and industrial sites; open burning of building demolition or excess construction material; burning of automobiles or auto parts; and certain other flammable, explosive or toxic materials. Other burning activities are only conditionally allowable.

Supplementary Regulatory Tools

The APCC role is similar to DNR's Water Resources Commission and Resource Recovery Commission in that the APCC is the State Agency responsible for air pollution control matters. The APCC is under legislative mandate to protect and conserve the state's air resources by controlling both overall air quality and pollution of that air within the state's borders.

Also like other DNR Commissions, the APCC involves representatives of both government and private interests in exercising its licensing and other regulatory responsibilities. Its eleven members include eight Governor's appointees representing industrial management, local government, medicine, organized labor, and the general public; plus the directors of the State Departments of Agriculture, Natural Resources, and Public Health (Rule 101).

When the Commission finds that air pollution is occurring or is likely to occur, or finds that air quality standards cannot be met, it can use several non-regulatory tools to address the problem. By statute, the APCC is at one time a licensing, a management, and a quasi-judicial body with authority to use several mutually supporting powers and programs.

Ambient Air Sampling. Over 200 sampling stations are maintained throughout the state to monitor air quality parameters and the presence of particulate matter or other pollutants.

Field Investigations. State APCC field enforcement staff periodically review all identified sources of potential air pollution, as needed (frequency varies from semi-annually to biannually). Files are maintained to monitor permit, surveillance, voluntary agreement and local enforcement programs.

Source Sampling. State staff samples field investigated sources as well as others to demonstrate compliance or non-compliance with air pollution controls. Most of this work relates to permit review and enforcement.

Community Air Pollution Studies. Special comprehensive atmospheric and emmission studies are made in areas designated each year to analyze

local determinants of air quality, air use and impacts of air pollution.

Investigation of Complaints. Conservation officers, district air quality division personnel, other DNR field staff, local police and citizens have a vital role in promptly reporting observed air pollution. All such reports are quickly investigated by trained staff. A hot line is staffed 24 hours of every day by DNR and APCC staff to immediately respond to environmental emergencies and incidents involving air, land and water. Call 517-373-7660.

Emission Inventories. Annual statewide inventories of all the above activities are accumulated, cataloged and reported to give a comprehensive picture of the state's air quality and air quality control efforts.

Tax Exemption Programs. Under Act 250, P.A. of 1965, the State Tax Commission may allow air pollution control facilities approved by the Director of the DNR to be excluded from certain real, personal, sales and use tax evaluations.

Surveillance and Surveillance Fee Programs. Major emission sources are intensively checked under standardized conditions by state or district field staff. This is done at least annually, as needed. Fees to reimburse the state for this expense are paid by emission sources, and are pro-rated according to APCC formula.

Technical Support. APCC maintains its own laboratory unit to analyze air samples and related materials resulting from APCC activities.

APCC and its staff administers these responsibilities as separate, but highly integrated programs.

CRITERIA: DOES THE ACTIVITY INVOLVE FACILITIES WHICH COLLECT, TRANSFER, PROCESS OR OTHERWISE DISPOSE OR RECYCLE SOLID REFUSE MATERIALS?

OVERVIEW

Michigan residents now generate some 20 million tons of solid waste per year and require over 20,000 acres of land area for its disposal. The most important state use restrictions in the management and disposal of these materials were enacted in the Solid Waste Management Act (Act 87, P.A. of 1965). This legislation provides for the licensing and regulation of solid waste disposal areas which include by definition: refuse transfer facilities, incinerators, sanitary landfills, processing plants and any other facilities used in the handling, transportation or disposal of refuse. Treating each of these activities individually, Act 87 and its rules call for Department of Natural Resources (DNR) review and approval of license applications based on an evaluation of plans and specifications submitted with the application. This evaluation assures that usable sources of ground and surface waters are not jeopardized by disposal operations and that nuisance and water pollution are controlled to protect the public health. By requiring project plans and by providing for area-wide solid waste management plans, an organized approach to the landfill operation can be regulated in terms of local, area-wide and state operating criteria.

The Act also provides for DNR licensing and regulation of refuse transporting units. Because refuse includes solid industrial waste, this provision applies to units hauling industrial or domestic sludges or other moisture-laden materials not specifically covered by the Liquid Industrial Waste Haulers Act (Act 136, P.A. of 1969).

DETAILED PROVISIONS OF LEGISLATION

The basic regulatory authorities of Act 87 and its rules are described below.

Authority. The original Solid Waste Management Act (Act 87, P.A. of 1965) became effective immediately upon passage in June of 1965. Unlike earlier use-specific legislation regulating municipal waste disposal, junk automobiles, littering, roadside junk yards and even swine feeding, Act 87 took a more comprehensive look at solid waste concerns in line with the Federal Solid Waste Disposal Act of October, 1965 (P.L. 89-272, Title II). When the Federal legislation was amended by P.L. 91-512 in 1970, Act 87 was wimilarly amended to require local level planning for solid waste management by Act 89, P.A. of 1971. Rules which implemented the amended State Act and incorporated the earlier legislation are recorded as R325.2701 - R325.2789 of the Michigan Compiled Laws. The amended form of Act 87 has been in effect since March, 1972 when its rules were promulgated as R325.291 through R325.300 MCL.

The Governors Executive Orders 1973-2 and 1973-2a transferred these authorities, funding and personnel from Michigan's Department of Public

Health to its Department of Natural Resources.

Scope of Authority. Regulations of the Act apply to all refuse disposal occurring anywhere within the boundaries of the State. The Act considers refuse to be "solid wastes, except body wastes, including garbage, rubbish, ashes, incinerator ash or residue, street cleanings and solid market and industrial wastes" (Section 1), while disposal methods include either total or partial disposal and treatment activities.

Use Restrictions. With the exception of individual on-site disposal of household wastes which do not create health hazards or nuisances, no party "shall dispose of any refuse at any place except a disposal area licensed as provided in this Act" (Section 2).

The basic management tool used to implement this use restriction is a license requirement which is granted on the basis of plans and specifications submitted as part of an annual license application. All solid waste management activities must be conducted in a sanitary fashion which is not hazardous to the safety of employees or the public health, does not create a nuisance, does not unlawfully pollute or create injury to ground or surface waters which might interfere with legitimate water uses, and is based upon a management plan described in the rules of the Act. Rules specifically describe regulations for general licensing (Part 1), sanitary landfills (Part 2), refuse transport units (Part 4), refuse transfer facilities (Part 5), refuse processing plants (Part 6), collection centers for junk vehicles and farm implements (Part 7), development of solid waste management plans (Part 8), and miscellaneous disposal methods such as garbage grinding, burning and hog feeding (Part 3).

Rule 31 of Part 3 adds that "open dumps will not be permitted unless the location and specific method of operation has been approved in writing by the DNR, concurred in by the Director, and provided further that the isolation and operation and maintenance do not constitute a nuisance or hazard to health."

Implementation and Enforcement

These use restrictions must be implemented at state level by the Department of Natural Resources. No party may "establish, conduct, manage, maintain or operate a disposal area within this state without a license from the Director of the DNR. Any party contemplating the operation of a disposal area shall make application therefor each year to the Director ... on a form provided by the Director" (Section 3).

The Director may "revoke a license, after reasonable notice and hearing if he finds that the disposal area is not operated in accordance with this Act and the rules and regulations adopted thereunder" (Section 5). And "notwithstanding the existence and pursuit of any other remedy, the Director, in the name of the State or City or Village may maintain an action in its own name within its corporate limit for an injunction or other process to restrain or prevent the establishment, conduct, management, maintenance or operation of a refuse disposal area, refuse transfer facility, refuse processing plant or a refuse transporting unit without

a license or any other violation of the Act." (Section 7a.) And from Section 8, "any person who violates any provisions of this Act is guilty of a misdemeanor. Each day of the violation shall be considered a separate violation."

Appeals and Procedures. Though there are no specific provisions for appeal in the Act or its rules, appeals to actions of the Department or its director may be made in formal hearings and in subsequent civil court actions pursuant to the Administrative Procedures Act (Act 306, P.A. of 1969).

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures. All provisions of Act 87 and its rules are administered by the DNR, and all authorities of the Act and its rules are vested in the DNR's director. In practice, however, administrative duties are handled by the DNR's Resource Recovery Division with related staff and field work shared by that Division, DNR field and enforcement personnel, and local Department of Public Health personnel.

Solid waste operations will be regulated by DNR approval of license applications for each of the activities described in Parts 1 through 7 of the rules. Application review and approval is primarily based on whether plans and specifications submitted with the application comply with the procedural, fee, surety bond, planning and other requirements specified on the rules. License fees are $25 per year for facilities and $10 per year for transporting units. But in addition to these fees, sanitary landfill applications must also include surety bonds of $500 per acre of $2,500, whichever is greater, while other disposal locations must add surety bonds of 1/4 of 1 percent of construction costs of $2,500, whichever is greater. Those activities which can satisfy the Director on all of these requirements will be permissible for a renewable, one year license period.

Status of Implementation. In order of their occurrence in the rules, licenses were issued in 1975, for 300 sanitary landfills, 3 incinerators, 7,900 refuse transport units, 60 transfer facilities and 1 processing plant. And in addition, 15 solid waste plans were approved with 60 others in review.

Very few appeals have been made during the Act's 10-year history and as a result, no court tests have yet been made.

Administrative Policies. It has been Department policy for some time that no open dumps will be permitted and that no material other than dredge spoil which is regulated by other authorities may be dumped in Michigan's Great Lakes, although both practices could technically be allowed by statute.

Supplementary Regulatory Tools. Several significant management tools are contained in the Resource Recovery Act (Act 366, P.A. of 1974), effective January 1, 1975, to supplement Act 87 authorities. The purposes of Act 366 are:

* To encourage the conservation of natural resources by promoting or

developing systems to collect, separate, reclaim and recycle materials of value from waste for energy producing uses; and

* To provide a coordinated state-wide waste management and resource recovery program.

To realize its purpose, Act 366 establishes within DNR a State Resource Recovery Commission with authorities and duties to administer the terms of the Act and to define the role of DNR and municipalities regarding waste treatment. This Commission, like others within DNR, supplements state regulatory controls with planning, financing, tax exemption, legislative review and other programs to help local and state interests better meet goals of the regulatory legislation.

Specifically, the Commission must:

* Adopt a comprehensive state solid waste plan (drafter July, 1972).
* Review and approve policies, standards, activities and Department projects for solid waste management done by the state, by regions or by municipalities;
* Recommend rules, guidelines and studies; consult with other public and private interests;
* Promote recycling and the use of recycled materials; review solid waste management plans and recommend necessary revisions to plans in order to prevent unlawful pollution or environmental damage as defined in the Water Resources Commission Act (Act 245, P.A. of 1929, as amended), in the Air Pollution Control Act (Act 348, Public Acts of 1965, as amended), and in the Solid Waste Management Act (Act 87, P.A. of 1965, as amended);
* Draft orders and conduct hearings to assure that approved solid waste management plans are implemented; and
* With the State Attorney General, commence civil action for appropriate relief (including bonding requirements, permanent or temporary injuctions, and civil penalties of up to $2,500 per day of continuing violations) for enforcement of the Commission's final orders, or to restrain the violation and require compliance.

The Act similarly charges DNR with developing the State's solid waste management plan and its annual revisions; promoting proper solid waste storage, transport, handling, disposal, and recycling; providing technical assistance to public and private interests including their planning, design and financing to implement solid waste management which is consistent with state and other plans; promoting through contracts the use of private enterprise in implementing plans; and, if requested, contracting for solid waste service agreements.

Municipalities may conduct any lawful solid waste management project on its own, with other parties or with DNR, so long as their activity does not displace another facility or project which is licensed by the Department. Municipalities may own land, borrow money from DNR, make contracts and incur other obligations, impose user rates and fees, grant security interests to DNR in return for bonds and notes, and pay to DNR fees and charges set by the Department for waste management projects.

The State's role in this authority is to ensure that if the Resource Recovery Commission determines that local waste management is not conducted according to plans, then DNR as a public corporation, may close existing facilities, condemn land site new facilities, provide financing, certify certain tax exemptions and contract for technical help or other aids. Once the current proposals for rules to implement these authorities (HB 6248) are promulgated, these use restrictions will become a regulatory authority under their own criteria.

CRITERIA: DOES THE USE ACTIVITY INVOLVE THE HAULING OF LIQUID INDUSTRIAL OR DOMESTIC WASTE?

OVERVIEW

Through the mid-1960's a great number of Michigan warehouses were used to store barrels of industrial wastes which had been abandoned there by itinerant hauling contractors. Now, however, anyone engaged in removing, transporting or disposing of industrial wastes must be licensed and bonded under the Industrial Waste Haulers Act (Act 136, Public Acts of 1969). Michigan's basic goal in this Act is to protect its citizens and resources from both continuous and incidental pollution by liquid industrial waste. The management techniques used by the Act to protect against pollution of state waters are licensing and bonding requirements. The Act, as administered by Michigan's Water Resources Commission (WRC) is especially important to coastal interests for its authority to review and approve the siting of storage and disposal facilities.

DETAILED PROVISIONS OF LEGISLATION

The major elements of the Liquid Industrial Waste Haulers Act are explained in the following sections.

Authority. Act 136 was enacted July 31, 1969, as Section 323.271 through 323.280 of the Michigan Compiled Laws and took effect immediately.

Scope of Authority. The Act applies state-wide to any "individual, partnership, firm, association, corporation or person carrying on the business" of removing, transporting or disposing of liquid industrial waste. As used in the Act, liquid industrial waste means "any liquid waste, other than unpolluted water which is produced by or incident to, or results from, an industrial or commercial activity or the conduct of any enterprise" (Section 1).

Use Restrictions. Section 2 of the Act requires that no party may "engage in or carry on the business of removing liquid industrial waste from the presence of another person unless duly licensed . . . and bonded." Furthermore, no party may "engage, employ or contract with any other person except a licensee under this Act, to remove liquid industrial waste from his premises." Section 8 requires that licensees must "dispose of all wastes in accordance with Act 245, P.A. 1929, as amended . . . at locations specifically approved by the WRC . . . where it could not enter any body of surface or groundwater."

The Act specifically states, however, that municipal waste treatment facilities and their waste hauling contractors are exempt from requirements of this Act (Section 4). They are regulated instead by similar provisions of the Waterworks and Sewage Systems Act (Act 98, P.A. of 1913).

Implementation and Enforcement. Use restrictions promulgated by Act 136 are implemented by the Michigan Water Resources Commission and its staff. Under these terms, any party operating or proposing to operate a waste hauler activity must apply to the State for a waste hauler's license. State approval depends upon how adequately the Water Resources Commission feels the applicant protects against pollution of waters of the state by meeting the experience, reputation and equipment qualifications, as well as the bonding requirements of the Act. This done, the proposed disposal sites must then be reviewed, investigated and approved. If all conditions are satisfied, a license may be granted (Section 6).

Any party violating or refusing to comply with any provisions of the Act are subject to revocation of their license, and upon conviction, a fine of not less than $500 plus the cost of prosecution. Violators defaulting in the payment of fines or costs may additionally be imprisoned for not less than 10 days nor more than 30 days. When a violation is of a continuing nature, each day in which the violation occurs is considered a separate offense (Section 10).

Appeal Procedures. Though there are no appeals provided for in the Act, any fine or imprisonment resulting from a violation must result from conviction in a court of competent jurisdiction. Any party aggrieved of that court decision may therefore appeal the decision in local appeals court proceedings where the Water Resources Commission will be represented by the Michigan Attorney General.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures. Act 136 is administered by the Water Resources Commission, its staff and its designated representatives. The Commission has authority to review and approve permit applications; review forms and records from waste haulers and those contracting with waste haulers; determine hazardous or nuisance conditions resulting from the handling or disposal of waste by licensees; initiate clean-up, and to ask for court corrections of violations. Administrative staff work in regard to the Act is conducted by the Department of Natural Resources' Oil and Hazardous Materials Control Section, Water Quality Division.

Waste hauler licenses must be renewed and reviewed annually by the Water Resources Commission. Each application must be accompanied by a license fee ($100) and a surety bond ($15,000 for residents $30,000 for non-residents). The fee is non-returnable each year, but the surety bond may be reused in annual license renewals. If the Commission finds that hazardous or nuisance conditions unlawfully pollute waters of the state as a result of the licensee's work, it may use his bond to take any

necessary corrective or abative measures to prevent the pollution.

The application itself requires that the applicant explain his qualifications, experience, and reputation, as well as document that his procedures, equipment and disposal site will be used in a manner which will not cause unlawful pollution and which will not be detrimental to the public interest. Each application also requires a license fee of $10 per vehicle to be licensed, payable by the state.

Any application meeting the bonding and licensing requirements will be approved and will be granted a license to operate, as long as operations conform to those licensing conditions they will be permissible.

Status of Implementation. Some 140 liquid industrial waste hauler permits have been reviewed each year since the Act's passage in 1969. As most applications are renewals, and since the review process recommends changes needed for permit approval, most of the applications received are ultimately approved.

In February of 1976 the state won a district court test of Act 136 in Auto Ion Chemical Inc. & James Rooney vs. The State of Michigan, confirming the state and DNR authority to require licenses for liquid industrial waste haulers.

Other Regulatory Tools. Before a waste hauler's permit can be granted, the applicant must comply with Section 8(2) of Act 136 which requires that all wastes be disposed in conformance with Act 245, P.A. of 1929, as amended. Though not a separate management tool, the relationship of Act 245 with this and other acts might be clarified here. The body of Act 245 establishes (in very general language) a commission to oversee all state interests related to water. Rather than alter this commission with each change in technology, law or public opinion, the Act has often been amended by adding rules which are promulgated as operational footnotes to relevant new water related acts. Part 5 Rules perform this footnote function, relating act 136 permit authorities to Act 245 water quality control authorities, via Section 8(2) of Act 136.

A second management tool relating to the coastal management program's concern with waste haulers is the Domestic Waste Haulers Act, also known as the Servicing and Cleaning Act for Septic Tanks, Seepage Pits and Cesspools (Act 245, P.A. of 1951). There are few differences between the state's regulation of domestic and industrial liquid waste haulers. As with their industrial counterpart, domestic haulers are regulated by the WRC to protect citizens from disease and resources from pollution. The regulation technique used is a licensing and bonding requirement which is also administered, implemented and enforced as above. Though over 350 permits were approved last year, most haulers used municipal wastewater treatment plants for disposal, as the Act intended, rather than other DNR-approved disposal sites. Because of this comparatively low volume and the low pollutant concentration of domestic septic sludge, this use activity has not been significant enough to be considered by the CZM program under its own criteria.

CRITERIA: DOES THE ACTIVITY INVOLVE USE OF THE GREAT LAKES OR OTHER WATERS OF THE STATE FOR DISCHARGE OF INDUSTRIAL OR COMMERCIAL WASTEWATERS?

OVERVIEW

Primary responsibility for overseeing the quality of Michigan waters is given to the Water Resources Commission (WRC) within the Department of Natural Resources (DNR) by the Water Resources Commission Act (Act 245, P.A. of 1929) and its several subsequent amendments. In broad outline, the Act establishes the Commission and empowers it to:

* Set water quality standards, (surface water discharge standards comply with federal criteria of the National Pollutant Discharge Elimination System program).

* Inspect and monitor discharge or storage activities which could potentially affect the quality of Michigan waters.

* Regulate discharges by permit and regulate storage arrangements. This operation also conforms to the Federal NPDES standards for surface water discharges.

* Require periodic reports from discharges including the registration of certain products and materials used in manufacturing.

* Regulate and certify supervisors of commercial or industrial waste treatment plants discharging to surface or underground waters.

General provisions of the Act further empower the Commission to investigate complaints; establish programs for water quality surveillance and monitoring; conduct special and comprehensive studies of rivers and lakes, their use, and their biological and waste assimilation conditions; issue orders; initiate litigation; and enforce compliance.

This criteria focuses on the discharge permit programs administered by WRC as part of these and other support functions. Two types of permits, surface water (NPDES) discharge permits and (State) groundwater discharge permits, are involved in this program. Both permits regulate commercial and industrial use activities which make such discharges to protect the water resource and the general public interest. WRC administers both to comply with and augment each other.

DETAILED PROVISIONS OF LEGISLATION

A description of the basic provisions of Act 245 and its rules as they relate to commercial and industrial discharge activities are described below.

Authority. Industrial and commercial wastewater discharge provisions of Act 245 implement a permit system compatible with the National Pollutant Discharge Elimination System (NPDES) program in the Federal Water Pollution Control Act amendments of 1972 (P.L. 92-500, Part 124). Through Act 118, P.A. of 1972, effective April 18, 1972, the State legislature amended the broadly worded Water Resources Commission Act (Act 245, P.A. of 1929) to add specific provisions for a state discharge permit system in Sections 2 and 5. Detailed rules to implement this State program were approved and placed in effect with this amendment as Part 21 of the Rules of the Act. The amendments are cited in Section 323.2 and 323.5 in Michigan Compiled Laws while the Part 21 Rules are R323.2101 through R323.2160, MCL.

Scope of Authority. Industrial and commercial wastewater discharge of Act 245 regulate discharges to any waters of the state, meaning all surface watercourses, surface water bodies and underground waters within the confines of the state, including the bordering Great Lakes (Section 11).

Rules of the Act consider discharges to be "any discharge or discharge of any waste, waste effluent, wastewater or pollutant, or any combination thereof into any of the waters of the state or upon the ground." Likewise, waste means "any waste, wastewater, waste effluent or pollutant including, but not limited to any dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste, discharged into water." And, wastewater means "liquid waste discharges into waters of the state resulting from industrial and commercial processes and municipal operations, including, but not limited to, cooling and condensing waters and sanitary sewage from industrial, commercial and municipal facilities." (Rule 2105).

Use Restrictions. Any party discharging or proposing to discharge wastes from any point source into the surface of groundwaters of the state or on the ground must obtain from the WRC a valid National Pollutant Discharge Elimination (NPDES) surface discharge or a State (underground) Discharge Permit. Discharges into surface waters require a NPDES permit, while discharges into groundwaters or onto the ground require a state permit (Rule 2106). Any party discharging waste or wastewater from more than one location must file a separate application for each discharge location (Rule 2108).

Rule 2109 specifically exempts the following uses from discharge permits as they are regulated in other legislation: human sewage discharged from vessels using Michigan ports or waters, discharges directed solely to a publicly owned treatment works, certain activities associated with oil or gas production authorized by the State Supervisor of Wells, and certain sewers connected to wastewater treatments works which conduct only storm waters.

According to Rule 2133 and Section 5, the Commission must be assured, on the basis of the application and WRC studies and records, that in issuing permits, it has taken all appropriate steps to prevent any pollution which is unreasonable and against the public interest, in view

of the existing conditions at any lake, river, stream or other waters of the state.

Rule 2136 adds that state and federal permits shall therefore not be issued to any party proposing the following discharges:

* Discharge containing a radiological chemical or biological warfare agent or a high level radioactive waste.

* Substances which the Commission determines would substantially impair anchorage or navigation.

* Discharges from a point source in conflict with an areawide waste treatment management plan prepared under Section 208(b) of P.L. 92-500.

Implementation and Enforcement

Discharge restrictions will be implemented by WRC review of state permit applications, but federal NPDES permits will be reviewed by both WRC and the Environmental Protection Agency.

Parties proposing discharges to groundwaters or to the ground must submit an application for a State Permit to the Executive Secretary of the DNR's Water Resources Commission for review and approval (Rule 6). Any party proposing to discharge to surface waters must submit an NPDES Permit application to the Executive Secretary of the WRC for his review and approval, and subsequent referral to the Regional Director of the Environmental Protection Agency for comment (Section 5). In both cases, WRC will issue full or conditional permits if they determine that unlawful pollution can be adequately guarded against by available waste treatment or control measures (Section 8b).

In accordance with Section 402 of the 1972 Amendments to the Federal Water Pollution Control Act (92-500) all point source discharges of wastewater to the surface waters must have National Pollutant Discharge Elimination System (NPDES) permits. On October 18, 1973, Michigan's WRC, received authority from EPA to administer that program in Michigan. As required by 92-500, discharges permitted under this program are limited by treatment criteria defined as Best Practicable Control Technology Currently Available (BPCTCA) and by water quality conditions, whichever is more distinctive. All proposed permits are public noticed for a period of not less than 30 days, and comments received during the public notice period must be addressed in the final permit. The concurrence of EPA, Region V, is necessary prior to issuance of any NPDES permit in Michigan. After receiving and evaluating federal and public inputs, WRC may issue the NPDES permit (Rule 2112). With the exception of the EPA review, WRC issues state groundwater discharge permits under Act 245 in much the same manner.

If the Commission finds that the terms of a permit have been, are being, or may be violated, it may revoke the permit or grant the permittee a reasonable period of time in which to comply (Section 7). However, any party who "discharges contrary to the provisions of the Act, permits,

orders, rules or stipulations of the Commission, or who makes a false statement, representation or certification of an application for, or form pertaining to a permit, or in a notice or report required by the terms and conditions of an issued permit, or who renders inaccurate a monitoring device or record required to be maintained by the Commission, is guilty of a misdemeanor and shall be fined not less than $2,500 nor more than $25,000 for each violation." The court may impose an additional find for each day during which the unlawful discharge occurred of not more than $25,000 for first offenses or not more than $50,000 per day of violation for each conviction subsequent to a first offense (Section 10).

The Commission may request the State Attorney General to commence civil action for appropriate relief, including permanent or temporary injunction or to recover full value of injuries sustained to natural resources of the state plus any costs of surveillance and enforcement by the state resulting from the violation, for any violation of this Act, or its rules. In restraining the violation and requiring compliance, the court has jurisdiction, in addition to any of the above to impose a civil penalty of not more than $10,000 per day of violation and at its discretion, may impose probation upon violators of the Act (Section 10).

Appeal Procedures. Any party aggrieved by permit restrictions or any other order or stipulation may petition the Commission for a hearing. After hearing testimony and evidence from the petitioner and any other interested parties, WRC will issue a Final Order of Determination upon the matter. This Determination is conclusive unless reviewed in circuit court in accordance with Part 1-3 amendments to Act 245, which is also known as the Administrative Procedures Act, Act 306, P.A. of 1969 (Section 8).

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures. Both state and federal permit programs are administered by the Department of Natural Resources' Water Resource Commission. Authorities directly and indirectly related to the permit programs are exercised by the Commission's Executive Secretary: investigating complaints; conducting discharge surveillance programs; monitoring water quality; reviewing and approving permit applications; issuing and renewing permits; issuing Orders of Determination; conducting hearings; and initiating enforcement action. Administrative staff work and field studies in reviewing and approving both state and federal permits are conducted by the Water Quality Division of the Michigan Department of Natural Resources, acting as staff of the Water Resources Commission. Related functions such as certain types of surveillance and special studies are conducted within other DNR divisions acting as WRC staff.

Whether discharges are made to surface waters, groundwaters, or to the ground, WRC will regulate discharge activities with both state and federal discharge permit programs. Review and approval of discharge activities is based upon applications submitted to the Commission's Executive

Secretary. Permit applications must be completed in accordance with guidelines promulgated by the Administrator of EPA entitled, "National Pollutant Discharge Elimination System; Proposed Forms and Guidelines for Acquisition of Information from Owners and Operators of Point Sources," as published in 40 CFR 126, and any subsequent revisions, additions or modifications adopted by the Commission. Application forms provided by the Commission require the applicant to describe the discharge location and the waste characteristics (in terms of content, flow rates, etc.).

After WRC receives the permit application, it is reviewed for completeness. If additional data is needed, the applicant is contacted to gather the additional information. Field investigations are normally made at the proposed disposal site. A preliminary decision to issue or deny the permit is made and the applicant is notified of the decision. Decisions to deny may be appealed to the Water Resources Commission at this point. If the permit is not denied, WRC then prepares a draft permit and a fact sheet outlining the major provisions or conditions of the permit. The application, draft permit and fact sheet for federal permits then must be submitted to EPA, to the Army Corps of Engineers, and to the Department of Interior for review and comment. A public notice may then be published or an Intent to Issue the permit is advertised in order to notify interested parties that a 30-day period is open for comment on issuance of the permit. Depending upon that public response, a public hearing may be held to receive additional comment. Following the comment period of public hearing, all comments including the hearing record are reviewed to determine if the permit should be issued as drafted, if it should be modified, or if it should be denied. If an NPDES permit is modified, a redrafted version is submitted to EPA. According to EPA reaction, the permit is then issued in final form or denied. If denied, the applicant may appeal that decision to the WRC by requesting a hearing.

The Commission will approve all permits, which on the basis of the application, comments, and WRC records, assure that discharges will: (a) comply with WRC-established pollution standards appropriate to the public use of receiving waters; (b) meet state standards for discharge and storage of potentially hazardous substances; (c) comply with applicable federal and state laws and regulations; (d) prevent any pollution the Commission deems unreasonable and against the public interest in view of existing conditions.

Section 6 of the Act amplifies this criteria so that it is: (a) unlawful for any party to directly or indirectly discharge to the waters of the state any substance which is, or which may become injurious to the public health, safety or welfare; (b) injurious to domestic, commercial, industrial, agricultural, recreational or other uses which are being or may be made of such waters; (c) injurious to the value or utility of riparian lands; (d) injurious to livestock, wild animals, birds, fish, aquatic life or plants or the growth or propagation thereof; or (e) whereby the value of fish and game is or may be destroyed or impaired.

Permissible discharge activities will be those which have been granted requirements detailing the effluent standards and limitations, the water quality standards, the compliance with area-wide waste treatment plans, any interim requirements, schedules of compliance, compliance reports, or any other limitations and requirements specified by the Commission in the body of the permit. State and national permits will also specify a fixed term by the Commission, and reissued and re-evaluated at the end of its term. Permits will also specify the performance standards and monitoring requirements over the duration of the permit period to assure compliance.

Status of Implementation

Since mid-1973, over 14,000 NPDES permits and 250 groundwater permits have been processed and granted by Water Quality Control Division. Those NPDES permits regulate essentially all existing uses plus a number of new uses of surface waters which receive discharges. All existing groundwater discharge activities are not yet covered under the 250 groundwater permits, though the Water Quality Control Division is well into the process of issuing such permits. Applications for new uses in both programs are being processed as received, but there are no tallies separating new and existing uses from the total.

It is estimated that 10 percent of all new use applications to both programs have been denied. To date, this has resulted in only six petitions for NPDES adjudicatory hearings (2 have since been withdrawn, 3 remain in hearing and 1 is very near a determination) and no petitions for groundwater permit hearings.

Compliance and enforcement for both programs receive a great deal of attention within the Water Quality Control Division. The several surveillance and monitoring activities of the division assure that all dischargers adhere to their responsibilities under each program. Violations for operating without a permit are rare, however, the compliance monitoring program has surfaced violations of permit conditions such as failed effluent limitations and failure to adhere to compliance schedules. These violations have led to issuance of nearly 2,000 administrative orders requiring compliance. Of these, 2,000 less than a dozen have required further formal enforcement action.

The most notable enforcement action occurred early in 1976 involving Michigan Chemical Company. After issuing several unsuccessful orders for noncompliance, WRC staff through the State Attorney General filed a formal complaint with WRC. After hearings on the matter, the company consented to entry of a Final Order with the Commission which revoked their NPDES permit and contained a schedule for the gradual cessation of operation at the subject facility. The company also agreed to contribute $20,000 to the Michigan Fish and Game Fund for restitution of damages to the Pine River ecosystem.

Administrative Policies. In WRC's 47-year history many formal policies have been used to help implement state, department and commission water quality goals. Many of these policies have become legislation, as evidenced in comparing the several "Part" Rules of Act 245 with a comprehensive list

of major WRC policies. (See Authorities Appendix of this document for both.) Since these policies have been important to WRC's role in granting discharge permits as well as its roles as a quasi-judicial and management agency, a brief outline of policies relating to each role is outlined below in selected excerpts from the index of all major WRC policies.

NPDES RELATED POLICIES:

Index Item #23	WRC to adopt water quality standards for interstate waters.
#55	WRC made party to enforcement actions brought by EPA.

STATE DISCHARGE PERMIT RELATED POLICIES:

Index Item #41	WRC to consult with DNR's Geological Survey Division in groundwater disposal permits where wastes might migrate to existing groundwater supplies.
#54	WRC policy on disposal of wastes by surface injection.
#63-66	WRC policy statements on underground discharge of spent cooling water, waste disposal application guidelines, and new uses of state waters for disposing of less than 10,000 gal./day of sanitary sewage.
#80	WRC guidelines for evaluating subsurface disposal of sewage.

POLICIES RELATING TO BOTH NPDES AND STATE DISCHARGE PERMITS:

Index Item #18	Guidelines for using emergency water clean-up funds.
#40	Control of metal finishing wastes.
#45	WRC phosphorus removal policy and deadlines.
#53	Salts to be stored without polluting surface or groundwaters.
#85	WRC-Department of Public Health interagency agreement on processing NPDES and state discharge permits.
#86	Sanitary sewage and disposal facilities using on-site storage, hauling and final disposal of off-site receiving facilities (pump and haul facilities) policy and guidelines.
#45	Phosphorus removal policy.
#53	Salts to be stored to protect surface and groundwater from pollution.
*85	WRC-DPH interagency agreement regarding permits issued under Act 98, P.A. 1913. Sanitary Sewage Disposal Facility using on-site storage, hauling and final disposal off-site receiving facilities (pump and haul facilities) policy and guidelines.

POLICIES RELATING TO OTHER MANAGEMENT TOOLS:

Index Item #9	Cleaning agent sales policy.
#21&28	Policy of disallowing oil and gas well drilling in state-owned bottomlands.
#36-44	Policy on new or increased use of state waters involving wastewater systems under Act 98, P.A. of 1913, radioactive wastes, power plant cooling water discharges, schools, hospitals, apartments and sewage disposal from developments within local government units.
#48	Policy regarding on-land sewage effluent disposal.
#50	WRC agreement with Department of Agriculture in enforcement of the Pesticide Registration and the Economic Poisons Acts.
#72-76	WRC to regulate recreational and commercial watercraft sewage treatment facilities and subsequent promulgation of Watercraft Pollution Control Act (Act 167, P.A. of 1970).
#79	WRC policy regarding responsibilities to the public, the press and public involvement.
#82 & 83	Authorities of WRC's Executive Secretary; DNR staff-appointed as agents of WRC.
#87	WRC response strategy for oil and hazardous materials spills.
#88	Policy of WRC being reimbursed for costs of responding to oil and hazardous materials spills and other incidents.

Supplementary Regulatory Tools. Michigan's long and intense concern for its waters is reflected in the history of Act 245. The basic, broadly worded version of 1929 has been continuously revised to strengthen and expand both regulatory and non-regulatory programs. Revisions within the last ten years concern the powers and programs of the Water Resource Commission, the administrative authority for all Act 245 provisions.

The WRC role is similar to the DNR's Air Pollution Control and Resource Recovery Commissions, in that WRC is the state agency for water pollution control. The WRC is under legislative mandate to protect and conserve the water resources of the state and to have control over pollution of any water of the state including the Great Lakes.

The WRC role is similar to the DNR's Air Pollution Control and Resource

Recovery Commissions, in that WRC is the state agency for water pollution control. The WRC is under legislative mandate to protect and conserve the water resources of the state and to have control over pollution of any water of the state, including the Great Lakes.

Also, like the other DNR commissions, WRC functions as a judicial body of government and private representatives in exercising both regulatory and non-regulatory responsibilities. The WRC is by statute a quasi-judicial body. Its seven members include three Governor's appointees representing municipalities, industries, conservation organizations, and the directors of the State Departments of State Highways and Transportation, Agriculture, Public Health and Natural Resources. Before action can be taken, the Commission must determine that pollution is occurring or may occur, on the basis of facts, records and the law.

Pollution in Michigan is defined by the legislature as "raw sewage or any other discharge which is or may become injurious to:

Public Health, Safety or Welfare
Public Water Supply
Recreation
Fish and Wildlife
Agricultural Water Use
Industrial Water Use
Commercial Water Use
Value of Fish or Game
Aquatic Life
Riparian Property."

When the Commission finds pollution hazards, it can issue abatement orders. If these orders are not obeyed to the Commission's satisfaction, the State Attorney General is contacted to begin enforcement in circuit court, according to the general provisions of Act 245 and/or more specific provisions of Act 245's rules or the Environmental Protection Act (Act 127, P.A. of 1970). These actions may in turn be appealed to a higher court, but only on the validity of procedures and adequacy of pollution proof.

WRC detects pollution by the following systems:

Investigation of complaints. Conservation officers, other Department of Natural Resources field staff, local police and citizens serve a vital role in promptly reporting observed pollution. All such reports are quickly investigated by trained staff. A hot line is staffed 24 hours of every day by DNR and WRC staff to immediately respond to environmental emergencies and incidents involving land, air and water (Call 517/373-7660).

Surveillance. Major industrial waste discharges are checked at least annually by intensive surveys where controls are well established and by district field staff, where necessary.

Monitoring. Water quality at the mouths of the major Great Lakes tributaries are sampled monthly and numerous other locations are sampled on a regular basis throughout the state.

Special Studies. Special comprehensive river and lake studies, biological and waste assimilation studies are made to evaluate surface water quality conditions.

WRC protects Michigan's waters through action programs, most of which are regulatory in nature and have been described in other criteria within this chapter. WRC and its staff administers these responsibilities and others as separate, but highly integrated programs. A brief description of these responsibilities is attempted below.

Under Act 245 the WRC is directed to:

* Control the pollution of any surface or underground waters of the state and the Great Lakes;

* Establish pollution standards for lakes, rivers, streams and other waters of the state as it deems necessary;

* Examine and certify operators of industrial waste treatment facilities discharging wastes into the waters of the state;

* Require the registration of certain manufactured products, production materials and waste products where certain wastes are discharged;

* Issue permits for all discharges to the waters of the state which include provisions to restrict the polluting content of existing or proposed new or increased uses of state waters for waste disposal purposes;

* Assess an annual surveillance fee to any person, company or corporation, except a municipality, discharging water-borne wastes directly or indirectly into the waters of the state;

* Promote and encourage voluntary pollution controls (stipulations) that are enforceable by law;

* Issue orders to restrict potential pollutional contents of all new and expanded uses of the state's waters for waste disposal. Michigan law has required such "new use" restrictions since 1949;

* Implement water quality standards to protect the natural water quality and the uses of Michigan's waters. The Commission, acting in compliance with Federal Legislation and its own basic act, has established water quality standards, and designated use areas where various standards apply, for all the inland lakes and rivers, and the Great Lakes in Michigan. This program is designed to protect existing high quality waters and to upgrade waters which are now lowered in quality.

But in addition, the WRC is further authorized to:

* Issue permits which include a performance timetable requiring the abatement of existing pollution problems, and restrictions on new discharges to prevent unlawful pollution;

* Seek court enforcement of its permits and orders through civil and criminal remedies and penalties;

* Determine the volume of water flowing in all streams and the high and low water marks of lakes;

* Make regulations and orders to prevent harmful interference with the discharge or stage characteristics of streams;

* Determine the location and extent of flood plains, stream beds and channels;

* Make surveys, studies and investigations of water use;

* Take advantage of and coordinate with any act of the Federal Congress;

* Administers the "Truth in Pollution Law" program, requiring annual surveillance fees and wastewater reporting forms from industrial and commercial wastewater discharges; and

* Administer the Watercraft Pollution Control Act and the laws restricting the contents of cleaning agents sold in Michigan.

The following functions and duties of the Water Resources Commission and its Executive Secretary are set forth by Executive Orders of the Governor:

State-Federal Programs

* The Commission is authorized as the state agency responsible for coastal zone management in Michigan and to coordinate the state's efforts with the federal government under new federal coastal zone legislation.

* The Commission is authorized to cooperate and coordinate with the U.S. Army Corps of Engineers in flood control studies and projects and act as coordinator of effort, information and policy of state agencies on all Corps' activities, except navigation.

* The Commission is authorized to process and coordinate local applications for Corps of Engineer's flood plain information studies.

* The Commission is authorized to assist the State Soil Conservation Committee in determining the feasibility of headwaters management projects applied for by local units of government under the provisions of Federal Public Law 83-566.

* The Executive Secretary is by statute a member of the Great Lakes Basin Commission.

* The Commission is authorized to coordinate Michigan's participation in the Great Lakes Basin Commission.

International Programs

* The Executive Secretary is appointed as a member of the Water Quality Board of the International Joint Commission on control of pollution of boundary waters.

A more comprehensive list and test of these programs is found in the Act itself with its Rules and Amendments, and in other statutory responsibilities documented in State Statutes administered by the Water Resources Commission. Both of these are included in the Authorities Appendix of this document.

CRITERIA: DOES THE ACTIVITY INVOLVE COLLECTION, CONVEYANCE, TRANSPORT, TREATMENT OR OTHER HANDLING OF DOMESTIC OR INDUSTRIAL LIQUID WASTES BY MUNICIPAL SEWER SYSTEMS OR BY MUNICIPAL TREATMENT FACILITIES?

OVERVIEW

Municipal wastewater collection and treatment activities have long been regulated under the Control of Waterworks and Sewage Treatment Systems, Act 98, P.A. of 1913 as amended. The objective of this regulation is to protect the public health, safety and welfare and to protect the water resources of the state. In accomplishing this protection, municipal wastewater treatment systems are under state supervisory control in virtually all stages of their operation from collectors to outfalls.

Under Act 98, provisions for wastewater treatment, municipalities may plan, construct, operate, maintain and alter facilities under state supervisory control--a state classification system groups facilities into uniform categories by size and type. A state inspection program monitors plant performance and sets operating standards for each category. State certification is required for plant superintendents. Reports, records and operating techniques may be state-inspected.

All these activities are the regulatory responsibility of the Department of Natural Resources (DNR) in close cooperation with similar responsibilities of the Department of Public Health (DPH) for water supply and of other DNR duties which regulate industrial waste treatment.

DETAILED PROVISIONS OF LEGISLATION

Authorities for regulating sewage systems and wastewater treatment systems under Act 98 and its rules are explained in the following sections.

Authority. Act 98 reached today's form (R 325.201-R 325.214 of Michigan Compiled Laws) through several amendments to the original 1913 Act. These amendments did not much alter the original until Governor Milliken's Executive Reorganization Orders 1973-2 and 1973-2a transferred the duties and personnel of the Act's wastewater provisions from the Department of Public Health to the Department of Natural Resources. Though Act 98 authorities for wastewater treatment in DNR are still administered separately from its water supply authorities in DPH, legislation is now in committee to replace Act 98 with separate legislation for each function. Passage is expected this summer. Rules to implement wastewater authorities of the Act 98 became effective in November of 1975 as R299.2901 through R299.2974 of the Michigan Compiled Laws. These Rules are also intended to provisionally implement the new legislation.

Scope of Authority. Section 1 of Act 98 gives DNR supervisory and visitorial powers and controls over all public and private parties

engaged in furnishing municipal sewerage and/or sewage treatment service. Rule 3 defines these sewer systems as the facilities used or intended for use by the public to collect, convey or transport domestic or industrial waste to a treatment facility. A treatment facility is defined as the facilities used or intended for use by the public to treat or otherwise handle domestic or industrial wastes. And similarly, a sewerage system includes sewer systems and treatment facilities required to collect, transport and treat domestic or industrial wastes.

Use Restrictions. As stated, nearly all activities associated with liquid waste treatment are regulated:

"Treatment facilities shall be classified by the Director of DNR. . . based on populations served, type of treatment facility, the character and volume of waste to be treated, the use and nature of the waters. . . receiving the effluent . . . and special features . . . or characteristics more difficult to operate" (Rule 11).

"The Director (DNR) shall examine persons . . . to operate such plants and issue and revoke certificates . . . (so that) every water treatment plant subject to provisions of this Act shall . . . be under the supervision of a properly certified operator" (Section 3).

"Before construction or alteration of the sewerage system or portions thereof, plans and specifications shall be submitted to the Department for review and issuance of a construction permit" (Rule 33).

"The owner of a sewerage system shall obtain and maintain reproducible as-built plans and specifications which accurately describe the entire sewerage system in its current condition" (Rule 56).

"It shall be unlawful for any (party) to issue any voucher, check or in any other way expend monies . . . for such construction unless a valid permit for the same, issued by the Director of the DNR, is in effect" (Section 6).

"The owner of a treatment facility shall prepare . . . an operation and maintenance manual for the facility . . . which shall be submitted to the department for review, approval and filing" (Rule 57).

"The superintendent of the facility shall file with the department each month, or . . . as the department may designate on forms prescribed by the department, operating reports " (Rule 53).

And the Director of the DNR "shall counsel with government agencies (and other parties) owning and/or operating (such facilities) when disputes between public agencies over sewerage service (areas) or sewage treatment rates occur and may act as arbitrator in such cases" (Section 11).

Implementation and Enforcement. In all these matters the Director of the NDR "shall exercise due care to see that the sewarage systems are properly planned, constructed and operated so as to prevent unlawful pollution of the streams, lakes and other water resources of the state" (Section 11). But the regulations most important to the coastal management program are

the requirements for planning and construction permits. This requirement documents that all facilities will meet acceptable design standards in preventing pollution and protecting health. Rule 41 states more specifically that the Director will grant permits for activities whose plans and specifications, in his view, adequately assure that the plant will have proper devices and will operate them satisfactorily to protect the public health and prevent unlawful pollution.

The Act contains both specific and general penalties for violations. In Section 6, any party who shall "permit or allow construction to proceed without a valid permit, or in a manner not in accordance with the plans and specifications approved by the Director of the DNR, shall be guilty of a misdemeanor." Or, in Section 7 "any person making a false statement in reports shall be deemed guilty of and subject to the penalty of perjury." In the most general case, however, any party found guilty of violating the Act or its rules is "guilty of a misdemeanor and shall be punished by a fine of $25 to $100 plus costs for prosecution, or imprisonment of up to 90 days, or both." Each day of violation is considered a separate and additional violation. The State Attorney General will represent the state in all cases arising under the Act, including the recovery of penalties (Section 13). Rule 60 additionally states that violators are also subject to any other applicable state acts and rules.

Appeal Procedures. Aggrieved parties may appeal disapproval of construction permits or any other action undertaken via the Act by petitioning the Director of the Department of Natural Resources. Both informal hearings with the Department and/or formal hearings with the Natural Resources Commission may be requested. If unsatisfied with the hearing determinations, either party may then request an immediate and binding circuit court decision which must be granted. The state will be represented by the State's Attorney General in all such proceedings.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures. Responsibilities for implementing wastewater treatment regulations rests with the Director of the DNR, though in practice the Municipal Wastewater Section of the DNR's Water Quality Division administers each use regulation and conducts necessary staff and field work.

Municipal wastewater treatment systems will be regulated by DNR approval of a construction permit. This review and approval is based upon conformance of plans and specifications included in the application with the Great Lakes Upper Mississippi Board of State Sanitary Engineers manual, "Recommended Standards for Sewage Works," in describing the system's location, service area and population, waste components, equipment, flow rates, emergency procedures and other design characteristics. Applications which satisfy DNR in completing these requirements and also in protecting public health and preventing pollution will be permissible.

Status of Implementation. Michigan now has over 400 municipal wastewater treatment facilities, with more expected. All are regulated by one or more provisions of this Act.

The last 10 years have seen a steady increase in average annual operators certified from 200 to 300. Most of these certifications have been reclassifications to higher levels and are the result of the State-conducted training programs. In spite of stricter standards, manpower studies project that this number will continue to expand at a rate of about 8 percent each year as a result of operator reclassifications, increasing plant complexity and the increasing number of plans under federal "201," "208" and "303" programs for area-wide waste treatment planning.

Court actions under this Act are rare, due to its age and the strong Water Resources Commission role in providing regulatory (hearings, orders), and incentive (training, technical aid) backup. The most recent test of judicial support is from a 1958 circuit court decision which upheld a WRC "sewer ban," and kept the City of Romeo from exceeding plant capacity with new sewer service.

Administrative Policies. Though the wastewater provisions of Act 98 have been in effect since 1913, the current implementation controls in Rules are relatively new (November, 1975). These rules incorporate most technical and procedural policies such as continuous monitoring to assure effluent disinfection and procedures for sludge disposal which had been issued earlier in Department Letters. Other less formal policies were not so incorporated, but were included in a handout sheet available from Wastewater Section.

Municipal rather than private ownership is strongly encouraged for all systems serving the public.

Private and industrial waste producers are strongly encouraged to send effluents to municipal systems for treatment whenever their wastes will not effect the system and its performance. Municipalities must be reimbursed for such services.

Local DNR and DPH personnel will assist, encourage, direct and control installation of private systems which serve the public where public systems are not available for connection.

CRITERIA: DOES THE ACTIVITY INVOLVE WASTE FROM MINERAL (INCLUDING TEST, BRINE, STORAGE AND DISPOSAL) WELLS IN THE COASTAL ZONE?

OVERVIEW

Land subsidence, ground water and surface water pollution, and safety hazards related to mineral wells are some of the problems leading to legislation of the Mineral Well Act (Act 315, P.A. of 1969). This legislation like the water wells, oil and gas, sand dunes and strip mining laws, controls all activities related to exploring, developing, operating, reworking and abandoning of a specific type (mineral, brine, test, storage, and disposal wells) of resource extraction activity.

Act 315 establishes a supervisor of mineral wells and a mineral well advisory board within the Department of Natural Resources' Natural Resource Commission to administer and enforce its provisions. Its objective is to prevent pollution from surface and underground wastes and to prevent waste of mineral resources. The basic management technique used to regulate mineral mining activities is a permit program requiring mineral well drillers to obtain an approved drilling permit from the Mineral Well Supervisor. The state does, however, reserve authority in administrative powers of the Act to make emergency orders without hearing, inspect, repair and plug wells in violation of permit requirements.

DETAILED PROVISIONS OF LEGISLATION

The major provisions of Act 315 and its rules are outlined below.

Authority. Act 315 of 1969, entitled the Mineral Well Act, is Rule 319.211 through 319.236 of the Michigan Compiled Laws. The Act has been in effect since March 1970, but its rules, R299.2201 through R299.2298, were not effective until June of 1972. Implementation began when the first permit was issued in May of 1973.

Scope of Authority: All provisions of this authority apply statewide to brine, test, storage and disposal wells. In words of the Act, test wells are "wells, core holes, care tests, observation wells or other wells drilled from the surface to determine the presence (i.e., existence or outlying) of a mineral, mineral resource, ore, or rock unit, or to obtain geological or geophysical information or other subsurface data. Storage wells are wells "drilled into a subsurface formation to develop an underground storage cavity for subsequent use in storage operations." Disposal wells are those "wells drilled or converted for subsurface disposal of waste products or processed brine and its related surface facilities" and brine wells mean wells "drilled or converted for the purpose of producing natural or artificial brine" which are mineralized waters, but which are not potable or fresh waters.

The Act further describes pollution as "damage or injury from the loss, escape or unapproved disposal of any substance at any well subject to this Act." Waste products which could cause pollution are "wastes or by-products resulting from municipal or industrial operations or waste from any trade, manufacturer, business or private pursuit . . . for which underground disposal may be feasible or practical" and are categorized as either underground or surface wastes, while underground wastes are materials which damage or injure to, or destruction of surface waters, soils, animal, fish and aquatic life, or surface property from unnecessary seepage or loss incidental to or resulting from drilling, equipping, or operating . . . wells subject to this Act" (Section 2).

Section 26 specifically excludes from these provisions wells drilled under authority of the Oil and Gas Act (Act 61, P.A. of 1939), the Natural Gas Wells Act (Act 326, P.A. of 1937), the Water Well Act which is also known as the Groundwater Quality Control Act (Act 294, P.A. of 1965), and the Waterworks and Sewage Treatment Act (Act 98, P.A. of 1913). This section also adds that "this Act shall not be construed tp silercede pr controvene in any of the provisions of Act 245 of the Public Acts of 1929, as amended."

Use Restrictions. "No party may cause surface or underground waste in the drilling, development, production, operation or plugging of wells subject to this Act" (Section 3). A permit application must be filed, approved, and received before commencing to drill a mineral well, to convert a mineral well to new use, to convert a new well drilled under another Act to a mineral well, or to deepen, rework or convert to new use a well drilled before the effective date of the Act (Rule 11). Any party to drill or operate mineral wells must use appropriate and approved methods to prevent waste and pollution during all drilling, testing, production, storage and disposal phases of their operations. The supervisor of wells may issue orders and instructions and adopt, recommend or recognize guidelines related to drilling, spacing or operating to cope with known or expected surface or underground conditions (Rule 52). This also includes well closing, plugging or abandonment; that all pits and excavations must be filled and leveled off at the surface; that debris must be removed, and that all conditions which may create a nuisance or a fire or pollution hazard must be eliminated to the supervisor's satisfaction. The surface of the abandoned well site must be returned as nearly as possible to its original condition (Rule 85).

Though all wells must conform to this and more detailed controls, certain wells are exempt from permit to drill requirements. Permits to drill test wells are not required in:

* Areas where rocks of precambrian age lie directly under unconsolidated surface deposits;

* Areas designated by the supervisor of wells where there is no known or potential danger of surface or underground waste from test well drilling;

* Test holes drilled in operating a quarry, open pit or underground mine within the mined areas, less than 500 feet from the quarrry, open pit or underground mine;

* Test holes under 25 feet in depth which do not encounter bedrock, and;

* Project areas designated by the supervisor of mineral wells after fact finding hearings determine to be exempt from test well permit requirements (Rule 27). However, all wells subject to the Act, whether under permit or not, are to meet the plugging requirements of the Act.

Implementation and Enforcement

Mineral well use regulations are implemented directly by the DNR's State Geologist who, as the supervisor of mineral wells also acts as staff of DNR's Natural Resource Commission (Section 4 and 13). The mineral well supervisor is empowered to suspend or correct any operations, conditions, or practices which may cause or result in surface or underground wastes, and to "do whatever is necessary to carry out and enforce the purpose and intent of the Act and the Rules, whether or not such orders or instructions are indicated, specified or enumerated in the Act or in the rules" (Rule 98).

Drillers proposing to drill test wells, wells, or to convert wells must receive a permit from the Supervisor to begin the drilling. After drilling is complete as specified in the permit application, drillers must perform tests and keep records which will be used by the Supervisor in determining whether the wells may be used and operated without causing surface or underground waste. The Supervisor may additionally make inspections as needed, and promulgate emergency orders without a public hearing to monitor and enforce these provisions as he feels necessary.

Whenever the supervisor determines that a well has been unsatisfactorily cased, sealed, operated, repaired or plugged in violation of the Act, its rules, permits or orders, the Supervisor may serve notice that he may inspect the well and repair or correct such conditions. The Supervisor may additionally administer oaths and subpoena witnesses or documents in conducting hearings or initiating court action. According to Section 22, circuit courts have power to punish for contempt in any noncompliance with these provisions. The Attorney General will represent the Supervisor in all such actions.

From Section 24, it is unlawful to violate any provision of this Act, its rules or order of the Supervisor; drill or convert any well without first obtaining a permit; operate a storage or waste disposal well without approval; falsify, omit, destroy, mutilate, alter, remove from this state, or refuse to produce records or other information requested by the Supervisor. "Any person in violation of this Act shall be subject to a fine of not more than $1,000 and each day that the violation shall continue shall constitute a separate offense. The penalty shall be recovered by suit brought by the Supervisor. Any person aiding or abetting in the violation of this Act or any rule or order promulgated thereunder shall be subject to the same penalties as prescribed herein" (Section 25).

Appeals Procedures. Whenever the Mineral Well Advisory Board or other aggrieved party believes the Supervisor's actions are unduly burdensome, inequitable or unwarranted, they may appeal to the Natural Resources

Commission, who acts as an appeal board, for relief. This request must be granted. During hearings the Supervisor, members of the board or any other interested party may have the right to be heard. Appeal board action will be final, but may be further appealed in the courts (Section 12).

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures. Act 315 is administered by the Supervisor of Mineral Wells. The Act specifically empowers the Supervisor to (a) require the locating, drilling, deepening, reworking, reopening, casing, sealing, injecting, mechanical and chemical treating, and plugging of wells subject to this Act shall be done and designed to prevent surface and underground waste; (b) require the keeping and the filing of logs and samples, drill cuttings, cores, water samples, pilot injection test records, radioactivity logs, operating records and other reports as necessary; (c) make inspections; (d) conduct hearings; issue monitor and revoke permits; (f) initiate court action and; (g) release security bonds (Section 16). Other duties of the Supervisor of Mineral Wells include issuing emergency orders (Section 15) and conducting hearings (Section 21). Administrative staff work and field studies conducted under this Act are done by the Geology Division of the Department of Natural Resources.

Virtually all phases of mineral well activities will be regulated by DNR approval of well drilling permits. This permit review and approval is based upon materials provided to the Mineral Well Supervisor by the well owner or operator. Application of materials must describe and record how the well will be drilled, operated and abandoned. Applications which the Supervisor determines adequately prevent waste of mineral resources and waste damage to subsurface waters and other resources throughout the well's operation will be permissible.

All application materials and subsequent records and logs will come directly to the supervisor of wells from the well owners or operators.

Status of Implementation. Since the first permit was issued in May of 1973, some 2,700 permits for the various types of mineral well activities have been issued. Due to DNR's long and strong consultant role and the prior approval features of this permit review, approval and surveillance system, no mineral well activities have been halted or interrupted by a permit denial. Violations, appeals and court tests are accordingly rare. Very few appeal proceedings have been instituted to date, and these have all been mutually satisfied at either the Supervisor of Wells or Natural Resource Commission level. There is no litigation in process or pending under Act 315. This and the collective Department knowledge indicate that all operations and operators are operating in compliance with the provisions of the Act.

Administrative Policies. Rule 28 states "a mineral well to be located in or over the bed or waters of the stream, inland lake, a Great Lake, a natural or artificial impoundment, or other body of water shall be

subject to approval by the (Natural Resource) Commission before issuance of a permit."

In administering Rule 28, the Natural Resources Commission has concurred with the Director of the Department of Natural Resources in a memorandum dated April 2, 1973 that: "All well permit applications received by the Geological Survey Division for mineral wells to be drilled in surface waters of the state will be reviewed by the Fisheries Division and the Water Management Division prior to a Natural Resource Commission review."

CRITERIA: DOES THE USE ACTIVITY INVOLVE COASTAL EXPLORATION, EXTRACTION OR STORAGE OF OIL AND GAS RESOURCES?

OVERVIEW

The Oil and Gas Wells Act (Act 61, P.A. of 1939) and legislation preceding it was originally passed in a strong conservationist movement, inspired by earlier exploration and over-harvesting of lumber and other resources. Michigan's legislature intended that this Act establish comprehensive authorities and procedures to prevent surface and underground waste and to ensure conservation of oil and gas resources. In this, Act 61 established a Supervisor of Oil and Gas Wells and an Oil and Gas Well Advisory Board within the Department of Natural Resources (DNR) to administer and enforce its provisions. The management technique used to control oil and gas well activities is a combination program administered by the Supervisor which controls virtually all oil and gas productions activities from exploration to drilling (permits) to abandoning, plugging and changing ownership. The supervisor may also make limited emergency orders without hearings, and inspect, repair or plug wells which violate requirements of the Act and its rules.

Though tract records are not available, it is estimated that each of the half-dozen "national brand" oil and gas companies operating in Michigan controls significant (up to 5 million acres in one instance) acreage of land in short-term leases or outright ownership. Other "local brand" companies and independents together number in the hundreds and also control significant but smaller acreages as economic conditions allow.

DETAILED PROVISIONS OF LEGISLATION

The detailed provisions of Act 61 and its rules are outlined below.

Authority. The Oil and Gas Wells Act (Act 61, P.A. of 1939) has been amended several times since it took effect in 1939. Rules have been in effect in their current form since June, 1971. The Act and rules are respectively cited as R319.21 through R319.27; and R299.1101.101, of the Michigan Compiled Laws.

Scope of Authority. Provisions of the Act and its rules apply statewide to nearly all activities connected with drilling and production of oil and gas. Section 2 of the Act defines oil to be "natural crude oil or petroleum and other hydrocarbons . . . produced at the well in liquid form by ordinary production methods and which are not the result of condensation of gas after it leaves the underground reservoir." Gas is defined as "a mixture of hydrocarbons and varying quantities of nonhydrocarbons in a gasseous state which may or may not be

associated with oil, and including those liquids resulting from condensation." The wastes which the Act intends to prevent are also described by Section 2 in three categories: underground, surface and market. "In addition to its ordinary meaning (underground wastes are) the inefficient, excessive or improper use or dissipation of the reservoir energy . . . and unreasonable damage to underground fresh or mineral waters, natural brines, or other mineral deposits from operations for the discovery, development, and production and handling of oil or gas. (Surface wastes are) the unnecessary or excessive surface loss or destruction without beneficial use, however, caused, a gas, oil or other product . . . and the unnecessary damage to or destruction of the surface, soils, animal, fish or aquatic life or property, or other environmental values from or by oil and gas operations, and the drilling of unnecessary wells." And finally, market wastes "will embrace the production of oil or gas in excess of . . . actual demand . . . (plus) the demand for (additional oil or gas in) . . . building up or maintaining reasonable storage and reserves."

Section 27, however, exempts the following activities from the Act's provisions: drill holes for the exploration and extraction of iron, copper, or brine; water wells, mine and quarry drill and blast holes, coal test holes, seismograph or other geophysical exploration test holes. Water well drilling is controlled by the Ground Water Quality Control Act (Act 294, P.A. of 1965). The other exempted activities are controlled by provisions of the Mineral Well Act (Act 315, P.A. of 1969).

Use Restrictions. Act 61 requires in Section 4 that "it shall be unlawful for any person to commit waste in the exploration for or in the development, production handling or use of oil or gas; or in the handling of any product thereof."

The principal management technique used to implement this broad use restriction is a permit requirement. All well drilling for: (a) oil and gas; (b) secondary recovery or pressure maintenance; (c) disposal of salt water, brine, oil field waste or other liquids incidental to oil and gas drilling; (d) storage of oil well gas or natural dry gas; and (e) development of reservoirs for storage of liquid petroleum gas, must all comply with permit requirements (Rule 101). Related activities and exploration, locating, redrilling, deepening, reopening, casing, sealing, operating and plugging are to be conducted to prevent the escape of oil or gas from the strata in which it is found. "To prevent pollution, damage to or destruction of freshwater supplies including inland lakes and streams and the Great Lakes and connecting waters and valuable brines by oil, gas or other waters . . . in such a manner and by such methods and means that no unnecessary damage or danger to or destruction of surface or underground resources, to neighboring properties or rights, or to life, shall result" (Section 6).

More detailed requirements of these and other controls are included in rules.

Implementation and Enforcement. Use restrictions on oil and gas well activities are implemented directly by order of the Director of the Department of Natural Resources as the Supervisor of Oil and Gas Wells (Section 3). These orders are administered and enforced by the DNR

Geological Survey Division. Operators proposing the activities described above must receive an approved permit from the Oil and Gas Section of the Geological Survey Division of the DNR before beginning drilling. After drilling is completed as specified in the permits, drillers must perform tests and keep records which will be used by the Supervisor in determining whether the wells may be operated without causing or resulting in wastes. The Supervisor may additionally make inspections as needed and promulgate emergency orders without a public hearing to monitor and enforce these provisions.

Whenever the Supervisor determines that a well has been unsatisfactorily cased, sealed, operated, repaired or plugged in violation of the Act, rules, permits or orders, the Supervisor or his authorized representative may serve notice that he will inspect the well and repair or correct any inappropriate conditions.

Section 22 provides support for all of these responsibilities by levying an annual fee (up to 1 percent of the gross cash market value) on all oil and gas well production. This fee is collected by the Revenue Division of the State Treasury Department.

Upon the initiative of the Supervisor or the Advisory Board or upon a complaint of any person alleging that waste is taking place or is imminent, the Supervisor can call a hearing (or direct the Advisory Board to call a hearing) for determining violations and carrying out corrective actions. "Any person who violates any provision of this Act or any rule, regulation or order shall be subject to the penalty of not exceeding $1,000 and each day that violation shall continue shall constitute a separate offense. Said penalty shall be recovered by suit brought by the Supervisor. Any person aiding or abetting in the violation of (such) provisions, shall be subject to the same penalties" (Section 20).

Nonetheless, the Act also stipulates other penalties for other specific violations. Section 11 provides penalties for perjury and oaths and affidavits from 6 months to 5 years imprisonment in the State Penitentiary. Section 19 provides felony penalties of up to $3,000 or 3 years imprisonment or both for falsifying, misleading, omitting, altering or removing records and papers required by the Act and rules. Any party to abandon a well without plugging it according to the Act and rules is guilty of a misdemeanor and will be fined up to $1,000 and costs of prosecution, imprisoned for up to 90 days, or both (Section 18b).

Failure to obtain a permit or conduct well operations according to permit criteria will be cited by the Supervisor. If the cited conditions are not corrected within 30 days, the Supervisor may enter the property and correct the condition at the operator's expense. Failure to reimburse the Supervisor by forfeiting a surety bond or other means within 30 days will result in a court suit by the Supervisor, acting in behalf of the State (Section 18a). Though the Supervisor may act with all powers of a county prosecuting attorney in any court of competent jurisdiction, the State Attorney General usually represents the Supervisor's office in all these matters (Section 18).

Appeals Procedures. Whenever the Oil and Gas Well Advisory Board or any other aggrieved party believes the Supervisor's actions are unduly burdensome, inequitable or unwarranted, they may appeal for relief to the Natural Resources Commission, who acts as an appeal board. This request

must be granted. During hearings the Supervisor, members of the Board, or any other interested party may have the right to be heard. Appeal Board action will be considered final, but may be further appealed in the courts (Section 3).

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures. Act 61 is administered by the Director of the Department of Natural Resources, acting as the Supervisor of Oil and Gas Wells. In carrying out these general duties, the Supervisor must designate, with the approval of the Natural Resources Commission, an Oil and Gas Wells Advisory Board (Section 3) to act as consultants in making and enforcing rules; collecting data; making inspections, studies and investigations; approving drilling permit conditions; ruling on bonding and fee requirements; requiring reports and records; overseeing the safety and efficiency requirements of the Act; issuing citations; suspended well operations; plugging wells; classifying wells; and identifying well ownership (Section 6). Other duties of the Supervisor include issuing emergency orders and conducting hearings. Administrative staff work and field studies conducted under this Act are done by the Division of Geology in Michigan's Department of Natural Resources. The Chief of the Division of Geology is also ex officio State Geologist and the Assistant Supervisor of Oil and Gas Wells. In this capacity the Chief often represents the Supervisor in administering provisions of this Act.

Virtually all phases of oil and gas well drilling and production activities are controlled in Act 61 by DNR approval of regulatory well drilling permits as well as nonregulatory programs related to permit activities. Permit review and approval is based upon materials provided to the Oil and Gas Well Supervisor by the well owner. Application materials must describe and record how the well will be drilled, operated, abandoned and plugged. These materials must minimally include a site plan and an Environmental Impact Assessment. Of all applications submitted, only those which the supervisor determines adequately prevent waste of mineral resources while preventing damage to surface waters and other resources throughout the wells operation, will be permissible. All materials and records come directly to the Supervisor from the well drillers or operators.

Status of Implementation. Since the first permit was issued under Act 61 in 1939, all oil and gas wells operating within the state have conducted their activities in compliance with the Act. During this 26-year period some 25,000 drilling permits have been reviewed, approved, and field checked by the Division of Geology. Due to DNR's long-standing advisory activities and the prior approval feature of Act 61, most drilling activities have been conducted within permit requirements. This has resulted in very few wells operating without a license, and relatively few appeal or enforcement actions. One significant court test of the Act occurred in a 1971 DNR denial of a permit to drill an oil well on grounds that the use would cause "unnecessary damage to the surface, soils,

or animal, fish or aquatic life." Denial was upheld through the appeals process as MICHIGAN OIL CO. VS. NRC AND THE SUPERVISOR OF WELLS. Michigan's court of appeals upheld the circuit court opinion in a November 1976 decision which is expected to go to the State Supreme Court.

Administrative Policies. "It is accordingly the declared policy of the State to protect the interests of its citizens and land owners from unwarranted waste of gas and oil and foster the development of the industry along the most favorable conditions with the view to the ultimate recovery of the maximum production of these natural products. To that end, this Act is to be construed liberally in order that effect may be given to sound policies of conservation and the prevention of waste and exploitation" (Section 1).

In one such construction DNR and the Division of Geology have expanded the impact of both regulatory and nonregulatory provisions and both environmental protection and waste prevention provisions of Act 61. This is done by procedurally interrelating each mandate in rules of the Act and less formally in day-to-day administration of the program. The Division of Geology typically acts as a consultant in implementing these provisions. As an example nearly all drilling permit applicants receive a site inspection from Division staff during application review process. This inspection yeilds preliminary judgments on how/what must be done to meet permit and nonregulatory requirements of the Act . . . a savings in time and expense in well work, permit reviews and appeals.

In more formal policy action the DNR's Water Resources Commission has stated (June 16, 1967) that it opposes oil and gas drilling in the Great Lakes. DNR's Natural Resources Commission has a similar policy, passed originally in 1946, reaffirmed in 1961 and reaffirmed again in 1976. Both in June, 1967 resolution from WRC and the August, 1976 NRC resolution are granted below.

WRC Policy Statement on Offshore Drilling and Development, June 16, 1967.

"During the past several years considerable attention has been focused on the advisability or otherwise, of drilling for oil and gas in or near the waters of Lake Huron, St. Clair River, Lake St. Clair, and the Detroit River.

"Consideration has therefore been given by the State of Michigan and Province of Ontario to this subject in light of the present and proposed uses of those waters, recognizing the importance of utilizing them to the greatest advantage for the greatest number of people.

"As a result, representatives of Michigan and Ontario have met through the good offices of the International Joint Commission, which maintains continuing supervision over the quality of these waters. Representatives of the two governments have informed the Commission that Ontario and Michigan, through their responsible officers have adopted and will pursue the following policy with respect to drilling for oil and gas in or near said waters:

1. "Drilling permits for oil and gas shall not be issued in the International boundary waters comprising Lake Huron, the St. Clair River, Lake St. Clair and the Detroit River to its mouth in Lake Erie.

2. "Drilling permits for oil and gas wells may be granted on the uplands bordering these waters and upon islands therein, both in the Province of Ontario and the State of Michigan provided that they are not within 350 feet of the water's edge. Permits for wells closer than 350 feet may be granted only after individual inspection and subsequent approval by the Ontario Lieutenant Governor in Council or the Supervisor of Wells in Michigan. Before such permits are to be granted by either the State of Michigan or the Province of Ontario, at least 30 days notice will be given to the other governmental jurisdiction.

3. "If a change in this Policy is proposed by either the Province of Ontario or the State of Michigan, formal notification will be given to the other party and the International Joint Commission prior to the effective date of such change.

4. "The oil and gas regulatory authorities of both the Province of Ontario and the State of Michigan will make, support and promote the amending of existing regulations or adopting new regulations which will provide for implementation of this Policy.

5. "Current statutes governing these operations in Ontario and Michigan are considered adequate and no amendatory legislation is necessary at this time.

6. "Professional staffs of both governmental jurisdictions will continue to keep abreast of technological advances in offshore drilling operations and will advise then respective governments when and if a change in this policy appears necessary and in the public interest."

<u>NRC Policy Statement on Offshore Drilling as Reaffirmed, August, 1976.</u>

"WHEREAS the Natural Resources Commission has long had a policy opposing oil or gas drilling in the Great Lakes; and

"WHEREAS in 1975 this Commission supported the Director in his denial of request to explore below the high water mark of Michigan waters in the Great Lakes; and

"WHEREAS there is great public concern and new discussion regarding drilling in the Great Lakes; and

"WHEREAS the Natural Resources Commission believes that drilling in the Great Lakes is likely to pollute or impair the largest fresh water bodies in the Western Himosphere;

"THEREFORE the Natural Resources Commission reaffirms its strong opposition to exploration or drilling for oil or gas in the waters of the Great Lakes."

CRITERIA: DOES THE USE ACTIVITY INVOLVE NEW DEVELOPMENT IN A DESIGNATED SHORELAND HIGH RISK EROSION AREA?

OVERVIEW

In the wake of extensive shore erosion damages during the late 1960's, the Michigan Legislature enacted the Shorelands Protection and Management Act (Act 245, P.A. 1970) to regulate development in erosion prone areas of the Great Lakes shoreline. The Act's erosion objective is to protect new construction from erosion damage by guiding its placement. More specifically, Act 245 directed the Department of Natural Resources (DNR) to delineate high risk erosion areas and to implement use restrictions for such areas in order to prevent further property losses. The management technique employed to restrict uses in high risk erosion areas is a structural setback requirement. In special circumstances, movable structures or approved structural protection works may substitute for the setback requirement.

DETAILED PROVISIONS OF LEGISLATION

The major elements of the erosion provisions of Act 245 and its rules are explained in the following sections.

Authority. Act 245 was enacted in 1970 and amended by Act 270, P.A. 1973. Rules implementing the Act's erosion provisions were promulgated on December 27, 1973, and went into effect 15 days thereafter as R281.631 through 281.645 of the Michigan Compiled Laws. Effective date for the state regulation authorized by Act 245 was July 1, 1975. Act 245 provisions for environmental, erosion and flood hazard areas are also known as Part 14 Amendments to the General Rules of the Water Resources Commission Act (Act 245, P.A. of 1929).

Scope of Authority. The high risk erosion provisions of Act 245 and its rules apply to the land in this state which borders a Great Lake or a connecting waterway, and which is situated within 1,000 feet landward from the ordinary high water mark established in Section 2 of Act 247 of the Public Acts of 1955, as amended . . ."

In addition, the land must be "undeveloped and unplatted" at the time the area was designated. (Rules for Act 245 provide MDNR authority to designate shorelands as high risk erosion only on undeveloped and unplatted shorelands. Currently, MDNR is proposing rules to extend this authority to developed and platted lands.) Undeveloped lands are defined as any stretch of high risk erosion shoreland frontage which is 330 feet or more in length and which is not developed with permanent structures. Unplatted lands mean lands whichare not part of an official plat on record with the Plat Section of the Michigan Treasury Department.

High Risk Area Delineation. Section 2(e) of Act 245 defines a high risk erosion area as "an area of the shoreland which is determined by the Department, on the basis of studies and surveys, to be subject to erosion." In addition, Rule 4 provides that "the Director shall designate a high risk erosion area upon his finding that erosion is causing or is likely to cause damage or destruction to permanent buildings now or hereafter erected." In practice, high risk areas have been tentatively identified on the basis of field surveys. Final determination of high risk erosion areas is made following a calculation of historical recession of the bluffline. To receive the high risk classification, an area must have experienced an average historical bluff recession rate of at least one linear foot per year.

Use Restrictions. Act 245 requires in Section 5 that "the Department shall determine if the use of the high risk area shall be regulated to prevent property loss, or if a suitable method of protection shall be installed to prevent property loss." Rules of the Act specify that such use restrictions should provide a 30-year period of protection.

The principal management technique employed to implement the use restriction is a structural setback requirement which is based upon historical bluffline recession for specific areas. All permanent structures and relevant utilities such as sewer and septic systems must be located landward of the required setback line. In cases when the distance between the bluff and the back property line precludes compliance with this requirement, the setback may be waived if structures are moveable or if satisfactory shoreland protection works (such as groin systems, breadwaters, etc.) are installed.

Implementation and Enforcement. Use restrictions in high risk erosion areas can be implemented by county, township or municipal zoning ordinances which have received DNR approval or, in the absence of such ordinances, directly by the DNR through site plan permits.

Under state implementation, a property owner proposing to build a structure in a designated high risk erosion area must submit a site plan for the approval of the Director of the Department of Natural Resources (Rule 281.11).

Under the local implementation option, a county, township, city or village may implement its own use restrictions using locally written, but DNR approved, zoning ordinances (Section 10). Those local ordinances which adequately protect property in high risk erosion areas by meeting or exceeding the state's setback distance requirements will be approved. Once a local zoning ordinance has received DNR approval, state site plan permits are no longer required by the Act.

Any individual or local government agency determined by the Natural Resources Commission to be in violation of these provisions may be prosecuted in circuit court proceedings (Section 11). The court may furthermore issue any order necessary tocorrect or restrain such violations.

Appeal Procedures. Affected property owners or local governments may appeal the disapproval of any of these provisions by petitioning the Director of the Department of Natural Resources for a hearing. Both informal and formal hearings may be requested. Appealing the designation of high risk erosion areas or their accompanying use restrictions occurs under Rule 6, while appealing the disapproval of local zoning ordinances occurs under Rule 7, and appealing the disapproval of site plans under Rule 8. These rules provide for timely hearing determination which is made by the Natural Resources Commission and enforced by the above circuit court powers.

Another avenue of appeal is available in circuit court to property owners, local governments and also to the Department of Natural Resources subsequent to a hearing determination. In this case, either party may request an immediate and binding circuit court decision which must be granted. The DNR will be represented by the State Attorney General in such proceedings.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures. Act 245 is administered by the Department of Natural Resources. The authority to designate high risk erosion areas, approval local zoning ordinances, and approve site plans is exercised by its Director. Administrative staff work and field studies undertaken in regard to this Act are conducted by the Shorelands Management and Water Resources Planning Section, Land Resource Programs Division, Michigan Department of Natural Resources.

High risk erosion areas will be regulated by Department approval of local shoreland zoning, or in lieu of such zoning, Department approval of site plans. Zoning ordinance review and approval is based on the passage and enforcement of local zoning ordinances. Ordinances which the Department determines adequately enforce the erosion protection intents of Act 245 and which are also based on local master plans will be permissible. Building permit review and approval is based upon the site plans provided to the Department by the property owner. The site plan must describe the area and its proposed uses (Rule 12). Site plans which the DNR determines adequately prevent property erosion losses will be permissible.

This process is briefly outlined in the diagram below. Site plans may come to the Shorelands Management and Water Resources Planning Section either directly from property owners, from local government agencies, or from other agencies within the Department of Natural Resources. Zoning ordinances, of course, come directly from local government agencies.

Status of Implementation. The high risk erosion provisions of Act 245 became enforceable on July 1, 1975. Since then, 100 property ownerships have been tentatively identified as high risk erosion areas, studied for appropriate use restrictions and formally designated by the DNR Director.

Notice of this designation and the accompanying use restrictions have been sent to 500 property owners in such designated areas to date. Only 11 appeals have been made contesting these designations. At this writing all appeals have been concluded to the satisfaction of both the Department and the property owners or local governments. Other areas will be designated as soon as data needed to complete their historical recession rates can be developed. Efforts to obtain this necessary information are continuing.

Two counties and six of Michigan's 190 shoreland townships have implemented approved erosion protections in their local zoning ordinances at this writing. Over a dozen other townships have ordinances under review. Remaining shoreland governments have received model erosion protection zoning ordinances for their inspection.

Of 22 erosion ordinances submitted to the Department for review, and have been approved, 13 have been denied. The high risk erosion provisions of Act 245 have not, however, been subject to circuit court enforcement or to any other type of court review.

Administrative Policies. In administering erosion and other provisions of the Act, State approval of local shoreland zoning is the regulation technique of first choice in all cases. This policy allows the most efficient, effective and acceptable program in Michigan's governmental structure.

Setback distances required for each high risk area are always given as minimums. A greater setback distance is advised wherever lot dimensions permit.

Individual homes which are now on the brink of an eroding bluffline are considered destroyed by erosion though the structure is not yet damaged. This determination is often necessary to control erosion impacts. Without this official determination, homeowners, local governments, and insurance companies have ordinarily waited until the homes were literally in the lake before attempting salvage or beginning protection measures.

CRITERIA: DOES THE ACTIVITY INVOLVE COASTAL EARTH CHANGES WHICH ARE LOCATED WITHIN 500 FEET OF A WATERCOURSE OR WHICH ALTER MORE THAN ONE ACRE OF LAND?

OVERVIEW

Since no Michigan property is located further than six miles from a watercourse which flows directly into one of the Great Lakes, the Michigan Legislature enacted the Soil Erosion and Sedimentation Control Act (Act 347, P.A. of 1972) to regulate activities which alter the earth's surface and which contribute accelerating soil losses to the waters of the state. The Act directs the state's Department of Natural Resources (DNR) to ensure that earth changes proposed throughout the state will be controlled to reduce resulting soil erosion and sedimentation. Controls are generally based upon construction plan review and approval, but can take three slightly different courses:

1. A permit program approved by the DNR and administered by a county or municipal enforcing agency;

2. State approval of an "authorized public agency," exempt from permit requirements but subject to other controls of the Act, and in some cases;

3. A permit program administered by the DNR in the case of overlapping jurisdictions, local enforcing agency violations, or violations by an authorized public agency.

DETAILED PROVISIONS OF LEGISLATION

The major provisions of Act 347, its rules and amendments are explained in the following sections.

Authority. The Act was passed in January of 1972, became effective in July of 1973, and was later amended by Act 197 of 1974. Rules became effective January of 1975. The amended Act is recorded as Section 282.101 through 282.117 of the Michigan Compiled Laws, while the rules are recorded as Rule 323.1701 in the General Rules of Michigan's Water Resources Commission. The Act is also known as the Part 17 Amendments to the General Rules of the Water Resources Commission Act (Act 245, P.A. of 1929).

Scope of Authority. This Act is effective on public and private lands statewide over "an earth change which is connected with . . . land use activities which disturb one acre or more of land, or if the earth change is within 500 feet of a lake or stream of this state" (Rule 1704). An earth change is defined by the Act as "a man-made change in the natural cover or topography of the land, including cut and fill activities" (Section 2).

Use Restrictions. Act 347 requires that earth changes "which may result in, or contribute to, soil erosion or sedimentation of waters of the state" (Section 2), will be regulated. The purpose of this

regulation is that earth changes "will be designed to effectively reduce accelerated soil erosion occurring as a result of man's activities" (Rule 1701).

The principal regulatory tool is a construction activity permit program based upon review and approval of a soil erosion and sedimentation protection plan. Individuals or agencies "who contract for, allow or engage in an earth change in this state shall obtain a permit from the appropriate enforcing agency prior to commencement" (Rule 1704). Permits will be required for any activities except for the following: minor normal maintenance repairs, agricultural plowing and tilling, logging, mining, minor landscaping, emergency repairs, or activities which have certain other permit requirements which include a statement indicating compliance with Act 347.

In brief, "all earth changes shall be designed, constructed and completed in such a manner which shall limit the exposed area of disturbed land for the shortest possible period of time" (Rule 1709). Exceptions will be permitted only in cases where it can be established on the basis of a site plan and/or current local soil conservation district standards and specifications, that other measures will prevent accelerated erosion and sedimentation, both during and after the earth change. Exemptions from permit requirements, however, are not exempted from enforcement procedures, (Rule 1704).

Implementation and Enforcement. Controls which prevent accelerated erosion will be implemented by the Department of Natural Resources by delegation of authority to county or municipal enforcing agencies.

Under local implementation and enforcement, a county, charter township, city or village may implement its own controls using locally written, DNR approved, erosion and sediment control ordinances (Section 7). Counties are required to do this, while municipalities may also elect to do so. After any local ordinance is approved, state site plan approval is no longer required; and likewise, if a municipal ordinance is approved, county approval is no longer required. Department of Natural Resources approval depends upon the Department's determination that an ordinance adequately provides soil erosion and sediment control on the land within its jurisdiction.

In addition, a state, local or county agency which regularly undertakes earth change activities may apply to the Water Resources Commission requesting their designation as an "Authorized Public Agency." If, based on report review, the Water Resources Commission is satisfied that the usual operating procedures adequately protect against accelerated soil erosion and sedimentation in their projects, the designation will be granted. This designation will exempt the authorized public agency from site plan review and permit requirements.

Direct state attention is limited to enforcement and occurs only if local enforcing agency jurisdiction overlap, if local enforcing agencies do not enforce, or if authorized local agencies are in violation of the Act. In each case, a completed construction plan must be submitted

to the Department of Natural Resources for approval before beginning the proposed earth change (Rule 1704). This plan must be submitted by the landowner - or in his absence - either the land developer or an agent.

Any party proposing or completing earth change activities is subject to regulation of the Act, including the local enforcing agencies and authorized public agencies. When local ordinances are violated, either the local enforcement agency or the Water Resources Commission may seek injunction (or any other corrective actions) in court (Section 14); however, the Commission will act only after the local agency has not done so. When, in the opinion of the Water Resources Commission, any party violates the Act, its rules or an applicable local ordinance, the Water Resources Commission may seek remedies in circuit court against both violator and negligent enforcer (Section 13).

Appeal Procedures. Local permit applicants may appeal denials made by the appropriate local enforcing agency in any fashion allowed by local ordinances.

Any permit applicant, local enforcing agency or authorized public agency may contest a Water Resources Commission hearing determination in circuit court proceedings. The Act provides for timely resolution of the appeal in Rule 14.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures. Act 347 is administered by the Michigan Department of Natural Resources. Authority to designate "local enforcing agencies" and "authorized public agencies" as well as authority to review site plans and zoning ordinances is exercised by the State Water Resources Commission. Administrative staff work and field studies undertaken regarding the Act are conducted by the Soil Erosion and Sedimentation Control Section, Land Resource Programs, Department of Natural Resources.

Earth change activities will be regulated by Department approval of local soil erosion and sedimentation control ordinances. Review and approval is based upon the passage and enforcement of local controls. Those ordinances which the Department determines adequately enforce the provisions of Act 347 and its rules will be permissible and will thereafter be in effect. All local reviews and approvals are based upon plans provided to the enforcing agency by the property owner or his agents. The plan documents must include a detailed description of the area and how the earth change proposed upon it comply with the Act (Rule 1703).

Local enforcing agencies must report details of permit activity and all violations to the DNR. In cases of overlapping local jurisdications or of violations by either local enforcing agencies or authorized public agencies, the DNR will itself review and approve the erosion

and sediment provisions of a construction plan. This information may come to the Soil Erosion and Sedimentation Control Section either directly from property owners, from their agents, from local government agencies, or from other agencies within the Department of Natural Resources.

Status of Implementation. Act 347 became enforceable on July 1, 1973. Shortly thereafter, model soil erosion and sedimentation ordinances were distributed to local governments and counties for their inspection. Currently 30 of Michigan's 41 shoreland counties and 15 additional shoreland townships, cities, and village ordinances have been approved for soil erosion and sediment provisions. All of Michigan's counties are required to complete the approval and implementation process and are expected to do so by mid-1976.

At this writing, all ordinances submitted to the Department for review have eventually met approval criteria. Provisions of Act 347 have therefore not been subject to circuit court enforcement or to any other type of court review.

Administrative Policies. Michigan's experience with Act 347 has led to the operational policy in which state approval of local soil erosion control and enforcement is the regulation technique of first choice in all cases. This allows the most efficient, effective and acceptable program in Michigan's government structure.

The DNR also relates its area of authority to all "waters of the state" (from Section 2). By their interpretation, this includes the Michigan portions of the Great Lakes and their connecting waters in addition to Michigan's inland lakes and streams.

Supplementary Regulatory Tools. Use activities commonly referred to as "mining" are exempted from Act 347; although the erosion and sedimentation problems related to mining can be considerable during operation as well as after the mine is abandoned. As a potential point-source of industrial pollution, most mines are regulated by one or more of the mining, air pollution or water quality permit programs described in other criteria. As a sediment cource, however, open pit mines and their reclamation are specifically described in criteria #25 of this appendix.

CRITERIA: DOES THE USE ACTIVITY INVOLVE OR OTHERWISE MAKE PERMANENT USE OF STATE-OWNED LANDS OR MADE LANDS (INCLUDING THE WATERS OVER THEM) OF THE GREAT LAKES OR THEIR BAYS AND HARBORS?

OVERVIEW

The State of Michigan owns over 28,500 square miles of Great Lakes bottomlands which are occasionally used by private interests in ways which preclude public use. Generally described as dredge and fill activities, these uses involve most of Michigan's Great Lakes shoreline at one time or another. Federal recognition of Michigan statehood made use of the waters of the Great Lakes and use of the lands submerged by those waters a state responsibility. To protect the public trust in these waters and lands, and to protect the resource itself, the Great Lakes Submerged Lands Act (Act 247, P.A. of 1955) made the DNR's Natural Resources Commission (NRC) responsible for reviewing and approving deeds, leases, and use agreements for submerged lands; and made the Department of Natural Resources (DNR) responsible for reviewing and approving permits for developing either submerged lands or the waters above them.

DETAILED PROVISIONS OF LEGISLATION

Detailed provisions of the Great Lakes Submerged Lands Act (Act 247, P.A. of 1955) and its rules are outlined below.

Authority. Since passage in 1955, Act 247 has been amended several times to alter its authority from a service to a regulatory emphasis. Its current version--in effect since May 1968--is Sections 322.701 through 322.715 of Michigan Compiled Laws. Rules R281.901 through 281.915 implement this amended version, though they have been in effect since passage of an earlier amendment in February, 1967.

Scope of Authority. Generally speaking, Act 247 has effect in Michigan lands and waters which lie below and lakeward of the ordinary high water mark of the Great Lakes.

Lands affected by Act 247 regulations are "all of the unpatented lake bottomlands and patented made lands in the Great Lakes, including the bays and harbors thereof, belonging to the State or held in trust by it, including those lands which have heretofore been artificially filled in." The waters affected are "all of the waters of the Great Lakes within the boundaries of the State," including Lake St. Clair (Section 2).

Bottomlands are lands below and lakeward of the ordinary high water mark, an elevation which is set for each of the Great Lakes in Section 2 of the Act. Made lands are lands resulting from artificial fill activities.

Use Restrictions. Concerning bottomlands restrictions, "riparian owners shall obtain a permit from (the DNR) . . . before dredging or placing spoil or other materials on bottomlands" (Section 3).

Concerning submerged lands restrictions the DNR, "after finding that the public trust and the waters will not be impaired or substantially affected, is hereby authorized to (approve applications and) enter into agreements pertaining to waters over (submerged lands) the filling in of submerged patented or unpatented lands, or to lease or deed unpatented lands after approval of the State Administrative Board." Extractive rights to all minerals and materials located in these nonresidential areas are reserved to the state, however (Section 3).

Section 2 makes it further unlawful "to commence or do any work with respect to (any artificial) waterway when the purpose is ultimate connection with any of the Great Lakes including Lake St. Clair. . . or to connect any natural or artificially constructed waterway (with such lakes) for navigation or any other purposes" unless a permit has been granted by DNR. The most common exception is that permits are not required for private, noncommercial recreation works of less than 50 feet in length, if spoil is not disposed of below the Great Lakes ordinary high water marks.

Implementation and Enforcement. Any riparian owners (including government units) of property which touches or lies opposite Great Lakes waters or submerged lands must request permit by completing and returning an application form to the DNR (Section 4).

Any party "who excavates, fills, or in any manner alters or modifies lands and waters subject to the provisions of this Act without approval of the DNR shall be guilty of a misdemeanor, and upon conviction shall be fined not more than $1,000 or imprisoned not more than one year, or both" (Section 10).

Appeal Procedures. Rule 15 provides for formal hearings at either party's request. There hearings gather testimony which either DNR or the applicant feels should be included in application review. If these hearings are held, testimony must be included in the DNR's decision to approve or disapprove the application. After DNR action, further appeals may be taken under the Administrative Procedures Act (Act 306, P.A. of 1969).

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures. The Submerged Lands Section, Land Resource Programs Division, administers Act 247 and its rules as Department of Natural Resources staff. They, acting for the Director of the DNR, determine when permits are required and approve permits. They also act for the Natural Resources Commission in accepting hearing requests and making deeds, leases or other use agreements.

Bottomland uses are regulated by DNR approval of permit applications. Applications will be approved if they adequately assure that dredge and fill activities will not hinder or prevent other uses of Michigan's land and water resources or unreasonably affect the public trust. Use applications which meet approval, review and fee requirements of the Act (Sections 13-15) will be granted and will therefore be permissible. The same requirements hold for applications requesting use of waterways connecting the Great Lakes or artificial waterways abutting the Great Lakes.

Use of submerged lands and associated waters will be regulated by the DNR approval of deed or lease agreements, which like the permits above, evaluate the public interest and impact on the public trust. Only uses which the DNR finds are in the public interest and do not injure or impair public trust will be agreed to. Those uses which also meet financial and procedural terms of the Act (Sections 5 through 8) will be permissible for the duration of the agreement.

Status of Implementation. Act 247 has established an active regulatory program since passage in 1955. Currently about 300 permit applications are received each year, with 97 percent eventually reaching approval. Only about three percent of each year's permits cannot be altered to receive approval. An additional number of field arrests (one to two percent of all annual permit applications) are made each year for work done without the required permits.

The Act has often been court tested. The most recent test of current amendments is the 1972 state appeals court decision to deny a large dredge and fill project in the People vs. Babcock. The single most comprehensive test of the Michigan's right to define a public rights doctrine and to regulate land and water uses to protect it occurs in Township of Grosse Isle vs. Dunn Bar Dredge Company, 1969, also in State Appeals Court.

Administrative Policies. Michigan's expertise in administering Act 247 has developed a policy which requires permits for any work done in the water during periods of high water levels in the Great Lakes. This means less likelihood of negative impacts due to siltation or other damage to aquatic resources, including state-owned bottomlands, and it also means a stronger overall program as the trend of increasing lake levels continues.

The Submerged Lands Section also expands the Act's coordination and information requirements. As a matter of procedure, all concerned government units and public interests are asked for comments and recommendations before DNR makes it permissibility decisions. This is particularly helpful for uses requiring multiple permits and for application requirements and procedures of the various state and federal submerged lands acts.

CRITERIA: DOES THE USE ACTIVITY CREATE, ALTER OR OTHERWISE MAKE PERMANENT USE OF BOTTOMLANDS OR MADE LANDS (INCLUDING THE WATERS OVER THEM) IN INLAND LAKES AND STREAMS OR IN CONNECTING WATERS OF THE GREAT LAKES.

OVERVIEW

Nearly every riparian landowner seems to know that under Michigan law, riparian rights in inland waters extend "to the thread" of the lakes and streams they abut. These inland bottomlands and the waters over them include over 11,000 inland lakes, 36,000 miles of streams, 300 waterfalls and both the first and second most active waterways in the world. In order to protect both public and riparian rights in this resource and to protect the resource itself, the Inland Lakes and Streams Act (Act 346, P.A. of 1972) was passed for what might loosly be described as an inland counterpart of the Great Lakes Submerged Lands Act (Act 247, P.A. of 1955). Any permanent use of (a) bottomlands or made lands (including the waters over them) in Great Lakes' connecting waters, and (b) in inland lakes or streams and their connecting waters are regulated by state permit. Act 346 places implementation of these regulations in the Department of Natural Resources (DNR).

DETAILED PROVISIONS OF LEGISLATION

Major land and water use provisions of Act 346 and its rules are discussed below.

Authority: The Inland Lakes and Streams Act was enacted in 1972 to extend protection of its earlier version (Act 291, P.A. of 1965) from navigable waters only to all inland lakes and streams. Act 346 went into effect immediately upon signing in January, 1973, with the current rules taking effect in May, 1974. Act 346 is recorded as regulations 281.951 through 281.965 of the Michigan Compiled Laws; the rules as R 281.881 through R 281.846.

Scope of Authority: Act 346 has force statewide in any "natural or artificial inland body of water having definite banks, a bed and visible evidence of either continued occurrence of water" including Great Lakes' connecting waters (namely the St. Clair River, St. Marys River and the Detroit River) but excluding (a) the Great Lakes themselves, (b) Lake St. Clair and (c) lakes or ponds of less than five surface acres in area. (Section 2)

Use Activity Regulations: Under Act 346 a permit must be obtained from the Department of Natural Resources prior to dredging, filling or construction below the ordinary high water mark; erecting, maintaining or operating a marina; creating, enlarging or diminishing an inland lake or stream; interfering with natural flows, dredging within 500 feet of an existing waterway,

or dredging where the ultimate purpose is connection to an existing waterway. (Section 3).

So long as they do not unreasonably interfere with other uses of state waters, a permit is not required for certain seasonal structures placed on bottomland for private non-commercial recreational use of water; certain sanding of beaches; waste collection or treatment facilities; watershed projects constructed under P.L. 82-556; and construction and maintenance of private agricultural drains, of certain drainage works and of privately owned storage ponds used in connection with a public utility. (Section 4).

Implementation and Enforcement: "Before a project which is subject to this Act is undertaken, a person shall file an application and receive a permit from DNR. The application shall be on a form prescribed by the Department and shall include any information that may be required by the Department. (All private permit applications) shall be accompanied by a ($25) fee credited to the state general fund". (Section 5). The DNR must approve the application and issue a permit if it finds that the use activity will not adversely affect the public trust or riparian rights and that the activity will not cause unlawful pollution. (Section 7). After an approved project is completed, DNR must make a final inspection to certify that all permit requirements are met. (Section 16).

The DNR may begin Circuit Court action to enforce compliance or to restrain a violation of any actions contrary to the Department order or permit denial. The Department may additionally enjoin performance, order removal of projects in progress, or order restoration of an affected area. (Section 13). Any party violating any provision of the Act or permit conditions is guilty of a misdemeanor. (Section 14).

Appeal Procedure: Section 11 of the Act allows two types of appeals: In most cases, the party aggrieved by action or inaction of the DNR requests a formal hearing which must be granted. This hearing is conducted by the Natural Resources Commission according to the specifications of the Administrative Procedures Act (Act 306, P.A. of 1969). Either party may further appeal the decision or inaction of this hearing in judicial review, also as provided by Act 306. If, however, riparian owners have exhausted these administrative remedies, they may choose to begin Circuit Court proceedings rather than formal hearings to protect their rights as riparian owners.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: The Submerged Lands Management Section of the Water Management Division, DNR, administers all provisions of the Act with the exception that criminal enforcement actions by the Department will be the responsibility of the DNR regional (field) managers.

Upon receiving an application, Submerged Lands Section submits copies to adjacent riparians, local, state and federal governmental units, quasi-governmental units such as port districts or watershed councils and other affected agencies for comment. Permits which DNR, after reviewing these comments, determines adequately protect the state's water resources and the rights of the public to use this resource will be approved. In making this evaluation, DNR must be assured that water resources are protected from pollution according to Act 245, P.A. of 1929, as amended ans also that all water uses such as recreation, aesthetics, government, agriculture, commerce, industry, fish and wildlife be protected in the subject waters as well as upstream and downstream waters.

DNR cannot grant a permit if the proposed activity will "unlawfully impair or destroy" either those waters or their use. Permit denials and approvals must include an explanation of the action in terms of any conditions or modifications under which use is permissible. Within the usual one year permit period the applicant is allowed the designated use unless the permit is revoked for misrepresentation or noncompliance. After the project is completed or after the permit period expires, DNR must visit the site to document that the permit conditions have been met.

Status of Implementation: The effectiveness of this permit program is easier to assess than most because ordinary records have been supplemented by a computer information system that has been organized (but not fully implemented) since 1971. Though "permits by applicant characteristics" and "permits by waterbody type" and such categories were omitted for our purposes here, the typical annual retrievals below help indicate the Act's level of implementation:

Permit Applications	2,000
Permits Granted Without Conditions	100
Permits Granted With Conditions	1,500
Permits Denied	150
Permit Decisions Appealed	100
Permit Complaint Investigated	several hundred
Permit Violations Recorded	20
Permit Violations Enforced	35

Much of the administration of this Act is done in court. Court tests of this authorities' constitutionality and the force of its provisions are well documented in Department files. At this writing, the monthly synopsis of litigation describes two new petitions for administrative proceedings with three others in process, eight new referrals to State Attorney General, 18 cases in active civil litigation, and two criminal actions. This load is typical and contains a cross-section of work done without a permit or noncompliance with permit conditions for dredge and fill work, bridge work, pipeline crossings, marinas, spoil placement, navigability decisions and other riparian use versus public trust conflicts.

Administrative Policies: The policy items below are taken directly from Department Letter No. 140 of December 2, 1975, which was developed by DNR administrative staff and signed by the Department Director for implementation and interpretation of the Act.

1. "No permits or permit renewals shall be issued without prior field inspections or specific current knowledge of field conditions.

2. "In deciding on whether to issue a permit, the attitude of the Department will be that a project which would be harmful to the environment (or likely to be harmful) should be denied unless the benefits to the public by the project completely outweigh the environmental losses.

3. "Proposed projects will not receive favorable consideration if they would: (a) cause destruction of fish or wildlife habitat deemed to be in the public interest; (b) eliminate areas of water surface subject to the public trust, having a public interest or value; (c) interfere with normal shore currents which would result in damage to adjacent properties; (d) interfere with the lawful public use of water areas; and (e) create a physical or aesthetic nuisance to riparian owners or the public trust.

4. "In issuing permits, the Department must recognize the "nibbling" effect of projects and should protect the resources by incorporating restrictions in individual permits or by denial of permits.

5. "In determining the ordinary high water mark and where opinions differ, the highest scientifically based mark should be used.

6. "Permits allowing construction in marshes should be denied unless the benefits from the project completely outweigh the environmental losses.

7. "If the act of dredging, filling or other activity would not be harmful, but the purpose for which it will be done will result in pollution to the waters of the state or impair or cause destruction of a resource, the permit should be denied.

8. "Requests for permits to place fill in inland waters must be carefully reviewed. Examples of fill requests that generally will receive favorable consideration are those that would: (a) reclaim recently eroded upland; (b) straighten irregular shorelines which have been created from past artifical changes; (c) provide backfill behind seawalls; (d) allow proper bridge and road construction that will not interfere substantially with navigability or flood plain values; and (e) control wave action and retard shore erosion.

9. "In all proposals, the benefits of new or desired uses will be measured against possible damage to the resource or other private or public interest.

10. "It is desirable and acceptable for Department employees making the field review to reach compromise agreements with the applicant which would allow issuance of the permit. Such a situation might involve decreasing the size of the proposed frontage, dredge or beach improvement both to provide for the applicant's recreational need and to preserve part of the areas as habitat. Such an agreement can usually be reached by merely suggesting and encouraging consideration for natural resources. Otherwise the permit must be denied."

CRITERIA: DOES THE ACTIVITY ALTER OR DESTROY THE CHEMICAL/BIOLOGICAL CHARACTER OF COASTAL WATERS OR WETLANDS?

OVERVIEW

The United States Congress has given the Army Corps of Engineers regulatory responsibility to protect our navigation channels and harbors against encroachments and more recently to restore and maintain water quality by regulating the discharge of dredged or fill material in coastal waters, inland waters and wetlands. The basic management technique employed to regulate encroachment is a permit procedure and review process, both guided by a detailed set of regulations. Michigan presently has laws restricting activities regulated by Section 404 including the Submerged Lands Act (Act 245 of 1955), the Inland Lakes and Streams Act (Act 346 of 1972), and the Shorelands Protection and Management Act (Act 245 of 1970, as amended). A wetlands protection bill giving the State of Michigan comprehensive environmental controls over waters and wetlands is also near passing in this legislative session.

DETAILED PROVISIONS OF LEGISLATION

The major elements of the Corps of Engineers Section 404 requirements are explained in the following sections.

Authority: Section 404 of the Federal Water Pollution Control Act, P.L. 92-500, 86 STAT. 816, 33 U.S.C. 1344, was enacted in 1972 authorizing the Secretary of the Army acting through the Chief of Engineers to issue permits for controlling discharge of dredge and fill material into navigable waters. Amended regulations of Section 404 became effective on July 25, 1975 and on June 3, 1976, the U.S. House of Representatives passed amendments to Public Law 92-500 including changes to Section 404.

Scope of Authority: Three phases of implementation were delineated in P.L. 92-500 for Section 404 permits. Phase I, effective July 25, 1975, regulates activities in the "navigable waters of the United States", defined as waters that have been used in the past, are now used, or are susceptible to use as a means to transport interstate commerce, and also includes contiguous wetlands. Phase II, effective July 1, 1976, in addition regulates discharges of dredged or fill material into primary tributaries, contiguous fresh water wetlands and lakes. After July 1, 1977 the Corps of Engineers will exercise its Section 404 authority over all waters of the United States and the contiguous wetlands.

Use Restrictions: Public Law 92-500 requires in Section 404 that the Corps of Engineers regulate dredging or discharge of dredge materials in waters of the United States; site development fills for recreational, industrial, commercial and residential uses; causeways or roadfills, dams and dikes, artifical islands; property protection and/or reclamation

devices such as riprap, groin, seawalls, breakwaters and bulkheads; beach nourishment; levees; and sanitary landfills. Most farming practices are exempt from these restrictions.

The purpose of the program is to insure that the chemical/biological integrity of waters of the United States is protected from irresponsible and unregulated discharges of dredged or fill material that could permanently destroy or alter the character of these valuable resources.

Implementation and Enforcement: The principal management technique employed by the Corps to implement the regulations defined in Section 404 is the requirement of obtaining a permit for the regulated activities. As explained in the section of Geographic Scope of Authority, the Corps is implementing Section 404 provisions over a period of three years.

Amendments to Section 404 approved June 3, 1976 provide that federal permit requirements be extended to wetlands adjacent to navigable waters as well as havigable waters themselves. This allows additional wetlands protection by mutual agreement of a governor and the Corps, exempts certain farming and timber practices from federal jurisidction, and provides for delegation of permit authority to states with adequate programs for regulating Section 404 projects.

Section 209.120, paragraph (q) of the 404 Rules and Regulations state that "District Engineers will supervise all authorized activities and will require that the activity be conducted and executed in conformance with the approved plans and other conditions of the permit. Inspections must be made on timely occassions during performance of the activity and appropriate notices and instructions will be given permittes to insure that they do not depart from the approved plans". If a District Engineer determines that the terms and conditions of a permit have been violated, the permittee does not comply with a specified time period, the District Engineer will issue a notice of suspension and "consider initiation of appropriate legal action".

Section 309(3) of P.L. 92-500 states that a person in violation of Section 404 regulations or any condition or limitation implementing any of such sections in the Section 404 permit shall be issued "an order requiring such person to comply with such section or requirement". Civil action for "appropriate relief, including a permit or temporary injunction" may be initiated in the appropriate district court of the United States and such court shall have "jurisdiction to restrain such violation and to require complaince" (Section 309(4)(b) of P.L. 92-500). Penalties prescribed in Section 309(4)(c) for violation of Section 404 provisions include "a fine of not less than $2,500 nor more than $25,000 per day of violation or by imprisonment for not more than one year, or by both." Penalties are increased beyond these limits for second offenders.

Appeals Procedure: Neither P.L. 92-500 nor the 404 amendments include provisions for appeals to 404 permit decisions. Relief from any 404-related decisions must, therefore, be settled in Federal District Court, although state 404 program administrators are now aware of any such action to date.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: Section 404 provisions of P.L. 92-500 are administered by the U.S. Army Corps of Engineers. The authority to issue or deny applications for permits involving certain activities in the waters of the United States is exercised by the Secretary of the Army acting through the Chief of Engineers. Administrative staff work and field studies undertaken in regard to Section 404 are conducted by the District Engineer and the district offices of the Corps of Engineers.

Applications for permit should be made to the nearest district office of the Corps of Engineers. A public notice is issued on each permit application and comments received on the proposal are furnished to the applicant for his rebuttal. A public hearing may be held before the District Engineer issues or denies a permit. But controversial cases are usually referred to higher _____ for a decision.

Corps of Engineers evaluations of permit applications are based on analyzing the impact of the proposed activity on the public interest including water quality. The benefits which may accrue from the proposal will be weighed against any foreseeable harm to the public interest. Notices of permit applications are sent by the district offices of the Corps to federal, state and local agencies for their comments. A Section 404 permit will generally be issued following a favorable state determination unless overriding national factors of the public interest are revealed

Upon approval of a state's Coastal Management Program, Section 307, Paragraph (c)(3) of the Coastal Zone Management Act of 1972 (P.L. 92-583) requires that any applicant for a federal license or permit who proposes to affect land or water uses in the state's coastal area must certify that the proposed activity will comply with the state's coastal area management program. Generally, no permit will be issued until the state concurs in certifying the application.

Status of Implementation: Provisions dealing with Phases I and II of Section 404 are presently in effect. Beginning July 1, 1977, Phase III authority will be enforced, although these authorities and their planned phase-in periods are currently being contested in the U.S. Circuit Court.

Administrative Policies: DNR's Water Management Division, which administers permit programs under state Inland Lakes and Streams Act (Act 346, P.A. of 1972) and Submerged Lands Act (Act 247, P.A. of 1955) described in other criteria, has developed a procedure and an application form for processing and granting "404" permits concurrently with the above state permits. This work is the result of a cooperative effort between DNR and the Detroit District Office of the Army Corps of Engineers. At this writing both the application forms and the approval procedures have been formally approved by the Director of DNR and the Detroit Corps. When approval

is gained from the Corps' Office in Washington, D.C. the program will be implemented to eliminate duplication and save time.

Supplementary Regulatory Tools: DNR's Wildlife Division and the Shorelands Management Unit have cooperatively completed an inventory of wetland areas on Michigan's Great Lakes shorelands. Further inventories and studies of wetlands in the remainder of the state, including those affected by "404" permits, is being planned as a result of funding provided by the Wetlands Stamp Act (Act 194, P.A. of 1976). Act 194 requires an annual $2.10 state stamp similar to the federal waterfowl hunting stamp for all hunters of migratory gamebirds. Sales of state stamps to hunters alone should add at least $200,000 annually to the state coffers for wetlands acquisition. Non-hunters interested in contributing to wetlands preservation may also purchase the stamp. The state funds may then be matched with federal funds to purchase sensitive wetlands. The wetlands inventory authorized and funded by Act 194, when combined with the Great Lakes' coastal inventory under the Shorelands Protection and Management Act (Act 245, P.A. of 1970) will give Michigan a comprehensive list of wetlands with detailed technical information to focus and support permit and management programs.

Though regulation of certain wetland area development is now covered by existing state legislation cited above, the addition of "404" permits will still leave gaps in the regulation, management and protection of some coastal and inland wetland areas. The Wetlands Protection and Management Act now before the Legislature (House Bill 4618) closes those gaps by directing the Department of Natural Resources to conduct a statewide wetlands inventory, prepare a plan for the use, management and protecting of wetlands, promulgate rules to administer the act, and implement a permit procedure to control the use and development of identified wetlands.

Enactment of H.B. 4618 is currently one of DNR's first legislative priorities. A very real possibility exists that it will be passed.

CRITERIA: DOES THE ACTIVITY INVOLVE NEW CONSTRUCTION IN DESIGNATED SHORELAND FLOOD RISK AREAS?

OVERVIEW

Of several state statutes concerned with the causes and impacts of flooding, the Shorelands Protection and Management Act (Act 245, P.A. of 1970) is the newest. One of the Act's basic objectives is to protect new construction from flooding damage and flood hazards by guiding its placement. More specifically, Act 245 directs the Department of Natural Resources (DNR) to delineate flood risk areas and to implement use restrictions for such areas in order to prevent further property losses. The basic management technique employed to restrict uses in high risk flood hazard areas is a permit requirement.

DETAILED PROVISIONS

Major elements of the flood risk provisions of Act 245 and its rules are explained in the following sections.

Authority: Act 245 was passed late in 1970 as the Shorelands Protection and Management Act and was later amended by Act 270, P.A. 1974 to add Great Lakes flood risk areas to its original environmental and erosion provisions. Rules to implement the flood risk provisions of the amended act became effective later in April 8, 1976 as R 281.631 through R 281.645 of the Michigan Compiled Laws. The amended act and its rules are also known as the Part 14 Amendments to the General Rules of the Water Resources Commission Act (Act 245, P.A. of 1929).

Scope of Authority: The flood risk area provisions of Act 245 and its rules apply to lands which are flooded by a Great Lake or a connecting water as defined by Section 4a of the Act. Flood risk areas may extend inland more than the "1,000 limit" and may occur in "developed and platted" areas unlike the Act's requirement for erosion and environmental areas. (Rules for Act 245 provide MDNR authority to designate high risk erosion and environmental areas only on unplatted and undeveloped shorelands. Currently, MDNR is proposing rules which would extend this authority to developed and platted lands.) The flood risk provisions apply, then, to those areas within the elevation contour of the Great Lakes' 100-year flood plain.
Flood Risk Area Delineation: Rule 4a of the Act requires that "the Director shall designate a flood risk area upon his finding that flooding from a Great Lake or its connecting waters is occurring, or is likely to occur, on the average of once within a 100-year period." Areas will be initially identified by DNR staff, based upon detailed engineering studies done by U.S. Department of Housing and Urban Development's Federal Insurance Administration as part of the Federal Flood Insurance Program. Where these studies will not be done or where other studies are available, the DNR must also develop local flood ordinances or regulations, U.S. Army Corps of Engineer's information reports, U.S. Soil Conservation Service's flood hazard analysis, and its own Department

records in reaching their final area delineation. If further studies are required, it is DNR's responsibility to initiate those studies (Rule 4c).

Use Restrictions: Act 245 requires in Section 5 that "the Department shall determine if the use of flood risk areas (for new construction) shall be regulated to prevent property loss, or if a suitable method of protection shall be installed to prevent property loss."

The principal management technique employed to implement the use restriction is the requirement that all new permanent construction proposed for the flood hazard area must be elevated or flood proofed in accordance with the Act. Non-residential structures of low flood damage potential proposed for the flood hazard area, however, may be subject to modified standards (Rule 4b). Proposals for new construction which have already received approvals required in the Plat Act (Act 288, P.A. of 1967) is exempt from requirements of this rule.

Implementation and Enforcement: Building restrictions in flood risk areas can be implemented by local (county, township or municipality) regulations or zoning ordinances which have received DNR approval or in the absence of such ordinances, directly by the DNR through site plan permits.

Under state implementation, a property owner proposal to build a structure in a designated flood risk area must submit a site plan for the approval of the Director of the DNR (Rule 281.11).

Under the local implementation option, a county township, city or village may implement its own use restrictions using locally written, DNR approved, zoning ordinances (Section 11). Department approvals depends upon how adequately the Department determines ordinances prevent property damage in flood risk areas. Once a local zoning ordinance has received approval, state approval of site plans is no longer required.

Any individual or local government agency determined by the Natural Resources Commission to be in violation of these provisions may be prosecuted in circuit court proceedings (Section 11). The court may furthermore issue any order necessary to correct or restrain such violations.

Appeal Procedures: Affected property owners or local governments may express their disapproval with any of these provisions by petitioning the Director of the DNR for a hearing. Both informal and formal hearings may be requested. Appealing the designation of flood hazard areas or their accompanying use restrictions occurs under Rule 6, while appealing the disapproval of local zoning ordinances occurs under Rule 7, and appealing the disapproval of site plans under Rule 8. These rules provide for timely hearing determination which is made by the Natural Resources Commission and are enforced by the above circuit court powers.

Another avenue of appeal is available in circuit court to property owners, local governments and also the DNR, subsequent to a hearing determination. In this case, either party may request an immediate and binding circuit

court decision which must be granted. The DNR will be represented by the State Attorney General in such proceedings.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: The flood risk portions of Act 245 are also administered by the DNR. The authority to designate flood risk areas, approve local zoning ordinances and approve site plans is exercised by its Director. Administrative staff work and field studies undertaken in regard to the Act are conducted by the Shorelands Management and Water Resources Planning Section, Land Resource Programs Division, Michigan Department of Natural Resources.

Flood risk areas will be regulated by Department approval of local shoreland zoning, or in lieu of such zoning, Department approval of site plans. Zoning ordinance review and approval is based on the passage and enforcement of local zoning ordinances. Ordinances which the Department determines adequately enforces the flood risk protection intents of Act 245 and which are also based upon local master plans will be permissible. Building permit review and approval is based upon the site plans provided to the Department by the property owner. The site plan must describe the area and its proposed uses (Rule 12). Site plans for proposals which the DNR determines adequately prevent property flood loses will be permissible.

Status of Implementation: The flood risk provisions of Act 245 became effective only recently (April 8, 1976). Enforcement, however, will occur in individual government units as hydrologic studies necessary for their flood hazard area determination can be completed.

At this writing, DNR is only beginning the area designation process. The flood risk provisions of Act 245 have, therefore, not been subject to circuit court enforcement or any other type of court review.

Administrative Policy: As in the environmental area and high risk erosion area, authorities of Act 245, Michigan has the authority to implement direct state controls through site plan approval or indirect state controls through approval of local zoning. It is DNR policy to administer the Act using indirect controls so that state approval of local shoreland zoning is the regulation technique of first choice in all cases. This allows the most efficient, effective and accessible program in Michigan's governmental structure.

CRITERIA: DOES THE USE ACTIVITY INVOLVE THE ALTERNATION, OCCUPATION OR OBSTRUCTION OF FLOODWAYS AND WATERCOURSES (INCLUDING THE GREAT LAKES CONNECTING WATERS) WHICH HAVE TWO OR MORE ACRES OF DRAINAGE AREA?

OVERVIEW

Land and water uses which obstruct or otherwise harmfully interfere with the capacities or flows of Michigan floodways and watercourses are regulated by authority of the Floodway Encroachment Act (Act 245, P.A. of 1929, as amended by Act 167, P.A. of 1968). Such uses are regulated primarily to protect flood prone areas from increasing damage. To accomplish this, the Act authorizes the Water Resources Commission (WRC) to define flood plain areas and regulate structural developments proposed within them. Regulations are implemented by the Act's requirements that such uses be reviewed and approved in a construction permit program administered by WRC staff within the Department of Natural Resources (DNR).

DETAILED PROVISIONS OF LEGISLATION

In meeting its objective, Act 167 regulations augment the broadly worded authority to control state waters in the Water Resources Commission Act (Act 245, P.A. of 1929). Act 167 and its rules are, therefore, very brief and procedurally oriented while Act 245 defines general WRC responsibilities as described below.

Authority: In mid-1968, Act 167 was signed by Governor Romney and ordered to take immediate effect as an amendment to Act 245. Rules were filed with the Secretary of State in 1972, taking effect on June 21st. The Act was recorded in Michigan Compiled Laws as Sections 323.2 and 323.5 (or the title and sections 2a, 3, 4, 5a and 5b of the Water Resources Commission Act), while the rules are listed as R 323.1311 through R 323.1329. Together the Act and its rules make up the Part 13 amendments to the General Rules of the Water Resources Commission Act (Act 245, P.A. of 1929).

Scope of Authority: These authorities apply to watercourses and floodways of all Michigan rivers and streams including those of the Great Lakes' connecting waters (Section 2a). A floodway is defined to be the stream's channel plus those portions of its adjacent floodplains which are required to carry and discharge flood flows with a one percent or greater chance of occurring in any given year (Rule 311). Where a watercourse approaches the Great Lakes, this authority extends upstream to the point where potential flood hazards are judged to be wholly dependent upon Great Lakes conditions.

Use Restrictions: "The Water Resources Commission (WRC) shall have control over alterations of natural or present watercourses . . . to assure

that the channels and floodways are not inhabitated and that they are kept free and clear of interference or obstructions which will cause any undue restriction of the capacity of the floodway" (Section 2a).

The Act makes it unlawful for any party to engage in or allow occupation, filling or grading, or any other non-agricultural activity which the WRC determines will harmfully interfere with the stage or discharge characteristics of any stream or part of a stream without a permit from the WRC (Section 5b). All land and water uses must be located and used so they will neither change the natural direction nor increase stage or discharge of flows, and so they cannot cause damage to property or threaten life.

Permit requirements, however, are less comprehensive than WRC's authority. Rule 312 exempts the following land and water uses from these permit requirements based on documentation or other assurance that the work proposed will comply with the Act: (a) projects having a drainage area of less than two square miles at the proposed site; (b) drain improvements proposed under the State Drain Code (Act 40, P.A. of 1956, as amended); (c) U.S. Army Corps of Engineers or U.S.D.A. Soil Conservation Service flood control projects; (d) replacement of bridge or culverts which are certified to have waterway openings at least as large as the original, no occurrence of backwater affects and no deletion of existing auxiliary floodway openings; and (e) new bridges or culverts which are certified to have designs which will convey the one percent frequently floods without backwater effects.

Implementation and Enforcement: These regulations are implemented by WRC approval of permit applications. Any party planning any encroachment to flood plains, channels or floodways must submit a letter of application and preliminary plans to the Executive Secretary of the Water Resources Commission for approval. Each application must document hydrologic, topographic, land use and other information necessary to evaluate backwater effects and erosion and siltation controls (Rule 313).

WRC staff then combines the applicant's information with its own records of stream stage and discharge characteristics in making its recommendation to the Commission. Applications will be approved and granted permits if their proposed uses meet these three criteria: First, floodway encroachments cannot cause harmful interference with water flows--either alone or in combination with existing or future works of similar design on the opposite side of the watercourse. Second, floodplain encroachments located landward of the floodway limits must not cause harmful interference to the natural water stages and direction of flows. And third, encroachments such as bridges must be capable of passing an intermediate regional flood (the one year frequency flood)without causing harmful interference (Rule 315).

When the Commission determines that a party has harmfully interfered with stage or discharge characteristics of a stream, or has occupied flood plains without a permit, it must call a hearing to establish the facts and determine if a violation has occurred. Any party found in violation

is subject to Section 3 of Act 245 which allows WRC to bring any appropriate action in the name of people of the state to enforce complaince with the Act and its floodway provisions. Ordinarily, this means that the Commission initiates litigation through the State Attorney General to stop work and/or restore the area.

Appeal Procedures: As amendments, neither Act 167 nor its rules include appeal procedures, however, Sections 7(2) and 8(a) of Act 245 do. Section 7(2) allows alleged violators to present written or oral testimony answering WRC's original charges. If WRC does not then withdraw charges, he or she may, under Section 8(a), petition the Commission for a formal hearing. Either party aggrieved by the result of that hearing may also review the hearing decision in circuit court action as provided in the Administrative Procedures Act (Act 306, P.A. of 1969).

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: Both Acts (Water Resources Commission Act and its Floodway Encroachment Amendments) are administered by the Department of Natural Resources' Water Resources Commission. The Commission has authority to approve permits, hold hearings, initiate court action and keep records. Administrative staff work and field studies done regarding this authority are conducted by the Flood Plain Management and Hydraulic Review Section in the Water Management Division of the Michigan Department of Natural Resources. In practice, however, it is the Flood Plain Management Section, acting as the Water Resources Commission staff, which maintains records and approves most use permits. This Section defines flood plain areas and records the stage and discharge characteristics of state watercourses for WRC. Documentation is in the form of U.S. Army Corps of Engineers' Flood Plain Information Reports or in the form of DNR data which is calculated under Federal Water Resources Commission Guidelines to be compatible with Corps techniques.

Applications will be approved or disapproved based on how well the uses proposed in the completed application comply with the Act in terms of the above hydrologic and other information. Only uses which have received WRC permit approval will be permissable.

Status of Implementation: WRC staff annually approves approximately 200 of its normal volume of 600 permit applications. In spite of the large number of disapproved applications, appeals are very rare. Though few appeals have been made since passage of the current rules in June of 1972 (no appeals were made during 1975), these authorities have received several court tests. One significant example occurred in the People and Michigan Department of Natural Resources vs. Mitchell, 1974, where a large flood plain area, filled in violation of the Act, was ordered restored to its original elevation in stipulated circuit court settlement.

Administrative Policies: Though Section 5b of Act 167 specifically exempts agricultural uses from permit requirements, Rule 312 and WRC staff policy exempt only the tilling of soil for agricultural production. All agricultural drainage or diking requires a permit to be permissable.

WRC requires that public corporations such as utilities and government units must also apply for permits to occupy flood plains, repair or replace bridges, or alter stream stage and discharge characteristics.

In cases where harmful damage to property or life may be difficult to document, WRC staff asks applicants to obtain releases from property damage and injury caused by the proposed projects to affected property owners and residents. If those releases cannot be obtained, WRC assumes that the objective of the Act cannot be met so that the application is disapproved, no permit is granted and the proposed use is not permissable.

Supplementary Regulatory Tools: The WRC and its staff in the Flood Plain Management and Hydraulic Review Section implement authorities very similar to these in reviewing other regulatory acts. Any subdivision of land requiring a plat under the Plat Act (Act 288, P.A. of 1969); any condominium requiring a master deed to build,advertise or sell under the Horizontal Real Property Act (Act 299, P.A. of 1963); and finally any mobile home park requiring a construction permit under the Mobile Home Park Act (Act 243, P.A. of 1959) will all need WRC permit review if they might be located in a flood plain. Provisions for this review are included in the regulatory legislation shown above and are discussed as separate criteria in this report; nevertheless, their intents and their affect and very similar to the Floodway Encroachment Act.

CRITERIA: DOES THE USE ACTIVITY INVOLVE A SUBDIVISION OF COASTAL LANDS INTO FIVE OR MORE PARCELS, EACH OF WHICH IS TEN ACRES OR LESS IN SIZE?

OVERVIEW

Whenever such lands are subdivided the state requires that the development comply with the Subdivision Control Act which is also known as the Plat Act (Act 288, P.A. of 1967). The Act's regulations intend to promote the public health, safety and welfare; further the orderly layout and use of land; require that land be suitable for building sites and public improvement and have adequate drainage; provide proper access to lots; promote proper surveying; control residential flood plain development; and finally, reserve easements for utilities. The management technique used to accomplish this regulation is the requirement that a preliminary plat be submitted to the state for approval.

Four sets of rules specify who receives plats for review, how plats are to be processed, and under what goals and criteria plats will be approved or disapproved. The Department of Natural Resources (DNR) approves all plats involved in flood plain areas, lands abutting existing or proposed bodies of water, and the public rights associated with such areas before they are recorded by the State Treasurer. Departments of Public Health, Treasury and State Highways and Transportation are responsible for plat approval involving unsewered areas and highway rights-of-ways.

DETAILED PROVISIONS OF LEGISLATION

Since the DNR related responsibilities and objectives are the most significant to the Coastal Management Program, the following descriptions of Act 288 authorities will emphasize only those provisions.

Authority: This Act was signed in mid-1967 and became effective January of 1968. The Act has had no amendments since its passage and is recorded as 560.116 through 560.117 of Michigan Compiled Laws. Procedural rules for implementation are included within the Act itself, but detailed terminology, methodology and standards for defining flood plains and flood proofing development are given in DNR's Part 3 rules of Act 288, R 560.301 through R 560.304 of Michigan Compiled Laws, effective July 15, 1975.

Scope of Authority: Subdivision of any lands within the state boundaries which, within any ten year period result in five or more parcels of land, each of which is ten acres or less in area, must comply with all provisions of this Act (Section 102).

Use Activity Regulations: Whenever any parcel of land is divided into five or more parcels, each which is ten acres or less in area, whether the division is accomplished in a single step or by successive divisions

over a period of ten years, that plat "must be surveyed and a plat thereof submitted, approved and recorded" (Section 103).

The principle management technique used to implement this restriction is the definition of the flood plain limits. Section 194 provides that the flood plain area must be left essentially in its natural state and that no buildings for residential purposes or occupancy may be located on any portion of a lot lying within the flood plain--unless approved in accordance with the rules of the Water Resources Commission and certified that the original discharge capacities of the watercourse are not changed in a manner that would effect the riparian rights of other owners. As stated in Rule 304, this means that new residential or other structures built for occupation, its access streets and its sewers which lie within the flood plain contour must be constructed and flood proofed according to Federal Water Resources Council guidelines.

Implementation and Enforcement: These restrictions are implemented by both the Department of Natural Resources and its Water Resources Commission. "The proprietor shall submit copies of the preliminary plat to the DNR for comment and approval if the land proposed to be subdivided abuts a lake or stream, or abuts an existing or proposed channel or lagoon affording access to a lake or stream where public rights may be affected" [Section 116 . . . and to the Water Resources Commission (WRC) of the DNR for approval or disapproval if any of the subdivision lies wholly or in part within the flood plain of a river, stream, creek or lake" (Section 117)]. Concerning riparian lands, DNR comment and approval is based upon how well riparian rights and the public trust are protected. Concerning flood plain lands, WRC approval or disapproval is based upon methods used to describe the flood plain boundaries and the design of structures located within these boundaries. The flood plain boundaries, whether described in local ordinances or by DNR calculations, must outline the 100-year frequency flood contour using methods compatible with Federal Water Resources Council guidelines (Rule 303). Similarly, occupied flood plain developments must comply with Federal Corps of Engineer's standards for flood proofing (Rule 304).

A further condition of DNR approval is that all necessary certificates of approval from the city, county, state and federal authorities by included in the application in compliance with the procedural, fees, bonding, and approval criteria of the Act. Once all necessary compliance is documented, the plat is certified final and filed by the State Treasurer's office and the local register of deeds.

Any part who sells or agrees to sell lands without recording an appropriate plat as required by this Act is deemed guilty of a misdemeanor. Upon conviction, the first offense is punishable by a fine of up to $1,000 or imprisonment of up to 180 days, or both; subsequent offenses are punishable by like fines or up to one year of imprisonment, or both (Section 264). Any sales of lands subdivided in violation of this Act will be voidable at the option of the purchaser and subjects the seller to forefeiture of all consideration received plus any damages which may be recoverable by legal action (Section 267).

In such actions, the State Attorney General, the county prosecuting attorney, and municipality, the county plat board, or a county road commissioner may begin legal proceedings in their own name to restrain. prevent or discontinue violation of any part of the Act (Sections 265 and 266).

Appeal Procedures: The Act specifies no appeals, but does provide procedures for altering preliminary plats, amending plats and carrying out court convictions to implement its penalties.

DNR flood plain boundary determinations may be appealed in accordance with Chapter 6 of the Administrative Procedures Act (Act 306, P.A. of 1969) according to Rule 303(5).

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: Though the State Treasurer is responsible for overall administration of the Act, the provisions involving flood plain or riparian platted lands are administered by the Flood Plain Management and Hydraulic Review Section of the Water Management Division, Department of Natural Resources. Administrative staff work, field studies, record keeping and calculations for approving flood plain boundaries and flood plain developments is done by the Flood Plain Management and Hydraulic Review Section.

Flood plain boundaries will be defined by Department approval of local regulatory ordinances, or in the absence of such ordinances, by Department definition of flood plain boundaries in accordance with federal guidelines provided in U.S. Corps of Engineers flood plain information reports, U.S.D.A. Soil Conservation Service flood hazard analysis studies, Federal Water Resources Council guidelines or U.S. Geological Survey surface water records. Structural developments will be regulated by Department approval of street elevation, bottom floor elevation, basement openings, floatation prevention measures, sewer backup prevention measures, lot size minimums, grade elevation minimums, hydrostatic pressure standards and other flood proofing requirements in compliance with Section 94 of Act 288, Sections 2A, 3, 4, 5A and 5B of Act 245, P.A. of 1929, as amended, and with methods and procedures found in "Flood Proofing Regulations" prepared by the Army Corps of Engineers. Plats which the DNR determines adequately protect the public rights in the state's waters and protect the property from damage will be approved and sent to the Department of Treasury with the recommendation that they be registered as permissible.

Status of Implementation: Ordinarily about 300 preliminary plats and 200 final plats are processed each year. An average of 80 percent of these are recommended to the Water Resources Commission for approval. The remaining 20 percent either cannot be modified to satisfy the regulations or are not pursued by the applicant.

The opportunity for court test of these regulations has been infrequent and disappointing. Two formal hearing decisions to uphold Water Resources Commission plat denials were appealed in Circuit Court - Water Resources Commission vs. Sky Haven #5, 1970, and Water Resources Commission vs. Riverside Subdivision, 1970 - where the denials were reversed on grounds that the flood plain stages had never reached and where therefore inaccurate.

Administrative Policies: The Commission and the Department upon the procedural requirements of the Act and rules by examining plats to determine whether other permits are necessary under other water resource related legislation. These permits may include additional reviews under Michigan's Inland Lakes and Streams Act and the Great Lakes Submerged Lands Act. This approach is an effective implementation of state authority since many plats require several permits.

CRITERIA: DOES THE ACTIVITY INVOLVE NEW COASTAL CONDOMINIUM DEVELOPMENT?

OVERVIEW

Since condominium projects are not platted, the deeding, ownership, advertising, sale and jurisdiction activities related to condominiums are regulated by the Horizontal Real Property Act (Act 229, P.A. of 1963). The Act's broad objective is to protect the health, safety and welfare of both condominium purchasers and the general public. This protection is provided in the Act, its rules and a detailed set of guidelines which specify how individual apartments and entire apartment projects must be planned, deeded and sold to legally be described as condominiums. The basis of these controls is a requirement that proposed condominium projects develop an approved master deed with the State Department of Commerce for registration with the Local Register of Deeds Office.

Deed registration for condominium projects is dependent on comments from up to three other state departments: condominiums which cannot be served by existing municipal water supply systems must gain the approval of the State Department of Public Health; condominiums which abut a state highway or trunk line must gain approval of the Department of State Highways and Transportation; and, the emphasis of this report, condominiums which cannot be served by existing municipal sewer systems or which abut a lake, stream or channel or which touch any flood plain area must gain approval of the Department of Natural Resources' Water Resources Commission.

DETAILED PROVISIONS OF LEGISLATION

DNR related provisions of the Horizontal Real Property Act are discussed in the following sections.

Authority: Act 229 was enacted May 23, 1963 and amended several times from 1963 to 1967. Current form of the Act is Sections 559.1 to 559.31 of the Michigan Compiled Laws. Rules to implement the Act were last revised in 1973. Those augmented rules became effective immediately as R 451.1301 through R 451.1387 of Michigan Compiled Laws.

Scope of Authority: Act's authority extends statewide to any developer who owns, intends to develop or advertises either single condominium units or an entire condominium project. A co-owner who is not a developer of a condominium project is not subject to these provisions in selling his individual apartment however (Rule 451.1307).

As defined by the Act, a condominium is "The ownership of (individual) apartments and space enclosed by the description thereof as contained in the master deed in a multiple use structure, together with ownership of and interest in common elements"(Section 2c). A condominium project is "A plan or project consisting of not less than four (condominium) apartments." (Section 2d).

In 1966, authorities vested by the Act in the State Corporation and Securities Commission was transferred by amendment to the Corporation and Securities Bureau of the Michigan Department of Commerce.

Use Restrictions: The Act stipulates that, "Any developer desiring to establish a condominium project for any property shall prepare a master deed complying with the provisions of the Act and shall forward such proposed master deeds to the (Michigan Department of Commerce's Securities) Commission" (Section 24); and that no project may be "advertised or represented as a condominium project until a permit to take reservations or a permit to sell has been granted" (Rule 451.1374). The Act also requires that no apartment within a condominium project may be sold or offered for sale prior to issuance of a permit to sell (Section 26); and that no project changes may be made contrary to the provisions set forth in a master deed without first requesting and obtaining new approvals from the Department of Commerce to change the project and accordingly amend the master deed (Section 27).

Since no project may be established as a condominium project unless and until a Department of Commerce approved master deed is recorded with the local supervisor, assessing agency or treasurer (Sections 3 and 7), the master deed requirement is the primary management tool to implement these restrictions. Separate permits for taking reservations to fill individual units and for advertising, and for selling entire projects are also required however. In all permits, condominium projects must be engineered, sold and occupied so that prospective buyers receive a detailed explanation of all relevant facts concerning the flood plain and the possibility of flooding, and so that the general public will be assured of its health, safety and welfare regarding waste water treatment, sewage and flooding.

Implementation and Enforcement: Use restrictions promulgated by Act 229 are implemented by the Michigan Department of Commerce's Corporation and Securities Bureau. Under terms of the Act, parties wishing to develop, sell or advertise condominiums must initially receive approval from the Commerce Department. However, "if the proposed condominium project is not to be served by an existing municipal water or sewerage system, the administrator shall notify (both) the Department of Public Health and the Water Resources Commission who, after investigation, shall inform the administrator whether in its opinion adequate provision has been made to protect the health of purchasers and the public or what requirements are necessary to do so. (And) if the proposed condominium project abuts a lake, stream or channel, the administrator shall notify the Water Resources Commission . . . (to determine whether) adequate provision has been made to protect the health, safety and welfare of purchasers and the public, or what requirements are necessary to do so." (Rule 451.1354).

The DNR's role in these reviews is best summarized as a use--specific application of provisions of the Waterworks and Sewage Treatment Systems Act (Act 98, P.A. of 1913), the Water Resources Commission Act (Act 245, P.A. of 1929) and the Floodway Encroachment Act (Act 167, P.A. of 1966). This assures that condominium activities will be constructed according to the purposes of Act 229 and in compliance with the above statutes.

"Every person who authorizes, directs or aids in publication, advertisement, distribution or circulation of any statement or representation concerning any condominium project which misrepresents the facts concerning the project as set forth in the approved and recorded master deed or the application of a developer to the Commission for permission to sell; every person who with the knowledge (of such activity) . . . that is false or fradulent, issues, circulates, publishes or distributes the same; every person who represents or causes or permits the representation of any property as a condominium project when such property has not been approved and recorded as a condominium project under the terms of this Act; and every person who violates or fails, omits or neglects to obey, observe or comply with any order, decision, demand or requirement of the Commission issued under the terms of the Act shall be fined not more than $1,000 or imprisoned not more than 1 year or both" (Section 28).

"In addition, the Commission may bring an action in any court of competent jurisdiction against any person to injoin such person from engaging or continuing in any violation of any order of the Commission or any provision of this Act. Actions taken under this section shall be brought in the name of the people of the state by the prosecuting attorney of the county in which the property is located or by the (State) Attorney General" (Section 28).

Appeal Procedures: Upon denial of approval for a condominium project, failure to comply with the Act or rules of the Act or if it appears that a project will be detrimental to health, safety or welfare of the purchasers or to the public, the Department of Commerce notifies the developer of their intent to deny, whereupon the developer may request a hearing according to the Administrative Procedures Act (Act 306, P.A. of 1969). In such hearings, the developer may file a written answer to charges or claims and make an oral statement. Within reasonable time after the hearing, the hearings administrator sends hearing findings and conclusions to the developer. A formal re-hearing may be granted upon application and is conducted in the same manner as the initial informal hearing. Act 306 may also be used by either party to continue appeals in court. The Department of Commerce will be represented by the State Attorney General on these appeals.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: Act 229 is administered by the Department of Commerce, Corporation Securities Bureau and its staff. The Bureau has authority to review and approve permit applications for condominium subdivision plans and condominium advertising and selling activities. The Bureau reviews the master deed and all other documents for compliance with Act 229 to insure that the property is fairly and clearly represented to prospective buyers (Section 26). Administrative work is also coordinated with DNR for flood hazards and sewerage, with Department of Public Health for water supplies, with Department of State Highways

and Transportation for safe access and with local authorities for compliance with local zoning or other ordinances. Activities which obtain these approvals as needed and also pay the required fees ($25 per application for each original or extension of permits to take reservations and $80 plus $15 per each apartment proposed for original and amended master deeds) will be granted permits for a period of one year. During that time the activity will be permissible as approved and registered.

Processing a condominium project ordinarily occurs in the following steps. A developer tests the market demand for his condominiums by applying for a permit to take reservations. After that permit is issued, applications are made for master deed approval and the permit to sell. Before the project units are opened for sale and occupancy, the developer must have approval of the master deed from the Bureau. The approved master deed information is then used to obtain permits to sell. Soon after the approved deed is recorded, permit to sell application is reviewed. Once this permit is obtained from the Department of Commerce the developer is entitled to close the sale of the units and furnish purchasers with a deed.

Status of Implementation: Since 1963, the Michigan Department of Commerce has exercised its authority over all projects having or seeking status as a condominium under Act 229. Using fiscal year 1975 for reference, the Department received 250 new requests for action, issued 200 permits to take reservations, approved 150 master deeds, issued 150 permits to sell and approved 150 amendments to master deeds.

Rather than deny permits, the Department of Commerce notifies the developer of changes needed for approval. To date very few proposals have failed to comply and receive ultimate approval under this system, and subsequent appeals, hearings and court tests have not developed.

Administrative Policies: Under the Horizontal Real Property Act, the Corporation and Securities Bureau imposes such requirements as it finds necessary and proper to protect purchasers of condominium units from possible fraud, deception or inadequacy of information about their purchases, including environmental impact. So long as any required or requested information is unavailable, permit processing stops. Commerce Department has a firm but informal policy that all flood plain and other determinations must be conclusive before the permit to sell can be granted. Department Letter No. 5 particularly emphasizes that no developer may irreversibly sell condominium units without due consideration and documentation of possible flood hazards as determined by the flood plain review process of the DNR's Water Resources Commission.

These policies are furnished to condominium permit applicants in a series of guideline letters as part of the standard application procedure. Each letter is published under the Department of Commerce letterhead and signed by the Director of the Corporation and Securities Bureau. They provide detailed procedural approval information to elaborate on the Act and Rules for preparing plans, advertising, identifying, preparing sales disclosure statements and determining and documenting flood hazards.

"If the project location may be within a flood plain and such a determination has not yet been made by the Flood Plain Control Section of the Department of Natural Resources, then state that this item is pending. State that if such a determination is not made upon issuance of a permit to sell, then the Corporation and Securities Bureau of the Michigan Department of Commerce may add a condition to the permit to seel that the project will not be within the flood plain and there will be no closings until such a determination is made". (Proposed Department Letter No. 4, page 8.)

"If the project is located within a flood plain or so close to the flood plain that the Flood Plain Control Section expresses concern over the possibility of flooding, then the Bureau may require that an accurate disclosure statement may be prepared for distribution to all purchasers and to prospective purchasers. Such a disclosure statement must be approved by the Bureau prior to distribution . . . The disclosure statement shall contain a detailed explanation of all related facts concerning the flood plain and the possibility of flooding. This disclosure statement shall be signed by each purchaser as an acknowledgement of such notification. These signed disclosure statements shall be kept on file by developer, available for the Bureau's review." (Proposed Department Letter No. 5, page 2.)

CRITERIA: DOES THE USE ACTIVITY INVOLVE NEW COASTAL MOBILE HOME PARK DEVELOPMENT?

OVERVIEW

The late 1950's saw a large increase in demands for facilities to serve both seasonal and year around mobile home owners in Michigan. A similar increase has recurred recently for year around mobile home owners. Michigan's mobile home park industry is regulated by the Mobile Home Park Act (Act 243, P.A. of 1959) to control various phases of mobile home park development and operation. The Act's major objective is to protect the public health from diseases transmitted as a result of improper water service, sewerage, waste control or vector control, and to protect the public safety from flood risks, improper drainage and faulty utility installation. The Act accordingly directs the Michigan Department of Public Health to regulate such activities and to implement use restrictions through construction permits and annual operating license requirements.

Of these, the major management technique used to protect coastal waters is the construction permit. Like the plat and condominium acts described earlier (respectively, Act 288, P.A. of 1967 and Act 229, P.A. of 1963). These provisions are use-specific applications of other (flood plain, sewerage, etc.) legislation wherein the Department of Public Health, in meeting requirements of its permit review, will contact the Department of Natural Resources for any necessary determinations of compliance with those sewerage, waste control or flood risk provisions.

DETAILED PROVISIONS OF LEGISLATION

The basic provisions of Act 243 and its interface with other legislation are described in the following sections.

Authority: Act 243 became officially effective in March of 1960 as the Mobile Home Park Act, Sections 125.1001 through 125.1097 of the Michigan Compiled Laws. Implementing rules are contained within the Act itself.

Scope of Authority: Provisions of Act 243 apply to any "parcel or tract of land under the control of any person, upon which three or more occupied trailer coaches are harbored on a continual or nonrecreational basis, or which is offered to the public for that purpose regardless of whether a charge is made, together with any building, stuucture, enclosure, equipment, or facility . . . incident to (such) harboring" within Michigan's borders.

Trailer coaches include a "mobile home, trailer or a single family manufactured living unit which is transported to sites as one or more modules, . . . (useable) as a dwelling or sleeping place . . . and licensable as a trailer coach under Act 300, P.A. of 1949, as amended". (Section 2).

Section 91 of the Act specifically exempts housing for agricultural labor which is corporately owned, and licensed under Act 289, P.A. of 1965, and for platted lands containing only one trailer coach serviced by either municipal or private water supply and sewage disposal systems.

Use Restrictions: In Section 5, the Act requires that "no person shall construct or engage in the construction of any trailer coach park or make any addition or alteration to a trailer coach park that either alters the number of sites . . . or effects the facilities required therein until he first secures from the (Director of the Department of Public Health) a permit authorizing the construction, addition or alteration. The construction, addition or alteration shall be done in accordance with and limited to work covered by plans and specifications submitted with the application and approved by the (Director)." Section 21 additionally requires that "no person shall maintain, conduct or operate a trailer coach park within this state without an annual license therefrom from the (Director of the Department of Health)."

Restrictions more specific to our purpose concern flood plain siting, solid waste disposal, sewage and waste control. "No trailer coach park shall be so located as to be detrimental to the public health . . . No portion of this site is to be occupied by the trailer coach, the location of the sewage treatment facility and any soil absorption system for such facility, the location of any dwelling unit and the location of any auxiliary building shall be above the elevation of a contour defining the flood plain limits for hypothetical flood having a recurrence frequency of once in about 100 years" (Section 51). "Garbage and rubbish shall be disposed of in a manner approved by the health officer" (Section 66). And from Section 57, "methods and facilities for collection, treatment and disposal of sewage or other water carried wastes shall comply with any applicable ordinances or regulations and shall be of such a nature and capacity and so maintained and operated as not to create unlawful pollution of the waters of the state, a menance to health or a condition of nuisance. No wastewater from trailer coaches shall be deposited on the surface of the ground. Trailer coach parks shall connect to a public sewer system where a public sewer system is available and accessible. Where no public sewer system is available and accessible, devices for the collection, treatment and disposal of sewage satisfactory to the Commissioner shall be provided, and if no practicable way can be found by which proper waste disposal is assured, the permit shall not be issued."

Implementation and Enforcement: Use restrictions in trailer park activities are regulated by the Department of Public Health through a construction permit approval requirement. Any party proposing new construction or alterations must submit an application to the Director of the Department of Public Health. This application includes copies of the proposed construction plans and specifications including a plot plan; a site plan; floor plans and elevations; and facilities plans for utilities, water supplies, sewerage, garbage and rubbish disposal (Section 8). Approved construction permits will be valid for periods of up to three years, although extensions of up to two years are available upon petition and concurrence of the DPH Director (Section 10). Department approval of construction permits depends upon how well application materials insure that the public health and safety will be protected in meeting requirements of the Act.

Annual operating licenses are granted to parks which have no hazardous deviations from approved plans, which have a full-time caretaker, and which also meet the license fee ($25.00 plus $.50 per site in excess of 25 sites in each park) and the tax bonding ($1,000 for each 100 sites or portion thereof) requirements of the Act as verified by field inspections. Failure to comply with these and other terms of the Act is grounds for the Director of Public Health to suspend or revoke the operator's license. This may be done only after a show-cause hearing in Circuit Court, however.

"The health officer, the Commissioner of State Police or any peace officer having jurisdiction in the area in which a trailer coach park is located. shall notify the Commissioner of any known violation of this Act or the rules and regulations promulgated hereunder. In addition, they shall make any necessary inspections. Standing the existence in pursuit of any other remedy, the Commissioner or the Health Officer may maintain an action in the name of the state for injunction or other process against any person to restrain or prevent the construction, enlargement or alteration of a trailer coach park, . . . without a permit therefore, or the operation or conduct of such a park without a valid license, or in a manner contrary to law. Any person constructing, enlarging or altering any trailer coach park without a permit, or conducting or operating a trailer coach park without a license, or convicted of violating any of the provisions of this Act or any rules and regulated promulgated thereunder shall be guilty of a misdemeanor." (Sections 94 through 96)

Appeal Procedures: The Administrative Procedures Act (Act 306, P.A. of 1969) provides both informal and formal hearings to parties aggrieved of a construction permit or an annual license action. These provisions also allow either party further appeals in circuit court.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: Most Act 243 authorities are vested in the Director of the Department of Public Health. Accordingly, the Health Department administers the Act and conducts field and staff work relating to 243 through its Community and Environmental Health Division's Mobile Home Park and Campground Section. Mobile home parks will be regulated by Department of Public Health approval of construction plans and other documentation submitted as part of the construction permit application. Department of Public Health comprehensively reviews the entire application in light of the specific procedural engineering, fee and bonding requirement in light of the specific procedural engineering, fee and bonding requirements of the Act as well as the proposal's potential environmental impact. In this, Department of Public Health may route the application to other agencies for review. The primary Department of Natural Resources' role in these reviews is to aid Department of Public Health review of flood hazards and sewage or wastewater treatment activities. Only activities meeting the terms of 243 plus the additional terms of flood hazard amendments to Act 245, P.A. of 1929 and the wastewater treatment provisions of Act 98, P.A. of 1913 will be granted construction permits or operating licenses and will therefore be permissible.

Status of Implementation: Act 243 has been in effect since early 1960 and has seen a constantly increasing number of operating license and park construction applications. In 1975, Department of Public Health reviewed over 1,000 operating license applications statewide, of which 900 were renewals of last year's permits and 150 were first year applications. Similarly, another 150 construction permits for expanding facilities or new construction were reviewed.

At this writing, relatively few licenses or permits have been denied due to the strong information and public assistance functions of the Department of Public Health. Nearly 95% of each year's applications are ultimately altered into compliance, and as a result, very few appeals or court tests have occurred. During 1975, a total of 75 administrative or enforcement actions were initiated on licenses and permits. Twenty of those actions resulted in closing facilities, correcting violations or gaining licensure. Within the past few years, three facilities appealed to Circuit Court to contest denial of licenses. In all three cases, the decision was in favor of the Department. The most recent appeal occured in King Arthur's Court, Inc. vs. State of Michigan, Department of Public Health, 1975, where the Circuit Court upheld a hearing order that the license should be denied. The state's major contention was that this park needed to connect to an accessible, existing municipal water system under Section 57 of the Act.

Administrative Policies: The Department of Public Health has a well developed network of County Department of Public Health offices out-state. These local officers were established as independent yet well integrated extensions of the state DPH organization by Act 306, P.A. of 1927. They are used extensively to strengthen public contact, consultation, administration and enforcement functions of all DPH programs. Both formal and informal policies involve county offices in distributing information, reviewing permits and inspecting sites.

The document, Michigan Department of Public Health Interpretations and Guidelines for the Administration of Act 243, Public Acts of 1959, as amended, Mobile Home Park Law, for example is distributed by state and local public health officials to all applicants and interested parties. As its title suggests, these are formal policies to clarify and amplify the Act and rules. The Department of Natural Resources' role in Act 243 regulations is further reinforced in these excerpts:

* "If any portion of the construction of a proposed park or expansion of an existing park falls within the 100 year frequency flood plain, a permit for such construction must be obtained from the Water Resources Commission under Act 245, Public Acts of 1929, as amended, prior to or concurrent with the issuance of a construction permit." (Page 2, Item f)

* "When a municipal sewer is not available and a soil absorbtion sewage system is proposed, the site . . . shall not be considered satisfactory if . . . subject to surface flooding." (Page 1, Item C)

* "Absorption field shall not be placed in the following locations . . . within 100 feet of lakes and streams as a minimum (or in) areas subject to flooding." (Pages 12 and 13, Item 6)

CRITERIA: DOES THE USE ACTIVITY INVOLVE NEW COASTAL CAMPGROUND DEVELOPMENT?

OVERVIEW

Michigan campground use has increased even more than mobile home use in recent years. Both primitive and elaborate facilities are in such demand that making reservations is a common and necessary practice during summer months. Winter camping is also increasing. The Public and Private Campgrounds Act (Act 171, P.A. of 1970) authorizes the regulation and licensing of recreational campgrounds in Michigan with five or more campsites - whether facilities are primitive or elaborate and whether their use is free or for a fee. The Act's broad goal is to protect the public health and safety by requiring sufficient and satisfactory facilities for access, water supply, sewage, waste disposal and vector control.

This Act directs the Department of Public Health (DPH) to carry out permit programs which regulate the new construction and continued operation of campgrounds. The management technique used to regulate such activities is a construction permit. Like the plat, condominium, mobile home parks acts described earlier (respectively, Act 288, P.A. of 1967; Act 299, P.A. of 1963; Act 243, P.A. of 1959), these regulations are basically repeat applications of procedures and duties in flood plain, sewerage and other legislation. In all these programs, the Department of Public Health must contact the Department of Natural Resources in determining compliance with DNR responsibilities mandated in those sewerage, waste control or flood risk laws.

DETAILED PROVISIONS OF LEGISLATION

Provisions of Act 171 and its interface with other legislation are described in the following sections.

Authority: Act 171 became officially effective in January of 1971, as the Public and Private Campground Act, Section 325.657 of the Michigan Compiled Laws. Implementing rules have been in effect since July of 1971 as R 325.1551 through R 325.1599, MCL. Neither the Act nor rules have been amended to date.

Scope of Authority: Provisions of Act 171 apply to any campground or "parcel of tract of land under the control of any person, wherein sites are offered for the use of the public or any members of an organization, either free of charge or for a fee, for the establishment of temporary living quarters for 5 or more recreational units" within Michigan's borders. Recreational units, as defined by the Act, include all temporary structures from tents to motor homes and chassis-mounted travel trailers used in recreation, camping or travel (Section 1).

State-owned and operated campgrounds must comply with all provisions of the Act, though they are exempted from the permit requirements (Section 2). Section 11 further exempts campgrounds licensed by Michigan Department of Social Services and operated only as a children's camp, and properties licensed under Act 289, P.A. of 1969, as a seasonal work camp for agricultural laborers. And finally, a temporary or rally type campground may be operated with a temporary license for up to two weeks (Rule 5).

Use Restrictions: In Section 2, the Act requires that "no person shall begin to construct or alter or engage in the development of a campground without first obtaining a construction permit from the Department of Public Health". The proposed construction, addition or alteration shall be done in accordance with, and limited to, work covered by plans and specifications submitted with the approved application.

Section 3 additionally requires that no party may "operate a campground without first obtaining an annual campground license from the Department of Public Health".

Restrictions more specific to our purpose concern flood plain siting, solid waste disposal, sewage and waste control. "A campground shall not be located where it will be detrimental to the public health" (Rule 2). The following excerpts from other rules clarify which criteria relate to DNR functions in terms of the public health:

* "A campground shall not be located on top of an abandoned landfill which has been used in the past 5 years for disposal of garbage or refuse" (Rule 2).

* "Disposal of garbage and refuse shall be in accordance with state and local law, ordinances and rules" (Rule 31).

* "At least one sanitary station of approved design shall be provided for a modern campground except to those campgrounds catering solely to recreational vehicles that connect to the campgrounds' water and sewage systems. The sanitary systion shall be designed and maintained to prevent contamination from being introduced into the fresh water storage tanks or campground water supply system" (Rule 26).

* (A water supply) "Connection shall be made to a local government water system when available and accessible" (Rule 9).

* "A new or existing well, pump and water system installation introduced to serve a campground shall be in compliance with the Department of Public Health rules entitled, "Minimum Standards for the Location and Construction of Certain Water Supplies" (Rule 9). These rules specify that such facilities must be located so that the well casing and cap lie above the 100 year flood plain elevation as determined by the Michigan Department of Natural Resources.

* "In a modern campground, connections shall be made to a local government sewer system when available and accessible" (Rule 11).

* "A soil absorption system . . . field shall not be placed in the following locations . . . within 100 feet of a lake or stream as a minimum; in the path of a catchment area of surface runoff; where a high groundwater table is closer than 4 feet to the ground surface; . . . (or) where surface flooding may occur" (Rule 12).

* "When a lagoon system or sewage treatment plant is proposed and the treated effluent is to be discharged into a watercourse including a lake, stream, county drain or drainage ditch, data concerning the specific case shall be submitted to the Department of Public Health on a form furnished by the Department" (Rule 14).

Implementation and Enforcement: Use restrictions in campground activities are regulated by the Department of Public Health through a construction permit approval requirement. Any party proposing new construction or alterations must submit an application to the Director of the Department of Public Health. This application includes copies of the proposed construction plans and specifications including a site plan showing elevations and facilities plan for utilities, water supplies, sewerage, garbage and rubbish disposal (Rule 3). Approved construction permits will be valid for periods of three years, although extensions are available upon petition and concurrence of the DPH Director (Rule 4). Department approval of construction permits depends upon how well application materials ensure that the public health and safety will be protected in meeting requirements of the Act.

Annual operating licenses are granted to parks which have no hazardous deviations from approved plans, which have a full time caretaker, and which also meet the license fee ($15) requirements of the Act as verified by field inspections. Failure to comply with these and other terms of the Act are grounds for the Director of Public Health to suspend or revoke the operator's license. This may be done only after a show cause hearing held by the Director, however.

Failure to comply at any time with provisions of this Act and its rules is grounds for the DPH to notify the facility owner or operator of that failure and to specify a time period within which the violations must be corrected. Failure to satisfy such an order leads to a hearing which determines why the operator's license should not be revoked. The Director's determination following this hearing is conclusive (Section 8) unless appealed further in the courts.

"Not withstanding the existence of any other remedy, the Director of the health officer may maintain an action in the name of the state for an injunction against any person to restrain or prevent the construction, enlargement or alteration of a campground without a permit, or the operation or conduct of a campground without a license"(Section 14).

"Any person found guilty of violating any of the provisions of this Act is guilty of a misdemeanor" (Section 13).

Appeal Procedure: Aggrieved applicants may appeal to the Director of the DPH within 10 days of receiving a permit denial or they may appeal directly to circuit court (Sections 5 and 8). The Administrative Procedures Act

(Act 306, P.A. of 1969) also provides both informal and formal hearings to parties aggrieved of a construction permit or an annual licensing action. Either party may then continue any further appeals in circuit court.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: Most Act 171 authorities are vested in the Director of the Department of Public Health. Accordingly, the Health Department administers the Act and conducts field and staff work relating to Act 171 through its Community and Environmental Health Division's Mobile Home Park and Campground Section. Campground activities will be regulated by DPH approval of construction plans and other documentation submitted as part of the construction permit application. Department of Public Health comprehensively reviews the entire application in light of the specific procedural, engineering and fee requirements of the Act as well as the proposal's potential environmental impact. In this, DPH may route the application to other agencies for review. The primary Department of Natural Resources' role in these reviews is to aid DPH review of flood hazards and sewage or wastewater treatment activities. Only activities meeting the terms of Act 171 plus the additional terms of flood hazard amendments to Act 245, P.A. of 1929, and the wastewater treatment provisions of Act 98, P.A. of 1913, will be granted construction permits or operating licenses and will therefore be permissible.

Status of Implementation: Act 171 has been in effect since early 1971 and has been a constantly increasing number of operating license and campground construction applications. In 1975, DPH issued over 750 operating licenses statewide and approved the operation of over 220 state-owned campgrounds not required to have a license. There were 240 plans reviewed for new camping facilities resulting in issuance of 143 permits for new campgrounds or expansion to existing facilities.

DPH helps minimize legal and administrative enforcement actions, however, during 1975 a total of 17 administrative or enforcement actions were initiated on licenses. There have been no court appeals as a result of these actions.

Administrative Policies: The Department of Public Health has a well developed network of county DPH offices out-state. These local offices are established as independent yet well integrated extensions of the state DPH organization by Act 306, P.A. of 1927. They are used extensively to strengthen public contact, consultant, administration and enforcement functions of all DPH programs. Both formal and informal policies involve county offices in distributing information, reviewing permits and inspecting sites under the same or very similar criteria as the Mobile Home Park Act (Act 243, P.A. of 1969) as described in previous criteria.

CRITERIA: DOES THE ACTIVITY INVOLVE THE PREPARATION, ADOPTION OR ALTERATION OF A COUNTY ZONING ORDINANCE?

OVERVIEW

The Michigan Legislature, through the County Rural Zoning Enabling Act (Act 183, P.A. of 1943) gave counties authority to adopt zoning ordinances for the purpose of creating zoning districts within a county jurisdiction. Under the broad purpose of promoting the public health, safety and morals and general welfare, the Act allows counties, with the assistance and approval of the Department of Natural Resources (DNR) to adopt ordinances regulating the location of land uses, the size and bulk of structures, the configuration of open spaces, and of sanitary, safety and protective measures to be followed in county development. In this light, counties may encourage or regulate in terms of their use suitability. The Act directs the state through the DNR to review county ordinances to ensure that development of the ordinance and the ordinance provisions do not violate statutory law and that they do not disregard current court interpretations of the Act's provisions. In an advisory sense, DNR acts to encourage appropriate treatment of natural resources and land use compatibility. The management technique used to regulate resource uses in the county ordinance and in the DNR review and approval is the Act's requirement that ordinances be legal in content and based upon a pre-established, rational, consistent, comprehensive and non-arbitrary approach.

DETAILED PROVISIONS OF LEGISLATION

Provisions of Act 183 relating to resource use regulations are explained in the following sections.

Authority: The original County Rural Zoning Enabling Act (Act 183, P.A. of 1943) became officially effective immediately upon signing in 1943. Procedures for implementing the Act are contained in the Act itself rather than in separately promulgated rules. These procedural provisions have been the focus of several subsequent amendments to the 1943 Act.

The basic authority of the Act has not changed through these amendments with the exception of the Governor's Executive Order 1973-12 which transferred review functions from the Department of Economic Development to the Department of Natural Resources. This form of the Act has had effect since March 1974 as Sections 125.201 through 125.232 in the Michigan Compiled Laws.

Scope of Authority: All provisions of the Act have statewide force for counties electing to adopt zoning ordinances. A county zoning ordinance has jursidiction within the county in those areas outside the limits of incorporated cities and villages (Section 1).

Use Activity Regulations: From Section 1 of the Act, "the county board of supervisors of any county in the State of Michigan may provide by ordinance for the establishment of zoning districts . . . (in which) the use of land for agriculture, forestry, recreation, residents, industry, trade, soil conservation, water supply conservation and additional uses of land may be encouraged, regulated or prohibited . . . (including) the establishment of setback lines in areas subject to damage from beach erosion . . . All such provisions shall be uniform for each class of land or buildings throughout each district, but the provisions in one district may differ from those in other districts."

There are two exceptions to these regulations. Oil or gas well activities such as exploration, siting, drilling, operation or abandonment are exempted from county zoning control as these activities are in the exclusive jurisdiction of the State Supervisor of Wells (Section 1). Use activities which are lawful at the time a zoning ordinance is enacted or amended may continue even though such uses will not conform with provisions of the new ordinance (Section 16).

Implementation and Enforcement: County zoning controls become effective after adoption by a county board of commissioners and DNR approval. Any county board of commissioners proposing to enact or amend the county zoning ordinance must submit the ordinance with any zoning maps and plans to the Director of the Department of Natural Resources for review and approval. Ordinances which have received DNR approval will have full force and effect on the date following their approval (Section 11).

Those ordinances which, in the DNR's opinion, do not violate existing statutory laws or conflict with current court decisions regarding zoning will be approved. State review for statutory consistency emphasizes both compliance with procedural requirements in making and reviewing ordinances and compliance with provisions of other zoning statutes such as the Shorelands Protection and Management Act (Act 245, P.A. 1970). State review for conflicts with current court zoning decisions now emphasizes the requirement that ordinances be based upon some consistent, nonexclusionary and nonarbitrary logic. DNR denial of proposed ordinances on these grounds often cites case law notably Kropf v. Sterling Heights, 391 Mich 139 (1974) which indicates that "an ordinance which totally excludes from a municipality a use recognized by the Constitution or other laws of this state as legitimate also carries with it a strong taint of unlawful discrimination and a denial of equal protection of the law as to the excluded use."

There are no provisions in the Act which require that counties zone or which require that use activities conform to existing zoning ordinances.

Appeal Procedures: The Act does provide appeal procedures through the board of zoning appeals for administrative actions taken by the county. The Department of Natural Resources must act within 30 days (15 days on interim ordinances) or approval is preserved. With regard to legislative determinations by a county, recourse is obtained through the courts.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: Act 183 is administered by the Department of Natural Resources. Though zoning must be initiated and implemented at county level, the review and approval requirements of the Act are vested in the Director of the Department. Administrative staff work and special studies undertaken in regard to the Act are conducted with the Land Use Section of DNR's Land Resource Programs Division.

County zoning controls governing land use cannot become effective until they are approved by the DNR. This review and approval is based upon Department review of the content of the ordinance. Their review focusses on the procedural legality, the legality of specific regulations, compliance with other state zoning related statutes such as the Shorelands Protection and Management Act (Act 245, P.A. of 1970); and on the ordinance's adherence to accepted, proper land use planning principles. This information, taken all together, must assure DNR that zoning controls will be made with a reasonable consideration of the character, the use suitability, the conservation of natural resources and property values, and a generally appropriate trend of land, building and population development within the county. If DNR is satisfied that such provisions have been legally adopted and can be administered and enforced in compliance with current state statutes and court interpretation, the ordinance will be permissible.

Status of Implementation: The most recent amendment to the 1943 form of Act 183 became enforceable on March of 1974. Presently, 27 of Michigan's 83 counties have zoning ordinances in effect which were adopted in conformance with the Act. In addition, one ordinance is being developed. With only a few exceptions, the Department has been able to work cooperatively with counties wishing to correct ordinance problems in order to gain state approval. DNR's review provisions in the Act, therefore, have not been subject to Circuit Court enforcement or to any other type of court action.

Administrative Policies: Though not specifically called for in the Act, DNR's Land Use Section has adopted a policy of emphasizing assistance to local units of government beyond that needed for zoning review. These activities include making and distributing periodic reviews of pertinent court cases, conducting zoning workshops, developing model zoning ordinances, actively recommending changes needed in state zoning legislation, and acting as consultants to address local zoning problems and goals.

Supplementary Management Tools: In addition to the state review of county ordinances described above, a certain, albeit indirect, amount of zoning control is provided by the Township Rural Zoning Act (Act 184, P.A. of 1943). This legislation gives local governments authority to zone areas within their jurisdiction. Its provisions have been in effect for some time and have seen considerable use. New township zoning ordinances and alterations of existing ordinances must now be reviewed for consistency by county zoning authorities. County review is limited to comments, however, and does not include approval or denial provileges. Act 184 is currently being studied for revision simultaneously with all other state enabling legislation for zoning.

CRITERIA: DOES THE ACTIVITY INVOLVE THE COASTAL AREA IN PLANNING, OPERATING, ABANDONING OR RECLAIMING OF MINERAL MINING (INCLUDING COAL, GYPSUM, STONE, METALLIC ORES OR SIMILAR SUBSTANCES EXCAVATED FROM NATURAL DEPOSITS) BY OPEN PIT METHODS?

OVERVIEW

Before the Mine Reclamation Act was passed, federal and state concern for open pit mines was limited to the most basic clear air and water regulations. Little if any reclamation work was done because (a) unlike sand and certain other mines, most open pit operations are long-lived enterprises of 25 years or more; and (b) mining is exempted from controls in soil erosion and sedimentation legislation. The Mine Reclamation Act (Act 92, P.A. of 1970) is a broadly worded Act intended to establish the Geology Division of the Department of Natural Resources (DNR) as the state agency of regulatory and research authority in matters involving open pit mines. The focus of this act is to (a) address the current lack of technical knowledge in reclaiming mined areas; and (b) address the problems foreseen from the lack of planning and attention to environmental impact such as sediment and erosion in operations. The Act provides for a Supervisor of Reclamation (who is also Chief of Geology Division) within the DNR. The Supervisor has general responsibility to oversee open-pit mining activities and specific responsibility to conduct comprehensive surveys and studies; to promulgate mining regulations, to protect the public interest in matters related to open-pit mining.

At this writing, studies have continued and rules have recently been promulgated to implement the Act. Rules require the DNR to regulate reclamation activities in open-pit mining areas. Their objective is to establish a plan review program within DNR to (a) protect neighboring areas from possible injury or damage due to pollution, sediment and erosion, safety; and (b) assure that the area may be used after mining is abandoned. Regulatory techniques used to restrict potentially harmful uses in such areas include requirements for annual operating plans, long-range environmental plans and performance bonds. These reviews evaluate management techniques which control slope, drainage, soils and vegetation to enforce the Act's objectives.

DETAILED PROVISIONS OF LEGISLATION

Major elements of Act 92 provisions are explained in the following sections.

Authority: On July 1970 the Mine Reclamation Act took effect immediately as Act 92, P.A. of 1970. This version was later amended by Act 123, P.A. of 1972, which became effective in March of 1973. As amended, the current version of the Act is cited in Michigan Compiled Laws as 425.181 through 425.188. Rules to implement the Act took effect November, 1976.

Scope of Authority: Provisions of Act 92 apply statewide to any "area of land from which material is hereafter removed in connection with production or extraction of minerals by open pit mining methods, the lands on which material from such mining is hereafter deposited, the lands on which the beneficiating or treatment plants and auxiliary facilities are hereafter located, the lands on which the water reservoirs used in the mining process are hereafter located, and auxiliary lands which are hereafter used." The minerals involved include "coal, gypsum, stone, metallic ore or material mined (only) for its metallic content and other similar solid material or substance to be excavated for natural deposits on or in the earth for commercial, industrial or construction purposes. It does not include clay, gravel, marl, peat or sand." Open pit mining activities mean "the mining of a mineral in the regular operation of a business by removing the overburden lying above natural deposits thereof and mining directly from the natural deposits thereby exposed or by mining directly from deposits lying exposed in their natural state. It does not include excavation or grading preliminary to a construction project nor borrow operations for highway construction" (Section 1).

Some 45 mines are now affected by these provisions: four of Michigan's operating open pit iron mines in the state's Upper Peninsula plus some 40 other types of open pit mines in other locations. These numbers include non-metallic mines due to the 1972 amendments which redefine the Act's Section 1 definition of the word "mineral".

Use Restrictions: The major management tools used to implement specific use restrictions are reclamation, regulations contained in a plan review program. The focus of these restrictions is to assure that mining areas will be promptly reclaimed in a manner appropriate to some future use of the area once mining activities have ceased. In brief, mining areas and activities must be planned and conducted to protect against personal injuries, pollution of air and water, against injury to fish and wildlife, erosion and sedimentation, and damage to adjacent properties. Part 1 Rules detail the planning requirements while parts 2 through 4, respectively, detail how open pits, stockpikes, tailings basins and auxiliary lands, and roads must be abandoned and reclaimed. Requirements are stated in terms of safety measures, bank slopes, character and content of soil and fill materials, drainage, vegetative cover and the long-term use of the mining areas.

Implementation and Enforcement: Use restrictions in open-pit mining areas will be implemented by a plan review and approval program within the Department of Natural Resources by the Supervisor of Reclamation.

Any party proposing to remove materials in connection with operating an open-pit mine must submit written notice of their intentions and other details to the Supervisor (Rule 4). In addition to this notice, annual operating plans (Rule 5); notice of abandonment (Rule 6); and, if the Supervisor requests, an Environment Plan (Rule 8) must also be submitted to the Supervisor. The Supervisor will review these documents, request any needed additional information, and may either refject, modify or approve the plans. Rejection, modification or approval depends upon how

well the plans (a) appear to be practical to implement and maintain; and (b) accomplish specific provisions and general intentions of the Act.

Appeal Procedures: Any party may be served with a restraining order, injunction or other appropriate remedy to preclude violations of the Act and its rules at the request of the Supervisor. The Supervisor will be represented by the State Attorney General in all such actions (Section 8). "Any interested person who feels aggrieved by an action or inaction of the Supervisor may request a contested hearing on the matter involved. Also, the Supervisor, on his own motion, may commence a hearing for the purpose of receiving information before issuing an order. The hearing shall be conducted by the Supervisor in accordance with provisions for contested cases in Act 306, P.A. of 1969", the Administrative Procedures Act. "A determination, action or inaction by the Supervisor following the hearing shall be subject to judicial review as (also) provided in Act 306" (Rule 49).

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: Authority to administer and enforce the intent and provisions of both Act and rules rests with the DNR's Chief of the Geology Division, referred to as the Supervisor of Reclamation within the Act. The Act allows the Supervisor to consult and obtain assistance from other divisions within DNR: to investigate and inspect mining areas; to conduct research; and to enter into contracts related to mining areas and their reclamation. Rules additionally provide the Supervisor be responsible for reviewing and approving plans, determining abandonment of mining activities, determining bond requirements and conducting hearings. Administrative staff work and field studies relating to these responsibilities will be conducted by the Mine Reclamation Unit of the Geology Division, Department of Natural Resources.

Mining area activities will be regulated by the Supervisor's approval of various plan documents which explain in detail how, when, where and by whom the proposed mining will progress from exploration through abandonment and reclamation activities. Activities which the Supervisor determines adequately assure prompt reclamation appropriate to long-term future use of the mining area and which also conform to approved plan documents will be permissible. The Supervisor's approval is based upon plans provided directly to him by mine operators and on field checks of the site.

Status of Implementation: Rules first became enforceable at their effective date in November of 1976. From the Act's passage in 1970 until that time annual plan maps have been reviewed, field checked and evaluated for some 45 operating properties as required in the Act itself. Other provisions in rules for notices of extraction, notices of abandonment, environment plans, reclamation bonds and notices of determinations of abandonment will first become enforceable in spring of 1978 due to budget process delays.

Since 1970, the Supervisor has contracted annually with consultants to study reclamation of mine waste, rock, overburdens and tailings basins. Elements of this research have included studies of vegetation, the nature and characteristics of mine tailings; development of equipment suitable for operation over tailings basins; use of tailings in construction of dikes and roads and erosion control; and the treatment or control of effluent from mine plants and tailings basins. Results have been favorable to date and will likely be continued.

The Act's provisions and rules above, therefore, have not been tested in court at this writing.

Policies: DNR and its Division of Geology maintains up-to-date mine reclamation information and remains well informed in reclamation technology advancements and in legislative developments on federal and state levels. This role is accomplished through the staff's active involvement and participation with such groups as the National Association of State Land Reclamationists, the American Mining Congress, and the Interstate Mining Compact Commission. Such continuing contact with environmental and reclamational problems relating to mining advertises and reinforces the Division's consultant roles used extensively by the general public and local, state and federal agencies and administrators.

This role is also used locally. Public pressure for more controls over the mining industry has lead to many counties and townships to consider passing ordinances to control mining and require reclamation of mined lands. As a result, local governments often consult with the Mine Recalmation Unit for advice and guidance in formulating related to mining ordinances. Most such ordinances (at the suggestion of DNR) require mining and reclamation plans of operators. Many of these local governments, however, lack either the political climate or the expertise to evaluate these plans and also ask DNR for guidance or occasional assistance in implementing their ordinances.

CRITERIA: DOES THE ACTIVITY INVOLVE COMMERCIAL, INDUSTRIAL OR OTHER EXTRACTION OF SAND FROM DESIGNATED GREAT LAKES SAND DUNE AREAS?

OVERVIEW

The shore sand dunes of Michigan's Great Lakes are prized for a variety of values. These sands are uniquely well suited to industrial use, but are also in demand for their scenic or recreational potential, and for their educational value in botonical and geological studies. Certain activities for extracting sand from the dunes have irreparibly impacted Michigan's coast by simultaneously depleting a limited material resource and damaging values other than mining.

Recognizing this, the Michigan Legislature enacted the Sand Dunes Protection and Management Act (Act 222, P.A. of 1976) which controls extraction activities and their associated environmental impacts in Great Lakes Sand Dune Areas. The Act's objective is to protect such areas from indiscriminate mining practices by regulating extraction and reclamation activities. The Act specifically charges the Department of Natural Resources (DNR) to inventory and study the state's sand resources; identify Great Lakes Sand Dune Areas and prepare a management program for their use; and develop administrative rules to regulate mining activities in Great Lakes Sand Dune Areas. The management technique used to restrict activities in Great Lakes Sand Dune Areas is a permit program based on information supplied annually to the DNR by operators seeking permission to mine. Environmental Impact Statements, 15-year mining plans, annual operating reports and reclamation performance bonds are all required as part of this program.

DETAILED PROVISIONS OF LEGISLATION

Major elements of Act 222 are explained in the following sections.

Authority: The Sand Dunes Protection and Management Act was signed by the Governor in July, 1976, effective 91 days after adjournment of that legislative session (about March, 1977). No Michigan Compiled Laws citation is available at this writing. Administrative rules to implement the Act have not yet been promulgated.

Scope of Authority: Provisions of the Act apply to "sand dune areas . . . designated by the (DNR) which include those geomorphic features composed primarily of sand, whether wind blown or of other origin and which lie within two miles of the ordinary high water mark on a Great Lakes" (defined in Section 2 of Act 245 of the Public Acts of 1955). Use restrictions related to sand dune mining involve any removal of sand from designated sand dune areas for commercial or industrial purposes, or both (Section 2).

Use Restrictions: Act 222 requires that "after July 1, 1977 (no party may) engage in sand dune mining within Great Lakes sand dune areas without first obtaining a permit for that purpose from the Department of Natural Resources." Permit applications must be submitted on forms provided by the Department and include an environmental statement, a 15-year mining plan, and progressive mining and reclamation plans describing the mining activities proposed (Section 4). All mining activities including reclamation must be planned and conducted in a manner which DNR determines would not have an irreparable, harmful effect on the environment (Section 9).

Implementation and Enforcement: Act 222 will be implemented and enforced by administrative rules developed to elaborate on provisions of the Act. Surveillance, monitoring, administration and enforcement of the Act will involve DNR central office and field staff, with cooperation from industry, local citizens and law enforcement officials.

Section 11 provides support for these activities by requiring up to a one cent per tone fee for sands mined each calendar year from sand dune areas. Fees and tonnage are reported in the aforementioned plans and in an annual operators report. Failure to submit this report or other records in compliance with rules promulgated by the DNR constitutes grounds for revokation of the permit. Failure to pay the full operating fee or when due "constitutes a debt and becomes the basis of a judgment against the operator." The amount of this penalty fee is equal to 10% of the operator's fee due or $1,000, whichever is greater.

Section 12 additionally requires that if applicants receive permits, they must also file a surety bond with the state to assure that activities will promptly comply with reclamation plans approved for each portion ("cell-unit") of the total mining operation. Bonds may be filed for only up to three operating units per operating permit, and in amounts equal to $10,000 per cell-unit or $1,000 per each acre mined, whichever is greater. (Bonds may, however, be transferred from one cell unit to another if DNR determines that mining in that unit has been abandoned and reclaimed as in the approved plan.)

For other violations, "if the (DNR) finds that an operator is not in compliance with this Act, the rules promulgated under this Act or a provision of a permit, the Department may suspend or revoke the permit". The DNR may request the State Attorney General to institute court action for restraining orders, injunctions or other appropriate remedies to prevent or preclude violation of a permit, the Act or these rules. Any party found in violation of these conditions "is guilty of a misdemeanor punishable by a fine of not more than $5,000" (Section 14).

Appeal Procedures: No appeal procedures are given in the Act itself, though from Section 13, DNR shall promulgate rules pursuant (editors emphasis) to the Administrative Procedures Act (Act 306, P.A. of 1966). Any rules that are promulgated will automatically meet procedures acceptable to policy and law in more restrictive Department of Natural Resources Administrative Rules.

These rules will also be consistent with the less rigorous Act 306 appeal procedures shown elsewhere in this appendix.

Any party aggrived of decisions or inactions regarding Act 222 may appeal to the Director of the Department of Natural Resources for a hearing. Either informal and/or formal hearings may be requested with respect to the Act or its rules. Subsequent to a hearing determination, either party may request an immediate and binding circuit court decision which must be granted. DNR will be represented by the State Attorney General in all such proceedings.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: The Department of Natural Resources is the agency of authority administering Act 222. Within the Department, responsibility for conducting the permit program rests with the Geology Division. Initial staff work and field studies related to the Act will be done within DNR cooperatively by the Geology Division and the Shorelands Management and Protection Unit of the Land Resource Programs Division.

Great Lakes sand dune areas, and particularly barrier dunes, will be regulated by implementation of a DNR permit system. Permits will be issued for portions of each mining operation in maximum terms of three years upon Department approval of plans and specifications, payment of an extraction fee, and filing of surety bonds. All requirements apply to initial filing as well as applications for renewal.

Plans submitted as part of the permit application must disclose the proposed area of activity, the method and direction of mining and reclamation proposed--both as work progresses and after the operation is completed. In addition, a 15-year plan showing how all the above activities will be conducted, and other information which may be requested by the Director of the DNR. Once a permit is obtained, the operator must annually file a report with the DNR showing all areas mined and reclaimed during the past year (Section 11). DNR will approve those applications which it determines from the application, studies and other DNR records, are not contrary to the public interests. Applications which meet all requirements, are approved, and also meet fee and monitoring requirements will be permissible.

DNR as charged in Section 3 will prepare a comprehensive inventory and study of the state sand dune and barrier dune areas. The report is to be used as an information base and will specifically include: (a) an economic study of commercial mining activities, including where the material is consumed and the amount of reserves available from the sand dunes; (b) which areas, for environmental or other reasons, should be state protected by acquisition of property or mineral rights; (c) a priority list of lands to be acquired by the Department; (d) methods of recycling or reusing sand for industrial or commercial purposes, along with alternatives to the use of dune sand and its economic impact; (e) identification and designation of barrier dunes along the shoreline and their effect on various interests in the state; and (f) recommendations for protection and management of sand dune areas for uses other than sand mining.

Status of Implementation: All provisions of Act 222 will become enforceable as rules are established and sand dune areas are designated by DNR. The preliminary studies and inventories required in Section 3 are well underway and are being used to develop criteria for designating sand dune areas. This designation and rules processes is expected to begin on the effective date of the Act, Spring 1977. There are, of course, no court interpretations on any provisions of the Act as yet.

CRITERIA: DOES THE ACTIVITY INVOLVE SYSTEMS WHICH SUPPLY OR PURIFY WATER INTENDED FOR PUBLIC OR HOUSEHOLD USE?

OVERVIEW

Municipal water supply collection and purification activities have long been regulated under the control of the Waterways and Sewage Treatment Systems Act (Act 98, P.A. of 1913). The objective of this regulation is to protect the public health, safety and welfare by providing pure and wholesome water to municipalities within the state. In accomplishing this protection, public water supplies and associated treatment works under state supervisory control in virtually all stages of operation from their sources to their point of use.

Under Act 98 provisions for public water supplies, municipalities may plan, construct, operate, maintain and alter facilities under state supervisory control. A state classification system groups facilities into uniform categories by size and type. A state inspection program monitors plant performance and sets operating standards for each facility category. State certification is required for plant operators, but voluntary for distribution system operators. Reports, records and operating techniques may be state inspected. State regulates new facilities and changes in existing facilities by review and approval of construction permits.

All these activities are the regulatory responsibility of the Michigan Department of Public Health (DPH) in cooperation with the Federal Environmental Protection Agency, the Federal Safe Drinking Water Act (P.L. 93-253 to the state (i.e. DPH), tremendously expanding these existing programs.

DETAILED PROVISIONS OF LEGISLATION

Authorities for regulating public water supply systems under Act 98 are explained in the following sections.

Authority: Act 98 reached today's form (R 325.201 through R 325.214 of Michigan Compiled Laws) through several amendments to the original 1913 Act. One of the most recent amendments, Governor Milliken's Executive Reorganization Orders 1973-2 and 1973-2a, transferred the duties and personnel of the Act's wastewater provisions from the Department of Public Health to the Department of Natural Resources, but left water supply regulatory functions within DPH. Though Act 98 authorities for municipal water supply and purification in DPH are still administered separately, from its wastewater treamtent authorities in DNR, legislation is now in Committee to replace Act 98 with separate legislation for each function. This legislation will also integrate DPH's Act 98 authority to regulate municipal facilities with other existing legislation which gives PPH authority to regulate water used by the public from other non-municipal sources such as resorts and similar "non-community" water

supplies. Passage is expected this session. Rules to implement DPH Act 98 responsibilities now exist and are contained within the text of the Act, but separate rules will be promulgated under this new legislation.

Scope of Existing Authority: Section 1 of Act 98 gives DPH supervisory and visitorial powers and controls over all public and private parties engaged in furnishing municipal water supply and/or water purification service to the public. The act defines a waterworks system as "the system of pipes, structures (and appurtenances) through which water is obtained and distributed to the public for household or drinking purposes" (Section 2).

Use Restrictions: As stated, nearly all activities associated with public water supply, treatment and distribution are regulated:

"The Director of the Department of Public Health shall classify water treatment plants with due regard to the size, type, location and other physical conditions affecting such plants, and according to the skill, knowledge, expertise and character that the person in active operating charge must have to successfully operate said plants and to maintain the public health" (Section 3).

"The Director of the Department of Public Health shall examine persons . . . to operate such plants and issue and revoke certificates . . . (so that) every water treatment plan subject to provisions of this Act shall . . . be under supervision of a properly certified operator" (Section 3).

"Before commencing the construction of any waterworks system . . . filtration or other purification plant or treatment works or any alteration, addition or improvement to such system or plant which may be undertaken from time to time, it shall be the duty of the (owner-operator) . . . to submit the plans and specifications of the same to the State Health Commissioners and secure from the said Director a permit for the construction of the same . . . it shall be unlawful for (any party) . . . to engage in or commence the construction of any (such system) or any alteration, addition or improvement thereto until a valid permit for (such work) has been secured from the Director" (Rule 6).

"It shall be the duty of (any party) . . . now or hereafter operating waterworks . . . in this state, to file with the Director of the Department of Public Health a true and correct copy of the plans and specifications of the entire system (including . . . all alterations, additions or improvements to such systems . . .) showing (all the sources through or from which water is or may be at any time pumped or otherwise permitted or caused to enter into such system . . .)" (Section 6).

"It shall be unlawful for any (party) to issue any voucher, check or in any other way expend monies . . . for construction unless a valid permit for the same issued by the State Health Director is in effect" (Section 6).

Implementation and Enforcement: In all these matters, the Director of the Department of Public Health "whenever he shall deem it necessary for the protection of health, have authority to direct owners-operators of such facilities (to cleanse any portion of such systems, to make such structural changes in existing systems as may be necessary to produce pure and wholesome water, and to operate the same in such a manner as to furnish a pure and wholesome water" (Section 3).

The regulations most important to the coastal management program are the requirements for planning and construction permits. This requirement documents that all facilities will meet acceptable design standards in protecting health and providing potable municipal water supplies.

The Act contains both specific and general penalties for violations. In Section 6, any party who shall "permit or allow construction to proceed without a valid permit, or in a manner not in accordance with the plans and specifications approved by the Director of the Department of Public Health shall be guilty of a misdemeanor", or in Section 7 "Any person making a false statement in reports shall be deemed guilty and subject to the penalty of perjury". In the most general case, however, any party found guilty of violating the Act or its rules is "guilty of a misdemeanor and shall be punished by a fine of $25 to $100 plus costs for prosecution, or imprisonment of up to 90 days, or both." Each day of violation is considered a separate and additional violation. The State Attorney General will represent the Department in all cases arising under the Act, including the recovery of penalties (Section 13).

Appeal Procedures: Aggrieved parties may appeal disapproval of construction permits or any other action undertaken via the Act by petitioning the DPH Director. Both information and/or formal hearings with the Department may be requested. If unsatisfied with the hearing determinations, either party may then request an immediate and binding circuit court decision which must be granted. The state will be represented by the State Attorney General at all such proceedings.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: Responsibilities for implementing the Waterworks regulations rests with the State DPH, though in practice the municipal waterworks section of the DPH's Water Supply Division administers each use regulation and conducts necessary staff and field work.

Municipal waterworks systems will be regulated by DPH approval of a construction permit. This review and approval is based upon conformance of plans and specifications included in the application with the Great Lakes - Upper Mississippi Board of State Sanitary Engineers Manual, "Recommended Standards for Waterworks", in describing the system location, service area and population, waste components, equipment, flow

rates, emergency procedures and other design characteristics. Applications which satisfy DPH in completing these requirements and also in protecting public health and providing pollution-free, potable water supplies will be permissible.

Status of Implementation: Michigan now has over 830 municipal waterworks supply and treatment facilities, with more expected. All are regulated by one or more provisions of this Act.

The last several years have seen a steady increase in the number of operators certified to a current average of nearly 300 per year. Most of these certifications have been reclassifications to higher levels and are the result of state conducted training programs. In spite of stricter standards, manpower studies project that this number will continue to expand each year as a result of operator classifications, increasing plant complexity and the increasing number of non-community plans submitted under authorities and requirements of the Federal Safe Drinking Water Act (P.L. 93-583).

Appeals court actions under this Act are extremely rare, apparently due to the Act's age and the strong DPH role in providing regulatory (hearings, orders) and incentive backup (training, technical aid).

Administrative Policies: Though the waterworks provision of Act 98 have seen continuous active service since 1913, its basic authorities are about to undergo substantive change with new legislation. When passed, this legislation will likely incorporate most currently held technical and procedural policies such as plant monitoring requirements to assure continuous quality control, approval of plant operating procedures and chemicals and "water hauler" regulations. Other less formal policies not so incorporated include:

Municipal rather than private ownership is strongly encouraged for all systems serving the public.

Local DPH personnel will assist and encourage installation of private systems which serve the public where public systems are not available, both now and as the expanded program in P.L. 93-583 becomes operational.

CRITERIA: DOES THE ACTIVITY INVOLVE THE STORING, HANDLING OR USE OF OILS, SALTS OR OTHER MATERIALS LISTED IN THE WATER RESOURCES COMMISSION'S CRITICAL MATERIALS REGISTER?

OVERVIEW

Many activities involve storing, consuming, converting or other handling of materials which, though they are not necessarily discharged, may accidentally or incidentally do great harm when added to the ground or surface waters. To prevent this hazard, the Part 5 Rules to the Water Resources Commission Act (Act 245, P.A. of 1929) require such users to prepare Pollution Incident Prevention Plans and submit those plans to the Water Resources Commission (WRC).

DETAILED PROVISIONS OF LEGISLATION

Basic elements of Act 245's Part 5 Rules are explained below.

Authority: Like other regulatory rules of this Act, the Part 5 Rules implement provisions which augment the basic water quality control authorities and procedures of the Water Resources Commission Act (Act 245, P.A. of 1929). Part 5 Rules for the prevention-planning, monitoring, cleanup and reporting of pollution incidents were approved by the Michigan Legislature on December 12, 1973 and went into effect immediately. These Rules are recorded as regulation R 323.1151 through R 323.1169 of the Michigan Compiled Laws.

Scope of Authority: These rules are administered statewide, including facilities which load and unload cargo-carrying barges and vessels which use state waters.

The WRC may use Part 5 Rules to regulate any volume of any polluting material. The rules, however, emphasize facilities containing oil (of any kind or in any form) in excess of 40,000 gallons, salts (defined as solid or liquid chlorides of sodium or calcium) and any other solid or liquid material listed in the WRC's Critical Materials Register pursuant to Section 6b of Act 245. Except for recreation marinas, brine storage and oil field petroleum storage, temporary or permanent land-based facilities which could directly or indirectly lose these contents to surface or groundwaters of the state will be regulated (Rule 151 and 152).

Use Activity Regulations: The primary tool used to control use of critical materials is a Pollution Incident Prevention Plan. This plan must insure that facilities will be adequately located, constructed, operated and monitored to protect against pollution of state waters and to prevent damages should such pollution occur. Oil facilities adjacent to a watercourse must have boom systems and emergency equipment to contain the spillage (Rule 154); must be structurally enclosed and contain excess capacity (Rule 156); must be monitored by knowledgeable personnel; must be completely

monitored to detect material loss; and must have capabilities to immediately begin containment and cleanup (Rule 155). Salts must be stored at least 50 feet from any lake or stream, structurally enclosed and contain excess capacity (Rule 157). Other potentially polluting materials must be sored in specially designed security areas, be structurally enclosed, and contain excess capacity (Rule 158).

Exceptions for exempting oil facilities of less than 40,000 gallons capacity and exempting other pollutants in limited quantities or con centrations can be granted in either of three ways: must be by action of the Water Resources Council in accordance with discharge permits under Act 245; with hearing orders of determination; or as permitted by local ordinances, approved by the State Health Department.

Implementation and Enforcement: Any party which operates or manages such a facility must file a Pollution Incident Prevention Plan with WRC at least 30 days before the date of that facility's first use. After inspection, if WRC finds that the plan inadequately or incomplately insures how personnel, procedures and equipment will be used to protect against pollution, WRC may return the plan for revision. Within 30 days, an acceptable plan must then be resubmitted (Rule 162-2).

Any party who violates the provisions of Part 5 Rules is subject to the procedures and penalties of Sections 7, 9 and 10 of Act 245, P.A. of 1929 (Rule 169). Under Section 10(1), WRC may request the State Attorney General to restrain the violation and to require compliance in circuit court proceedings. The court may provide "appropriate relief" including permanent or temporary injunctions and civil penalties of not more than $10,000 per day of violation.

Section 10(2) provides further that any party making a false or inaccurate statement in an application, in records or with monitoring devices used under provisions of this Act, is guilty of a misdemeanor and shall be fined not less than $2,500 nor more than $25,000 for each violation. In addition to this amount, the court may also impose an additional fine of not more than $25,000 for each day of unlawful discharge. Fines of up to $50,000 per day may be imposed for convictions of violations committed after the first conviction. The Attorney General may also file a suit to recover full value of injuries done to natural resources of the state and cost of surveillance and enforcement resulting from the violation. The court may also at its discretion impose probation upon convicted violators.

Appeals Procedure: Though the rules themselves do not specify any appeals for its provisions, the procedures and penalties of Section 10 above imply that appeals to court proceedings are possible through civil court action.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: Part 5 Rules are administered by the WRC and its staff within the DNR. Industrial related activities under Part 5 Rules are administered by the regional engineers of DNR's Water Quality Division, while transportation-related facilities and pollution incident cleanup activities are administered by the Oil and Hazardous Materials Control Section, also of DNR's Water Quality Division. Authority to make inspections, review plans, supervise cleanup activities and to order variances under the Act rests with the Water Resources Commission. Industrial and non-industrial facilities are regulated alike, but administered by different staff groups.

Representatives of both industry and transportation related facilities must file a Pollution Incident Prevention Plan 30 days before date of first use. Plan review and approval is based on how well the facility proposes to prevent pollution incidents, cleanup possible spills, inventory its materials and monitor other potentially hazardous activities. Plans which the Commission staff determines are incomplete, inaccurate or inadequate may be returned to the applicant with recommendations and a request for modification. The applicant then has 30 days in which do modify and resubmit the plan. Plans which do not violate these rules will be permissible.

Status of Implementation: Part 5 Rules became enforceable December 12, 1973. Since then, 650 industrial and 1,750 transportation related plans have been submitted to WRC. Of these, nearly 500 industrial and 150 others have been approved. At this writing, there have been no court tests of the Part 5 Rules, and therefore no appeals.

Administrative Policies: WRC, in administering the authorities of Part 5 and other rules relating to Act 245, has often given its staff responsibility for implementing more than one permit or planning program. Industrial related Pollution Incident Prevention Plans under Part 5, permits to discharge to surface and certain groundwaters of the state under Act 245, and hazardous materials spills under Act 245 are all responsibilities of the Water Quality Division, while non-industrial (transportation, storage or other related) plan reviews, cleanup and reports under Part 5, industrial and domestic waste hauler permits, and certain groundwater discharge permits are all responsibilities of the Oil and Hazardous Materials Section. The coordination of this arrangement has the affect of making WRC's overall control of such activities greater than the sum of its separate parts. Part 5 Rules by themselves do not require compliance and therefore have less than full regulatory control, but when coupled with the broader language of authorities in Act 245 and with corrolary acts having tighter requirements for state permit approval,WRC staff has effectively strengthened Act 245 and each of its rules without resorting to less popular options in the Environmental Protection Act (Act 127, P.A. of 1970).

CRITERIA: DOES THE ACTIVITY INVOLVE THE CONTROL, DIVERSION OR OTHER USE OF WATERS OF THE STATE IN OPERATING A LOW GRADE IRON-ORE MINE?

OVERVIEW

Converting low grade iron-bearing rock into marketable ores requires large investments in land, water and capital. Activities related to the control or use of water in this conversion is regulated by the Mine Water Diversion Act (Act 143, P.A. of 1959). The Act directs the Department of Natural Resources' Water Resources Commission to regulate water use in iron ore beneficiation to protect the public health and safety and to protect public and riparian interests in the lands and waters which are affected. The basic management technique used to accomplish this is a permit program which identifies use restrictions involving the drainage, diversion, control of other uses of waters of the state in mining low grade iron-ores.

DETAILED PROVISIONS OF LEGISLATION

Major elements of Act 143 and its rules are explained in the following paragraphs.

Authority: Act 143 was approved by the Governor in July of 1959, but did not become law until March of 1960, Rule R 323.1351 through R 323.1354 of Michigan Compiled Laws, also known as the Part 15 Amendments to the Water Resources Commission Act (Act 245, P.A. of 1929). Implementing rules have been in effect since July of 1972 as Rule R 323.101, MCL.

Scope of Authority: Section 2 of the Act describes the geographic and legislative limits of its authority as follows: low grade iron ore is "iron-bearking rock in the Upper Peninsula of Michigan which is not mercantible as ore in its natural state and from which mercantible ore can be produced only by beneficiation or treatment." Low grade iron-ore mining property "includes the ore beneficiation or treatment plant, other necessary buildings, facilities and lands located in the Upper Peninsula of this state." The term beneficiation, though not defined in this Act, is commonly used to describe the upgrading of ores with low mineral concentration to marketable ores of higher mineral concentration. A great deal of water is used, stored and reused in this process for slurrying, transporting and washing.

Although all operating minues for low grade iron-ore are located within the known ore deposits in Michigan's Upper Peninsula, the Act is administered statewide.

Use Restrictions: Act 143 requires in Section 3 that the Department of Natural Resources' Water Resources Commission may regulate the drainage, diversion, control or other uses of water whenever in the opinion of the

WRC, such uses are necessary to the mining operations of low grade iron-ore.

The management technique principally used to implement these use restrictions is a requirement that a water use permit must be issued by the Water Resources Commission to all parties engaged in or about to engage in such mining or beneficiation activities. Permit conditions require that the proposed control or other use of water is necessary for the mining of "substantial" deposits of low grade iron-ore; that other "feasible and economical" methods of obtaining adequate supplies of water are not available otherwise; that the proposed use will not unreasonably impair interest of the public or of riparians in lands or waters; that the proposed use will not unreasonably impair beneficial public use of lands or waters; and moreover the proposed use will not endanger public health or safety (Section 3). Water use permits, when granted, allow the permittee rights to use specific waters according to time, stream flow, withdrawal rate or other conditions specified in the permit.

Once granted, permits will remain in effect at the WRC's discretion for a period of time necessary to allow the mining to exhaustion and the subsequent beneficiation of all low grade iron-ores referred to in the application, but not to exceed a period of 50 years. The Commission may also prescribe the time it deems reasonable for commencing other activities related to rights granted by the permit. The original terms of the permit may be extended by the Commission upon application (Section 5).

Implementation and Enforcement: Use restrictions related to Act 143 are implemented by the Water Resources Commission within the Department of Natural Resources (Section 7). Applications for water use permits must be filed with the Executive Secretary of the WRC for Commission review and approval (Rule 323.101). Commission approval depends upon how adequately the proposed water use recognizes the public interest in meeting the specific permit conditions. Once the permit is approved, the construction and other mining operations related to water use may begin.

Any party, which in the opinion of the Natural Resources Commission, is in violation of any of these provisions or is found to unreasonably impair the public interests is subject to modification or withdrawal of the permit. Determination of violations may be made by WRC after hearings or in an emergency order, both of which are enforceable by right of judicial review (Sections 6 and 8).

Appeal Procedures: From Section 8 of the Act, mine operators and any other interested parties may appeal decisions, orders or permits (with the exception of emergency orders) of the Commission. Such actions are conducted under Part 1 through 3 amendments to the General Rules of the Water Resources Commission Act (Act 245, P.A. of 1929), otherwise known as the Administrative Procedures Act (Act 306, P.A. of 1969).

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: Act 143 is administered by the WRC within the Department of Natural Resources. Authority to specify permit conditions, grant permits and issue emergency orders is exercised by the Commission's Executive Secretary. Administration staff work and field studies done under the Act are conducted by the Hydrologic Engineering Section of the Department of Natural Resources' Water Management Division, acting as staff of the WRC.

Any low grade iron-ore mining activities which necessarily involve the diversion of water will be regulated by WRC approval of mining water diversion permits. Operators of such mining properties must apply to WRC by submitting application forms and any other information required by the Commission. Within 60 days of receiving the application, WRC must advertise and hold a public hearing to obtain other information for permit review. At these hearings, the applicant and any interested parties may appear, present witnesses and submit evidence. WRC has powers to administer oaths and to subpoena witnesses or evidence in such hearings (Section 3). Following the hearing, WRC reviews the application and related facts, and then either grants or denies permission for specific water uses and related operations.

The Commission will approve (i.e. consider permissible) diversion activities which are:

*Necessary in the mining of substantial deposits of low grade iron-ore and that other feasible and economic methods of mining or of obtaining water are not available to the applicant;

*Do not unreasonably impair other public or riparian interests in using the water or in the waters themselves, and will not endanger public health or safety;

*Continually measuring and recording the amounts of water being diverted; and also are

*In compliance with other terms and conditions specified in the permit.

Status of Implementation: Three of the water diversion permits issued under authorities of Act 143 are now in effect. Each of these three mines have been operating for some years and has about 50 operating years remaining under current permit conditions. In total, the three mines control 150 square miles of surface land area and 12 billion gallons of diverted water per year in Michigan's Upper Peninsula.

In the program's 16 year history, two other permits have been granted for similar operations, but have since been mined out; two others have been denied. There have been no appeals or court actions to test any of the Act 143's provisions.

Any low grade iron-ore mining activities which necessarily involve the diversion of water will be regulated by WRC approval of mining water diversion permits. Operators of such mining properties must apply to WRC by submitting application forms and any other information required by the Commission. Within 60 days of receiving the application, WRC must advertise and hold a public hearing to obtain other information for permit review. At these hearings the applicant and any interested parties may appear, present witnesses and submit evidence. WRC has powers to administer oaths and to subpoena witnesses or evidence in such hearings (Section 3). Following the hearing, WRC reviews the application and related facts, and then either grants or denies permission for specific water uses and related operations.

The Commission will approve (i.e. consider permissable) diversion activities which are:

*Necessary in the mining of substantial deposits of low grade iron-ore and that other feasible and economic methods of mining or of obtaining water are not available to the applicant;

*Do not unreasonably impair other public or riparian interests in using the water or in the waters themselves, and will not endanger public health or safety;

*Continually measuring and recording the amounts of water being diverted; and also are

*In compliance with other terms and conditions specified in the permit.

Status of Implementation. Three of the water diversion permits issued under authorities of Act 143 are now in effect. Each of these three mines has been operating for some years and has about 50 operating years remaining under current permit conditions. In total the three mines control 150 square miles of surface land area and 12 billion gallons of diverted water per year in Michigan's Upper Peninsula.

In the program's 16 year history, two other permits have been granted for similar operations, but have since been mined out; two others have been denied. There have been no appeals or court actions to test any of Act 143's provisions.

CRITERIA: COULD THE ACTIVITY INVOLVE, RESULT IN OR OTHERWISE RESULT IN THE COASTAL POLLUTION, IMPAIRMENT OR DESTRUCTION OF ANY NATURAL RESOURCE OR THE PUBLIC TRUST THEREIN WITHOUT ADEQUATELY CONSIDERING FEASIBLE AND PRUDENT ALTERNATIVES?

OVERVIEW

Michigan's first specific resources management legislation was enacted in 1865 to protect water quality for Michigan's fisheries. Since then, other acts, amendments to acts, rules, Executive Orders and policy statements have further defined authorities and duties of individuals and government agencies with regard to the public trust in the state's natural resources. But only in 1970 was an act passed to define the basic rights of government and the public in protecting their views of the public trust in Michigan's air, water and other natural resources. The Environmental Protection Act (Act 127, P.A. of 1970) essentially enables any public and/or private party to take any other party to court if it is believed that pollution, destruction or impairment of those resources is taking place or is likely to take place.

DETAILED PROVISIONS OF LEGISLATION

Details of the Act as they relate to resource restrictions are outlined below.

Authority: The Governor approved Act 127 in July of 1970 and ordered that it should take immediate effect. There have been no subsequent rules or amendments.

Scope of Authority: These provisions affect all lands, air, waters and other natural resources within Michigan's state boundaries and all public and private activities relating to their use.

Use Restrictions: "The Attorney General, any political subdivision of the state, any instrument or agency of the state or of a political subdivision thereof, any person, partnership, corporation, association, organization or other legal entity may maintain an action in Circuit Court . . . where the alleged violation occurred or is likely to occur for declaratory and equitable relief against (any of those above parties) for the protection of air, water and other natural resources and the public trust therein from pollution, impairment or destruction" (Section 2(1)).

"In any such . . . proceedings and in judicial review thereof any alleged pollution, impairment or destruction . . . shall be determined and no conduct shall be authorized or approved which does, or is likely to have such affect, so long as there is a feasible and pertinent alternative consistent with the reasonable requirements of the public health, safety and welfare" (Section 5)).

Implementation and Enforcement: In processing cases and determining violations, the Circuit Court of jurisdiction may implement these restrictions by: granting any conditions for temporary or permanent relief it deems necessary or equitable (Section 4.1); by ruling on the validity, applicability and reasonableness of pollution standards and procedures (Section 2.2a); by directing the adoption of new pollution standards or procedures to replace those which it deems deficient (Section 2.2b); or by remitting the parties to appropriate administrative, licensing or other proceedings already in use (Section 4.2). Section 4.3 adds that when remittances are made the court may still retain its jurisdiction as a final assurance that protection measures will be adequate.

Appeal Procedures: Appeals to decisions by the Circuit Court of original jurisdiction must continue through the court system in the usual manner.

ADMINISTRATION

Provisions for administering regulations described in this criteria statement and in detailed provisions of the legislation are described below.

Procedures: As stated, virtually any legal entity may be party to suits under this Act. The courts can be said to administer these proceedings, but in practice many parties, and especially the DNR, may participate since the Act allows the Attorney General, the state or others to intervene as a filing party to plead its view of the impacts in question (Section 5.1).

The usual procedure in arriving in a court decision is as follows. First, it must be determined which regulatory requirements or other policies and procedures and statutes apply to the resource use under consideration. The court will then review applicable permit procedures, and accuracy and may also make an investigation of the site to determine if the project has, will, or is likely to pollute, impair or destroy resources of the state. This determination must be based on both actual and probable environmental harm caused at the project site, as well as the actual and probable environmental harm as a consequence of a project to off-site public and private interests once the project has been completed. If the court finds that there will or is likely to be an impairment or destruction of state resources, and finds that there is no overriding public health, safety or welfare purpose for the project, then the court must deny that resource use permissibility. When a use activity is denied, the court provides a statement of its reasons for denial and what conditions or modifications--if any--should be made for the use activity to be permissible.

In summary, the court's position starts from the premise that the user bears the burden of proving that his or her activity is permissible under the statutory standards. Since the lack or presence of environmental damage is often a technical matter particularly within the knowledge of the DNR, it may be necessary for the DNR to investigate the asserted

lack of environmental damage to determine its validity. Similarly, the DNR may also be expected to provide testimony and evidence in cases where it is not actually a party to the suit. Where the court determines, on the basis of statute and these arguments, that there is a likelihood of environmental damage, it must deny the use permissibility, unless there is an overriding public health, safety or welfare reason for the project and there is no feasible alternative.

Status of Implementation: At this writing, the Environmental Protection Act has been used to bring suit against a great variety of activities and actions, industrial air pollution and land development being the most common. The Act has been used by state and local government agencies to supplement other statutory authorities and to address situations not specifically covered by existing regulatory statutes, and it has also been used by citizen groups and judges in all areas of the state at a rather steady rate, indicating the general awareness and usefulness of the Act as a tool. An excellent case catalogue (74 annotated cases from 1970 to 1973) and analysis of the Act's effectiveness can be found in "Environmental Citizens Suits; Three Years Experience under the Michigan Environmental Protection Act", Publication No. 4, Ecology Law Quarterly, Winter, 1974 and in its update published by the University of Detroit Law School, July, 1976.

Administrative Policies: An example of administrative policy may be taken from State Highway Commission vs. Vanderkloot, where the circuit court held that:

> "Article 4, Section 52, created a mandatory duty on the part of the Legislature to act to provide for the protection of the air, water and other natural resources of the state from pollution, impairment and destruction.
> 392 Mich 159, 192 (emphasis original)
>
> "The Legislature was not, and is not, under a duty to make specific inclusion of environmental protection provisions in every piece of relevant legislation. Legislation need not specifically refer to other legislation it affects to be read in pari materia."
> (citations omitted) (emphasis original)

The Attorney General's Office has determined from this that the Legislature, rather than include specific provisions for environmental protection in every pertinent inactment, has chosen to satisfy its constitutional mandate in Article 4 with general legislation in the form of Act 127. Moreover, passage of Act 127 alone does not satisfy Article 4; so that under this interpretation, it must be applied to all other legislation which considers the state's air, water or other resources. And that the Environmental Protection Act must be read into legislation which defines those acts to the environment which are considered "unlawful". (From Attorney General's October 29, 1975 memorandum regarding interpretation of Inland Lakes and Streams Act.)

But in addition, the Vanderkloot court realized that:

> "The Environmental Protection Act does not, as both parties imply, merely provide a separate procedural rate for protection of environmental quality, it also is a source of supplementary substantive environmental law.
> (This was also supported later by State Supreme Court in Ray vs. Mason County Drain Commissioner, 1975.)
>
> "The Environmental Protection Act is designed to accomplish two distinct results:
>
> A. To provide a procedural cause of action for protection of Michigan's natural resources; and
>
> B. To prescribe the substantive environmental rights, duties, and functions of the subject entities."

AREAS OF COASTAL PROBLEMS ISSUES AND OPPORTUNITIES related to STATE LEVEL INCENTIVE AUTHORITIES	AREAS OF COASTAL PROBLEMS, ISSUES OR OPPORTUNITIES					
STATE INCENTIVE PROGRAMS (arranged under categories of resource use/impact by administering agency program title)	AREAS OF NATURAL HAZARD TO DEVELOPMENT	AREAS SENSITIVE TO ALTERATION/DISTURBANCE	AREAS FULFILLING RECREATIONAL/CULTURAL NEEDS	AREAS OF INTENSIVE OR CONFLICTING USE	AREAS OF NATURAL ECONOMIC POTENTIAL	PAGE NUMBER
NATURAL OR ENVIRONMENTAL SIGNIFICANCE						
NATURAL RESOURCES:						
Environmental Services				*	*	C-160
Natural Rivers*	*	*	*	*		C-166
Shorelands Protection and Management*	*	*	*	*		C-166
Land Acquisition	*	*	*	*	*	C-167
Artificial Marshes and Ponds		*	*	*		C-179
Fisheries Research		*	*	*		C-179
Fish Passage Barriers		*		*	*	C-179
Habitat Protection	*	*	*			C-179
Hatchery and Production		*	*			C-180
Forest Fire Production		*	*			C-181
Forest Pest Control		*	*			C-181
Endangered Species Program*	*	*	*	*		C-182
Farmland Urban Wildlife			*	*	*	C-183
Forest Wildlife		*	*			C-183
Research		*	*			C-183
Waterfowl Management	*	*	*	*		C-184
Wildlife Services			*			C-184
PUBLIC HEALTH:						
Insect and Rodent Control			*		*	C-187
HISTORIC OR CULTURAL SIGNIFICANCE						
COMMERCE DEPARTMENT:						
Travel			*		*	C-151
NATURAL RESOURCES:						
Salvage	*	*	*			C-173
Mackinac Island	*	*	*			C-175
Parks		*	*			C-175
Recreation			*			C-176
Inventory and Assessment			*			C-180
Regulations			*			C-180
Forest Recreation		*	*			C-182
STATE: History and Research*			*	*	*	C-190
AIR QUALITY						
NATURAL RESOURCES:						
Preservation of Air Resources*		*		*	*	C-160
PUBLIC HEALTH:						
Radiological Health				*	*	C-189

*Indicates the incentive portion of a licensing or permit program also described in Direct and Significant Criteria.

AREAS OF COASTAL PROBLEMS ISSUES AND OPPORTUNITIES related to STATE LEVEL INCENTIVE AUTHORITIES	AREAS OF COASTAL PROBLEMS, ISSUES OR OPPORTUNITIES					
STATE INCENTIVE PROGRAMS (arranged under categories of resource use/impact by administering agency program title)	AREAS OF NATURAL HAZARD TO DEVELOPMENT	AREAS SENSITIVE TO ALTERATION/DISTURBANCE	AREAS FULFILLING RECREATIONAL/CULTURAL NEEDS	AREAS OF INTENSIVE OR CONFLICTING USE	AREAS OF NATURAL ECONOMIC POTENTIAL	PAGE NUMBER
WASTE DISPOSAL						
NATURAL RESOURCES:						
Marina Sanitation			*	*	*	C-187
Solid Waste*		*		*	*	C-161
Oil and Gas		*		*	*	C-164
Liquid Industrial Waste Haulers*		*		*	*	—
Domestic Waste Haulers*		*		*	*	—
Water Resources Commission*		*		*	*	—
Mineral Well Drilling*		*		*	*	—
LAND USE						
COMMERCE DEPARTMENT:						
Condominium*	*			*	*	C-150
Energy Administration		*		*	*	C-150
HIGHWAYS AND TRANSPORTATION:						
Port Development		*		*	*	C-153
Public Transportation				*	*	C-154
Highways	*	*	*	*	*	C-153
Railroad	*	*	*	*	*	C-154
Airport	*	*	*	*	*	C-153
LABOR DEPARTMENT:						
Building	*	*	*	*	*	C-156
Electrical	*	*	*	*	*	C-157
Mechanical	*	*	*	*	*	C-157
Plan Review	*	*	*	*	*	C-158
Plumbing	*	*	*	*	*	C-158
NATURAL RESOURCES:						
Mining and Environmental Geology		*		*	*	C-163
Farmland and Open Space		*	*	*	*	C-165
Zoning Ordinance Review*	*	*	*	*	*	C-167
Minerals and Leasing		*	*	*	*	C-168
Tax Land	*			*	*	C-169
Flood Insurance	*			*	*	C-170
Floodway Control*	*			*	*	C-170
Subdivision Control*	*			*	*	C-172
Submerged Great Lakes Bottomlands*	*			*		C-172
Docks	*	*	*	*	*	C-177
Harbors of Refuge	*	*	*	*	*	C-178
Public Access Site	*	*	*	*	*	C-178
Access and Facility Development	*	*	*	*	*	C-178
Forest Management		*	*	*		C-181
Inland Lakes and Streams*	*	*		*	*	C-171

*Indicates the incentive portion of a licensing or permit program also described in Direct and Significant Criteria.

AREAS OF COASTAL PROBLEMS
ISSUES AND OPPORTUNITIES

related to

STATE LEVEL INCENTIVE AUTHORITIES

STATE INCENTIVE PROGRAMS (arranged under categories of resource use/impact by administering agency program title)	AREAS OF COASTAL PROBLEMS, ISSUES OR OPPORTUNITIES: AREAS OF NATURAL HAZARD TO DEVELOPMENT	AREAS SENSITIVE TO ALTERATION/DISTURBANCE	AREAS FULFILLING RECREATIONAL/CULTURAL NEEDS	AREAS OF INTENSIVE OR CONFLICTING USE	AREAS OF NATURAL ECONOMIC POTENTIAL	PAGE NUMBER
Shoreland Protection & Management - Erosion*	*	*		*	*	C-166
Soil Erosion and Sedimentation*	*	*		*	*	—
Federal Water Pollution Control*	*	*	*	*	*	—
Mine Reclamation*	*	*		*	*	—
Sand Dune Protection and Management*	*	*	*	*	*	—
Shoreland Protection & Management - Flood Risk*	*	*		*	*	—
PUBLIC HEALTH:						
Land Subdivision and Planning	*	*		*	*	C-187
Mobile Home Park*	*	*		*		C-188
Campground Development*	*	*	*	*		C-186
WATER SUPPLY AND WATER QUALITY						
AGRICULTURE:						
Drains	*			*	*	C-147
Soil Conservation	*	*	*	*	*	C-147
COMMERCE:						
Industrial Plant Location	*			*	*	C-150
NATURAL RESOURCES:						
Environmental Services			*	*	*	C-160
Municipal Facilities and Planning				*	*	C-161
Water Quality Enforcement		*	*	*	*	C-163
Demonstration Erosion Control	*	*		*	*	C-164
Local Watershed Management	*	*	*	*	*	C-165
Hydrologic Engineering	*		*	*	*	C-170
Irrigation Management				*	*	C-171
Waterworks and Sewage System*		*	*	*	*	—
Oil and Hazardous Materials*		*		*	*	—
Mining Water Diversion*		*		*	*	—
PUBLIC HEALTH:						
Groundwater Quality Control		*	*	*	*	C-186
Public Swimming Pool			*	*		C-188
Public Water Supply			*	*	*	C-189
OTHER						
AGRICULTURE:						
Laboratory						C-148
Weather Service						C-148

*Indicates the incentive portion of a licensing or permit program also described in Direct and Significant Criteria.

AREAS OF COASTAL PROBLEMS ISSUES AND OPPORTUNITIES related to STATE LEVEL INCENTIVE AUTHORITIES	AREAS OF COASTAL PROBLEMS, ISSUES OR OPPORTUNITIES					
STATE INCENTIVE PROGRAMS (arranged under categories of resource use/impact by administering agency program title)	AREAS OF NATURAL HAZARD TO DEVELOPMENT	AREAS SENSITIVE TO ALTERATION/DISTURBANCE	AREAS FULFILLING RECREATIONAL/CULTURAL NEEDS	AREAS OF INTENSIVE OR CONFLICTING USE	AREAS OF NATURAL ECONOMIC POTENTIAL	PAGE NUMBER
COMMERCE:						
Public Service Commission			*	*	*	C-151
NATURAL RESOURCES:						
Marine Safety		*	*	*	*	C-173
Policy Development	*	*	*	*	*	
Environmental Review Permits*	*	*	*	*	*	C-174
General Services	*	*	*	*	*	C-174
Information and Education	*	*	*	*	*	C-174
Surveys and Statistical Services			*			C-182
PUBLIC HEALTH:						
Microbiological Services		*	*	*		C-186

*Indicates the incentive portion of a licensing or permit program also described in Direct and Significant Criteria.

MICHIGAN DEPARTMENT OF AGRICULTURE

Following are descriptions of Michigan Department of Agriculture incentive programs which are involved with coastal management in Michigan.

Agriculture Development Bureau

Drain Program: Program purpose is to consolidate drainage districts, construct and maintain drains, sewers, and pumping equipment, provide for flood control projects, water management, water management districts and subdistricts, and for flood control and drainage projects. The Drain Code of Michigan provides that the Director of the Department of Agriculture shall be chairman of the drainage boards for all drains established under the Drain Code that affect two or more counties. There are more than 1,000 established inter-county drains within the state.

Organizational structure for establishing and administering drains varies according to how the drain proposal is initiated, whether the proposed drain is entirely within one county or involves two or more counties, whether any highway rights-of-way are involved, whether the drain crosses state-owned land, etc. Principal entities involved are usually the county drain commissioners, a drainage district, drainage board, a petition to locate, establish, and construct a drain, and county and municipal clerks along with affected property owners, who approve drain projects if all prerequisites are met.

Program Authority: (Act 40, P.A. of 1956) Michigan Drain Code. Discussed in greater detail in Direct and Significant Criteria of this report.

Soil Conservation Program: Provides for consideration of soil resources and for control and prevention of soil erosion, thereby helping to preserve natural resources, control floods, prevent impairment of dams and reservoirs, assist in maintaining navigability of rivers and harbors, preserve wildlife, protect the tax base and public lands, and promote the health and general welfare of citizens of the state.

While program focus is primarily agricultural, technical assistance is provided to any land user. At the state level, the law establishes a state Soil Conservation Committee of seven members. The most obvious program efforts, however, are evident at the level of the local Soil Conservation District, which are entities of the state government, established through petition, hearing and referendum. The districts are governed by a locally elected five member board of directors.

Local districts give technical or in-kind assistance. They may make studies, disseminate information, sponsor demonstration projects for

erosion protection, acquire property, construct and maintain structures, and other activities. The State Soil Conservation Committee approves and coordinates programs of local districts. This coordination is provided through soil and water conservation staff of the Agriculture Department. Authorities require state agencies and subdivisions of the state to cooperate with soil conservation programs on lands over which they have jurisdiction.

Land in coastal counties figure significantly in the state's agricultural production. The program, however, is not geared to control shore erosion, but is addressed to management and treatment of land adjacent to such areas.

Program Authority: (Act 297, P.A. of 1937) Soil Conservation Districts Law.

Bureau of Consumer Protection

Laboratory Program: Program is responsible for chemical analysis of pesticides and occasional analysis of various types of commodites for other state departments, including the Department of Natural Resources. Program undertakings in the past include laboratory analyses of mercury in Great Lakes fish.

Program Authority: (Act 13, P.A. of 1921) Creation of the Department of Agriculture Act.

Plant Industry Program: The Plant Industry Program has the primary responsibility of enforcing laws and regulations enacted and promulgated for the purpose of preventing the introduction and spread of plant pests.

Coastal management implications of the program include regulation of the sale and use of pesticides, and plant pest inspections and surveys.

Program Authority: (Act 189, P.A. of 1931 Insect Pest and Plant Disease Act, (Act 171, P.A. of 1876) Michigan Pesticide Control Act, and Regulation No. 632, Rules governing commercial pesticide applicators.

Office of Agricultural Affairs

Weather Service Program: Primary tasks are to provide special weather data to be used for city drainage systems, flood control, bridge construction, highway safety research, irrigation, run-off, and research into other weather-related problems such as weather modification, climatic effects of power plant discharges, and effects of the Great Lakes on climate.

The United States Department of Commerce, National Oceanic and Atmospheric Administration -- National Weather Service -- cooperates in the operation of the program by providing data and weather summaries.

Program Authority: (Act 245, P.A. of 1895).

MICHIGAN DEPARTMENT OF COMMERCE

Following are descriptions of Michigan Department of Commerce incentive programs which are involved with coastal management in Michigan.

Corporations and Securities Bureau

Condominium Program: Authorities provide for the regulation of condominiums and require that developers obtain a permit to sell prior to entering into a binding agreement to sell condominiums in Michigan.

The Bureau reviews the master deed and all other documents for compliance with the law and proper establishment of the condominium and to ensure that the property is fairly and clearly represented to prospective buyers. Review of the location of condominiums includes participation from other state agencies in certain instances, such as whenever a proposal for a condominium is submitted in the location of a flood plain, the Department of Natural Resources makes comments on the intended projects.

Program Authority: (Act 229, P.A. of 1966) Horizontal Real Property Act. Covered in greater detail in Land and Water Uses section of this report.

Energy Administration

Energy Administration Program: The Energy Administration is responsible for developing consistent energy policies, developing and implementing a state energy conservation plan, and allocating fuels for hardship cases under the federal mandatory allocation plan.

The Director of the Administration also acts as the Governor's chief energy advisor.

Program Authority: Executive Order 1976-9.

Office of Economic Expansion

Industrial Plant Location Program: Main focus is to provide information to business interests about markets, manpower, transportation, industrial parks, power and fuel, waste and sanitary treatment, pollution control, available sites and buildings, laws and regulations, and technology of natural resources.

With regard to Great Lakes shorelands, program staff compiles information on transportation, industrial locations, overseas trade, mineral wealth, and quality of life considerations such as scenic and recreational resources.

Program Authority: (Act 380, P.A. of 1965) Executive Reorganization Act of 1965.

Public Service Commission

Public Service Program: The Public Service Commission is responsible for sorting out and making judgements about factors that control the supply and price of electricity, gas, and telephone service to assure that charges are fair to consumers and to the utilities it regulates and to assure that service is reasonable and adequate to meet the needs of the customer.

The Commission is guided by public interest in regulating non-municipal electric, gas and stream rates, telephone rates, gas and oil pipelines, and the intra-state aspects of the motor transport industry. It also regulates some water rates.

Program Authority: (Act 232, P.A. of 1863)
(Act 129, P.A. of 1883)
(Act 202, P.A. of 1887)
(Act 171, P.A. of 1893)
(Act 106, P.A. of 1909)
(Act 144, P.A. of 1909)
(Act 300, P.A. of 1909)
(Act 206, P.A. of 1913)
(Act 419, P.A. of 1919)
(Act 47, P.A. of 1921)
(Act 238, P.A. of 1923)
(Act 3, P.A. of 1929)
(Act 9, P.A. of 1929)
(Act 16, P.A. of 1929)
(Act 69, P.A. of 1929)
(Act 3, P.A. of 1939)
(Act 240, P.A. of 1952)
(Act 244, P.A. of 1952)
(Act 272, P.A. of 1952)
(Act 44, P.A. of 1960)

Travel Bureau

Travel Programs: Program goals and objectives formulated to assist the economic development of the state through orderly growth and development of Michigan's travel, tourism, and convention industry. The program encompasses all types of travel include business and convention travel, urban tourism, sightseeing, entertainment travel, and outdoor recreational travel; including the coastal areas of the state.

Subprograms which pertain to shorelands include:

Marketing and Promotion: Advertising and the provisions of public service information about Michigan's scenic and historical attractions and the resort and recreational advantages of the Great Lakes coastal areas to residents and non-residents. Included in this subprogram are participation in boat and sport shows, seminars on Great Lakes fishing, preparation of a directory of Michigan charter boats, and other assorted media and public relations responsibilities.

Travel Product Development: Promotion of the Great Lakes region as a viable area for the development of new travel products. Activities include the determination of overall need/demand for new products, the identification and encouragement of potential investors to undertake new development projects, and the provisions of assistance to investors in the areas of feasibility analysis and site location studies.

State Grant Program: The provisions of financial assistance to the state's four regional tourist associations and local area convention bureaus to assist the promotion of convention, travel and tourism.

Program Development and Evaluation: Research and analysis to determine market need/demand, product availability and the level of travel and tourism activity in the coastal regions for purpose of future planning.

Program Authority: (Act 175, P.A. of 1973).

MICHIGAN DEPARTMENT OF STATE HIGHWAYS AND TRANSPORTATION

Following are descriptions of Michigan Department of State Highways and Transportation programs which are involved with coastal management in Michigan.

Bureau of Aeronautics

Airport Program: The Michigan Aeronautics Commission has general supervision over aeronautics within the state. It is empowered and directed to encourage, foster and participate with the political subdivisions of this state in the development of aeronautics; to establish and encourage the establishment of airports, landing fields, and other aeronautical facilities; it makes rules as necessary and advisable for the public safety governing the designing, laying out, location, building, equipping and operation of all airports and landing fields within the state. Impacts of this program on the coastal area would relate to airports and navigation aids located within the coastal area as well as ancillary commercial and industrial land uses associated with airport facilities.

Program Authority: (Act 327, P.A. of 1945) Aeronautics Code.

Bureau of Highways

Highways Program: The Department is responsible for the overall highway program for the State of Michigan. This includes direct jurisdiction over state highways and limited administrative jurisdiction over all roads and streets within the state. Included in the program are ownership and maintenance of bridges, planning and operational assistance for automobile ferries, and the operation of roadside parks and rest areas. The Department constructs and maintains erosion control facilities within the coastal area.

Program Authority: (Act 51, P.A. of 1951) Title 23, United States Code.

Bureau of Transportation Planning

Port Development Program: Primary program activities include cooperation and negotiation with local commercial harbors on planning, acquisition, development, operation, maintenance and administration; negotiation with Corps of Engineers on channel and harbor development and maintenance dredging; initiation of specific studies and supervision of grants to ports for planning purposes; representing the Department on seaway, commerce, and navigation matters; supervising research on rates and services

relating to external, interstate and foreign commerce; and providing administrative assistance to local port commissions or local government.

Program Authority: (Act 251, P.A. of 1966).

Designated agency responsibility for port development (Commerce) (transferred to Michigan Department of State Highways and Transportation by Governor's Executive Order 1973-1).

Sect. 1 Cooperation and negotiation with ports.

Sect. 2 Grants to port districts.

Sect. 3 Studies and intergovernment agreements.

Sect. 4 Rates and services.

Governor's directives assigning responsibility for:

1. Joint responsibility with Department of Natural Resources on confined dredge disposal.

2. State liaison with Winter Navigation Board and Working Committee on Season Extension Demonstration Program.

Public Transportation Program: The Department, in cooperation with local governmental units, is responsible for the development of a comprehensive statewide public transportation system. Capital and operating assistance is provided to transit operators from a state General Transportation Fund which receives revenue from 1/2¢ of the motor fuel tax. Approximately $20 million annually is available from this source. The state provides planning and financial assistance for urban areas bus systems, dial-a-ride systems in rural and urban areas, rail passenger and intercity bus systems, maintenance and garage facilities, terminal improvement programs and park-and-ride facilities.

Many state funded transportation services and some facilities lie within coastal areas. Impacts of a coastal area management program could include land use changes affecting demand for transit service, highway or rail line changes affecting bus or train service, and land use controls affecting the construction, operation or expansion of maintenance, station or other facilities.

Program Authority: (Act 195, P.A. 1975).

Urban and Public Transportation Bureau

Railroad Program: The Department operates a variety of programs dealing with both solvent and bankrupt rail carriers. The basic thrust of the

state responsibility is associated with railroad planning, regulation, subsidization and, in some cases, operation. This program will impact on the coastal area due to the location of trackage and ancillary facilities as well as car ferry services on Lake Michigan and at the Straits of Mackinac which are physically located within the coastal area. There are many miles of railroad rights-of-way located within the coastal area, but particularly the car ferry operations require the maintaining of port facilities in several locations.

Program Authority: (Railroad Rail Reorganization Act of 1973)
(Railroad Revitalization and Regulatory Reform Act of 1976)
(Public Act 196, "State Transportation Preservation Act of 1975")
(Executive Order 1975-10, transfer of railroad statutory authority from the Michigan Public Service Commission to the Michigan Department of State Highways and Transportation)
(Federal Railroad Administration's guidelines)
(Action Plan)

MICHIGAN DEPARTMENT OF LABOR

Following are descriptions of Michigan Department of Labor programs involved with coastal management in Michigan.

Bureau of Construction Codes

Building Division

Building Program: The main purpose of this Division is to administer provisions of the state construction code. The Construction Code Commission had adopted by reference the Building Officials and Code Administrators International (BOCA) Basic Building Code with amendments. These amendments were adopted on May 6, 1974 and became effective on November 6, 1974. These rules are incorporated in the General Rules as Parts 1 through 4 (R 408.30101 - R 408.30495).

Act 230, P.A. 1972, as amended, provides that cities, villages or townships may elect to locally enforce the state construction code or exempt themselves from the law by adopting another nationally-recognized model code. The portion of the Act pertaining to building codes went into effect November 6, 1974. All ordinances amending national model codes must be approved by the Construction Code Commission. Forty-eight communities amended their codes which required formal hearings in accordance with Section 8 of Act 230. Testimony obtained at these hearings enabled the Construction Code Commission to make a determination to either grant or deny the requests for amendment.

Much effort goes into communicating timely information to counties, cities, villages and townships regarding their role in administration and enforcement of construction codes.

Monitoring of all plants shipping their products into Michigan was provided for under the mobile home inspection program. Monitoring of Michigan mobile home plants was begun in June of 1975 to meet additional requirements of the U.S. Department of Housing and Urban Development under authority of PL 93-383 which was approved on August 22, 1974 and effective 180 days later. This monitoring process involves one inspector from each of the Building, Electrical and Plumbing Divisions of the Bureau of Construction Codes, with the Building Division assuming responsibility for the administration of the program. The monitoring is taking place in plants that manufacture mobile homes for use in Michigan and has taken the mobile home team to states such as Illinois, Indiana, Wisconsin, Minnesota, Iowa, Ohio, Pennsylvania, Tennessee, as well as Michigan. Federal mobile home regulations pre-empted Michigan rules on June 15, 1976.

Program Authority: (Act 230, P.A. of 1972) Construction Code Act.

Electrical Division

Electrical Program: The Electrical Division was established to provide support staff to the Board under the supervision of the Bureau Director. The Electrical Administrative Board retained authority for examining electrical journeymen, masters, and contractors as well as for granting annual licenses. Staff duties include issuing permits for electrical wiring and inspecting wiring in public places.

The 1971 edition of the National Electrical Code is enforceable in Michigan by authority of Act 224, P.A. 1974 (Section 338.881, 338.884 and 338.886 of the Michigan Compiled Laws).

The Commission, through the process outlined in the Administrative Procedures Act, is contemplating the adoption of the 1975 National Electrical Code with reference, together with the appropriate rules to make it compatible with Michigan law.

Program Authority: (Act 230, P.A. of 1972) Construction Code Act, and (Act 224, P.A. of 1974).

Mechanical Division

Mechanical Program: Initial purpose is to review and suggest amendments to the Building Officials and Code Administrators Basic Mechanical Code and to make recommendations to the Construction Code Commission.

In pursuit of this end result, a mechanical code ad hoc committee was established in March of 1975. Qualified individuals were solicited by an open letter sent to 36 individuals, manufacturers, associations and professional organizations. As a result of this effort, 28 names and resumes listing the qualifications were received and evaluated. The recommendation to the Commission was that all 28 persons be allowed to serve on this committee, but that only a portion of them having voting rights insofar as amendments to the code are concerned. This resulted in a 12-member correlating committee which consists of the chairman of each of the 11 subcommittees (corresponding to the 11 articles in the Building Officials and Code Administrators Basic Mechanical Code) and one person representing the general public.

Considerable research and effort have also been expended in developing guidelines for energy conservation for several reasons: (a) several municipalities have inserted thermal insulation requirements in their local ordinances; (b) on April 4, 1975, Governor Milliken charged the Construction Code Commission, by Executive Memorandum, with the responsibility for adopting an energy conservation program; and (c) the state building code is silent on the subject of energy conservation.

The Construction Code Commission is presently contemplating the adoption on a statewide basis the comprehensive ASHRAE 90-75 Energy Conservation in New Building Design standard.

Program Authority: (Act 230, P.A. of 1972) Construction Code Act.

Plan Review Division

Plan Review Program: The Plan Review Division was established in January of 1974 as code administering function by the Director of Labor in accordance with Section 7, Act 230 (Section 125.1507 of the Michigan Compiled Laws). Its purpose is to provide plan evaluation of construction documents to insure compliance with all codes under the jurisdiction of the Construction Code Commission. The Division became operational in July of 1974.

Major functions of this Division include plan evaluation of the pre-manufactured unit industry for all units manufactured in or shipped into Michigan; plan evaluation and barrier free evaluation of all general construction; training seminars for plan reviewers and building inspectors; and code interpretation and consulting services to building officials, architects, engineers, planners, developers, etc.

Program Authority: (Act 230, P.A. of 1972) Construction Code Act.

Plumbing Division

Plumbing Program: The Plumbing Division was established to provide support staff, under the supervision of the Bureau Director, to the Board. The Plumbing Board retained authority for journeymen and master plumbers, as well as for granting annual licenses to same. The Board is also responsible for registration of plumbers' apprentices.

The functions of the Plumbing Division are to administer and enforce the State Plumbing Code, to assure plumbing permits and make inspections on the installations in areas not covered by local inspection, to review new products and make recommendations to the Construction Code Commission for their approval for use in Michigan, to review plans for plumbing installations, and to assist local governmental units in establishing procedures for plumbing inspections locally.

Portions of the original plumbing law, Act 266, P.A. 1929, were superseded in May of 1975, when the code and rules adopted by the Construction Code Commission by authority of Act 230, P.A. 1972, as amended (Section 125.1504 of the Michigan Compiled Laws), became effective. The Building Officials and Code Administrators Basic Plumbing Code was adopted by reference, with amendments to make it compatible with Michigan law and special requirements.

A Plumbing Board ad hoc committee is presently studying the 1975 edition of the Building Officials and Code Administrators Basic Plumbing Code. It is contemplated that the committee will submit recommendations to the Construction Code Commission for adoption later in 1976.

Program Authority: (Act 230, P.A. of 1972) Construction Code Act, and (Act 266, P.A. of 1929) Plumbing Law.

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Following are descriptions of Michigan Department of Natural Resources incentive programs involved with coastal management in Michigan.

Bureau of Environmental Protection

Air Quality Division

Preservation of Air Resources Program: Overall objective is to regulate new sources of air pollution and to reduce air pollution emissions from existing sources.

Activities include identification, investigation and surveillance of actual and potential air pollution sources to achieve and maintain compliance with rules. This is accomplished through emission inventories, engineering review of air use permits, air resource modeling, ambient air monitoring, environmental impact analyses, development of compliance schedules, source sampling, complaint investigations, enforcement of abatement schedules, and enforcement of industrial compliance monitoring. Supporting tasks include laboratory analysis, data analysis, and collection, air quality evaluation, surveillance fee programming, data processing and general administrative functions.

Program Authority: (Act 348, P.A. of 1956) Air Pollution Control Act

Covered in greater detail in the Direct and Significant Criteria portion of this report.

(Act 250, P.A. of 1965) Tax Exemption for Air Pollution Control Facilities Act
(Act 257, P.A. of 1972) Annual Reports and Surveillance Fees
Executive Order 1973-2a

Environmental Services Division

Environmental Services Program: Basic responsibility is to serve the entire Bureau with air and water laboratories, air and water surveillance fees, air and water data systems, long-term compliance water monitoring and other environmental service activities.

Monitoring and survey tasks include programs which determine the extent of water quality violations, waste assimilative capacity of receiving waters, effectiveness of pollution control programs, and trends in water quality. Draft plans regarding protection of needs and goals for the future of water quality in Michigan is compiled by a special studies unit.

Program Authority: (Act 245, P.A. of 1929)
(Act 348, P.A. of 1965)

Resource Recovery Division

Solid Waste Program: Program priorities are guided to control, regulate and enforce solid waste sites and to license waste haulers and refuse processing operations.

Mandates established by Act 87 of the Public Acts of 1965, as amended, limit the disposal of refuse to a licensed disposal area. Act 87 is aimed at protecting the public health; providing for planning and operation of refuse management systems; licensing and regulation of refuse disposal facilities; transporting units, processing facilities, and the regulation of collection centers.

Activities include licensing of disposal sites and refuse transportation units, inspection of disposal areas, technical assistance in the field of solid waste management, enforcement proceedings in the event of noncompliance, complaint investigation, and licensing of processing facilities. Other tasks include upgrading refuse handling, processing and disposal facilities to prevent environmental damage; promoting resource recovery; assisting in the development of grant and loan programs for financing solid waste management facilities with emphasis on resource recovery; developing acceptable disposal areas for hazardous wastes; and coordinating site inspection with local health departments.

Program Authority: (Act 98, P.A. of 1929) Solid Waste Management Act
(Act 366, P.A. of 1974) Resource Recovery Act

Both Act 98 and Act 366 are described more fully in the Direct and Significant Criteria section of this report.

(Public Law 89-272, Title II) Federal Solid Waste Disposal Act
(Act 87, P.A. of 1965)
(Act 89, P.A. of 1971) Amendments to Act 87
(Act 173, P.A. of 1953) Swine Feeding Act
(Act 348, P.A. of 1965) Air Pollution Control Act
(Act 106, P.A. of 1966) Anti-Litter Act
(Act 219, P.A. of 1966) Control of Junk Cart Act
(Act 136, P.A. of 1969) Management of Liquid Industrial Waste Haulers Act
(Act 300, P.A. of 1949) Abandoned Vehicles
Executive Order 1973-2a

Water Quality Division

Municipal Facilities and Planning Programs: Basic goal is to protect water quality of the state.

Directs work and develops guidelines relative to sewage disposal systems including grant programs; does design review, construction review, and operations review. Also is responsible for determining which portions of

municipal wastewater treatment works projects will be certified for a federal and/or state construction grant; conducts operator certification and training; prepares basin plans and reviews official pollution control plans; supervises operation and maintenance of municipal wastewater systems; identifies, investigates, and monitors industrial discharges into public sewerage systems; reviews and maintains state and federal legislation pertaining to grant programs; and reviews bidding information on grant projects. The branch is structured into four sections with a Construction Grants Program coordinator responsible for project tracking, scheduling and coordination of all elements relating to the construction grant process. In general, the Grants Administration Section assists in priority systems and project list development; administers review of grant applications and certifies to the Environmental Protection Agency grant applications and subsequent grant amendments for municipalities after study area plan has been finalized; prepares construction grant offers upon receipt of federal grant agreements; approves project payments and maintains accounting records of all project monies; makes periodic project inspections, checks contractors performance bonds; determines grant eligibility; and makes recommendations to EPA.

The Water Quality Planning Section is responsible for review of planning aspects of facilities plans and environmental assessments, for coordination of 208 planning, the development of areawide wastewater management plans, and maintaining the state's continuing planning process.

The Training and Investigations Section is responsible for the certification of qualified wastewater treatment plant operators. This activity includes the development of examination material and conducting and grading exams for both municipal and industrial operators. In addition, the section assists operators in improving in-plant operation and maintenance through technical assistance visits, formal training courses, and laboratory workshops.

The Wastewater Engineering Section is responsible for assisting in review of priority system and project list development; establishing plan of study areas; reviews cost-effectiveness of projects; engineering reports, plans and specifications of all sewerage projects; including technical review. Also evaluates plans and specifications and other project documents required under state and federal grant programs; aids in development of NPDES permits; issues municipal construction permits; reviews and approves change order; and is responsible for the state operation and maintenance of municipal systems.

Program Authority: (Act 98, P.A. of 1913) Municipal Wastewater Act

Also described in the Direct and Significant Criteria portion of this report.

(PL 92-500 of 1972) Federal Water Pollution Control Act and its Amendments
(Act 245, P.A. of 1929) Water Resources Commission Act
(Act 211, P.A. of 1956) Sewage Disposal and Water Supply Districts Act
(Act 22, P.A. of 1966) Tax Exemption for Water Pollution Control Facilities Act

(Act 329, P.A. of 1966) Water Pollution Control Grants Act
(Act 58, P.A. of 1959)
(Act 40, P.A. of 1956)

Water Quality Enforcement Program: Primary responsibility is to place controls over water pollution consistent with federal requirements as established by the Water Pollution Control Act and amendments to the state act and the State's Water Quality Standards.

The program directs work associated with administrative requirements of the State and National Pollutant Discharge Elimination System permit issuance, renewals, revocations, permit compliance, and follow-up enforcement actions. Staff tasks include supervision of wastewater treatment facilities construction and operation, directing pollution clean-up, and maintaining oil and hazardous materials control.

Program Authority: (PL 92-500) Federal Water Pollution Control Act Amendments of 1972
(Act 136, P.A. of 1969)
(Act 245, P.A. of 1929)
(Act 243, P.A. of 1951)

Bureau of Land and Water Management

Geology Division

Mining and Environmental Geology Program: The general project objective is to stimulate the development of mineral resource needs at acceptable social and economic costs.

Activities include collection and compilation of statistics pertaining to Michigan's active mineral operations in an annual directory; determining mineral values on state-owned lands; developing mining plans on state-owned lands; developing, evaluating and presenting geological and mineral data to stimulate exploration and development of ore and mineral deposits to help alleviate mineral shortages; cooperative topographic mapping with the United States Geological Survey; acting as groundwater consultants to agencies responsible for issuing permits for large capacity wells and land disposal/treatment of liquid and solid wastes; investigation of groundwater pollution problems; determination of base line hydrologic data for the sensible management and rehabilitation of lakes in Michigan; provide quantity and quality data on natural aquifer systems in Michigan; collect and interpret stream level, flow, quality, and quantity; provide definition of impacts of land disposal/treatment on the groundwater environment; regulation, evaluation and enforcement of mineral exploration and extraction wells; regulate and control mined land reclamation and sand dune mining; valuation for

taxation and specific taxation of metallic mineral properties; cooperative geologic mapping with the U.S. Geological Survey and cooperative water programs with the U.S. Geological Survey.

Program Authority: (Act 92, P.A. of 1970) Mine Reclamation Act
(Act 222, P.A. of 1976) Sand Dunes Protection and Management Act

Both Act 92 and Act 222 are also described in the Direct and Significant Criteria portions of this report.

(Act 65, P.A. of 1969) Board of Geological Survey Act
(Act 77, P.A. of 1951) Taxation of Low Grade Ore Act
(Act 66, P.A. of 1963) Ad Valorem Laws
(Act 68, P.A. of 1963) Taxation of Underground Iron Mines Act
(Act 7, P.A. of 1911) Mineral Statistics Act
(Act 294, P.A. of 1965) Ground Water Quality Control Act
(Act 66, P.A. of 1963) Valuation of Metallic Minerals for Taxation
(Act 315, P.A. of 1969) Mineral Wells Act

Oil and Gas Program: Basic program goal is to locate, evaluate and aid in the development of fossil fuel resources of the state and to regulate extraction for the protection of all surface and sub-surface resources.

Tasks include collection and interpretation of petroleum and geology data, preparation and distribution of oil well logs and data, maintenance and compilation of oil and gas drilling statistics, assistance with studies of shale oil and/or gas resources, collection and maintenance of oil and gas statistics, processing and issuance of permits to drill any well for oil and gas exploration, surveillance of well sites prior to permit issuance, surveillance of production and allocation of production, surveillance of oil field housekeeping, and regulation of plugging and abandonment procedures.

Program Authority: (Act 61, P.A. of 1939) Oil and Gas Wells Act.

Also described in detail in the Direct and Significant Criteria portions of this report.
(Act 326, P.A. of 1937)

Division of Land Resource Programs

Demonstration Erosion Control Program: Primary function is to research, develop, evaluate and recommend methods for Great Lakes shore erosion protection.

Research phase focuses on selection, design, installation and evaluation of demonstration projects around the state. Sites are selected on the basis of geographic distribution and because they have severe erosion

problems. Installations demonstrate innovative and conventional means of erosion protection. Documentation and evaluation of factors such as reduction of erosion rates, cost, construction difficulties, and durability are considered in evaluating projects. Program was formulated upon legislative order to take action to avert catastrophic consequences of severe shoreland erosion.

Program Authority: (Act 14, P.A. of 1973) Demonstration Erosion Control Structures Act

Farmland and Open Space Program: Basic goal or purpose is to keep farmland and open space in its present usage by providing tax incentives on property.

Act 116, P.A. 1974, enables property owners to enter into a development rights agreement for farmland or a development rights easement for open space with the state. The agreements or easements are developed to ensure that the land remains in a specified use over a prescribed time period (no less than 10 years). In return, the property owner is entitled to certain income or property tax benefits.

Farm eligibility is governed by the size of the farm, and in two instances by the income from the farm. Open space land must be undeveloped and either historic in nature or be designated land under the Natural Rivers Act, Act 231, P.A. 1970, or as an environmental area under Act 245, P.A. 1970, as amended, the Shorelands Protection and Management Act. Open space may also be eligible if it conserves natural or scenic resources, enhances recreation opportunities, preserves historic sites, and idle potential farmland of not less than 40 acres. Landowners first make applications to local units who approve or reject. If approved, the applications for farmland and designated open space are sent to the state for final approval or rejection.

Program Authority: (Act 116, P.A. of 1974) Farmland and Open Space Preservation Act

Local Watershed Management Program: Fundamental goals are to assist with the development and organization of local watershed groups.

Program activities include work with and assistance to local governmental units, watershed organizations, and watershed councils. Technical and advisory assistance is made to local communities when they consider creating organizations to develop regional water management programs. One major effort was the construction, development and implementation of a study for the Grand River Basin which involved the Grand River Watershed Council in an advisory capacity as part of a comprehensive study effort.

Under the Local River Management Act, two basic types of organizations may be formed. The first type; watershed councils, function mainly in

an investigative, informational, coordinative and advisory capacity; cooperating with local units and the Michigan Department of Natural Resources. The second type of group is the river management district, which is intended to be an agency for the acquisition, construction, operation and financing of water storage and other river control facilities, necessary for river management.

Program Authority: (Act 200, P.A. of 1958)
(Act 253, P.A. of 1964) Local River Management Act

Natural Rivers Program: Broad goals are to preserve and enhance a range of values inherent in our rivers and their tributaries, and to counter existing and potential problems.

A distinct and important feature of the program is the opportunity for local participation in developing plans for natural rivers. A vital necessity of the program is to ensure that development controls for land adjacent to a river be reasonable and realistic to property owners. The Natural Rivers Act provides for the designation of a system of Michigan rivers and provides for preservation and enhancement of their natural values. The law enables the Natural Resources Commission, after sufficient public notice and hearings, to designate particular streams as "natural rivers" because of their fish, wildlife, boating, scenic, aesthetic, flood plain, ecologic, historic and recreational values and uses. Designation of a stream or portion of a stream is based upon a long-range comprehensive management plan for the stream and its surroundings. The plan relates management practices to the stream and adjacent lands in order to maintain its natural values and opportunities. State agencies are expected to follow the guidelines set forth in such a plan. Three broad classes of rivers are recognized under the program, including wilderness, wild-scenic and country-scenic rivers. Rivers thus far designated are: Jordan, Betsie, White, Rogue, Boardman, and the Two Hearted. Rivers under active consideration include the Thornapple, Kalamazoo, Huron, Flat, Fox, Fence, Pigeon and Shiawassee.

Program Authority: (Act 231, P.A. of 1970) Natural Rivers Act.

Also described in detail in Direct and Significant Criteria portions of this document.

Shorelands Protection and Management Program: Broad, general goals are to protect and manage the Great Lakes shorelands, including connecting waterways, using regulatory powers, enforceable in high risk erosion areas, environmental areas, and flood hazard areas.

Special shorelands areas are delineated from shoreline surveys and studies and designated if they meet minimum requirements. Management plans are developed and implemented after consultation with local units of government and property owners. Authorities provide for appeal and hearings procedures upon designation. Local zoning ordinances and a state permit procedure, in the absence of local zoning, are primary enforcement tools.

Program Authority: (Act 245, P.A. of 1970) Shorelands Protection and Management Act

Also described in the Direct and Significant Criteria portions of this report.

Zoning Ordinance Review Program: Primary function or goal is to assure legality of ordinances and proper uses of land by evaluating local zoning ordinances enacted under the County Rural Zoning Act.

Program personnel evaluate county zoning ordinances and amendments to assess whether or not certain shoreland requirements are met, as established by regulatory authorities. For instance, wherever a zoning ordinance or amendment includes land that is designated as a high risk erosion, environmental or flood hazard area by the authority of the Shorelands Protection and Management Act, evaluations are undertaken to assure that the ordinance amendment complies with minimum requirements established under authority of the Act.

Program Authority: (Act 183, P.A. of 1943) County Rural Zoning Act
Executive Order 1973-12, which placed review responsibilities of sections 11 and 15 of Act 143, P.A. 184 in the Land Resource Programs Division.

Lands Division

Land Acquisition Program: A major program objective is to acquire real estate and/or associated rights for specific departmental purposes.

The Lands Division performs the role of a service agency. The Land Acquisition Section is responsible for supervising and carrying out various real estate activities for divisions which comprise the Department of Natural Resources. Most of the programs cover land and associated rights that are acquired to meet the objectives of the Parks, Wildlife, Forestry, Fisheries, Waterways, and Water Management divisions, and also includes varying degrees of assistance to the Administrative Services Division in their aid to local units of government as designated by the Legislature.

Real property is acquired by purchase, gift and by direct or three-way exchange. Associated land rights are secured by leases, permits or licenses. Real estate is acquired or exchanged to solve land control problems arising from program objectives that vary as do the uses intended, which may include state parks, forest campgrounds, public water access sites, boat marinas, harbors of refuge, release of Great Lakes bottomland, wildlife and fisheries management, and restoration, preservation of natural areas, and to meet Department administrative needs.

The duties performed to accomplish this charge commence through close liaison with the particular division seeking to solve certain land control problems for the purpose of implementing program objectives. The Land Acquisition Section provides planning assistance to the division in outlining an acquisition program by use of ownership maps and projected costs within the constraints of available land acquisition budgets. When acquisition priorities are determined, field investigations, appraisals to estimate fair market value, appraisal reviews, appraisal certifications, and calculation of possible relocation benefits are completed. At this point, negotiations to secure options to purchase are completed with orderly submission of this documentation to the Natural Resources Commission for formal approval while concurrent qualification of the project for federal fund participation is done. After Commission approval, title review by the Attorney General is completed, with the closing officer then processing payments for the various charges in connection with completion of the transaction and providing for preparation and execution of the deeds of conveyance and other details of closing, including orderly transfer of use jurisdiction to the various divisions and their field personnel. Acquisition in shoreland areas could include designated shoreland Areas of Particular Concern and areas for preservation and/or restoration.

Program Authority: (Act 17, P.A. of 1921) General Acquisition of Land Act
(Act 320, P.A. of 1947) General Acquisition of Land Act
(Act 193, P.A. of 1911) Exchanges of Land Act
(Act 227, P.A. of 1972) General Acquisition of Land Act
(Act 207, P.A. of 1965) Tax Reimbursements Act
(PL 91-646) Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970

Minerals and Leasing Program: Program purpose is to provide for the use of state-owned lands and mineral rights for specific purposes.

Primary activities involve the leasing of state-owned mineral lands for oil, gas and mineral exploration and development; leasing of Great Lakes bottomlands for sand and gravel; issuance of permits on uplands for removal of sand, gravel, etc.; sale of state-owned mineral rights; and leasing and deeding of state lands in the St. Clair Flats.

Applications for oil and gas leasing are filed continuously. State ownership is verified from the records and a review of the lands by field and other interested DNR divisions is obtained to determine if the mineral rights should be offered under terms of the development or non-development lease, pursuant to existing policy. Following Natural Resources Commission approval to hold the sale, the sale list is prepared and the public auction advertised. Copies of the sale list are sent to all applicants, members of the Legislature, township supervisors, chairmen of the county boards of commissioners and other interested parties, as well as to the field and Department divisions previously contracted for final review and recommendations. The Commission and the State Administrative Board must approve issuance of leases to the successful bidders following the lease sale. Leases are then issued and control records established.

Applications and leases for exploration and development of metallic minerals (iron ore, copper, etc.) are processed similar to oil and gas.

Mineral deed applications are submitted to the Geology Division for an appraisal of the mineral value under existing policies and procedures and for review by the Fisheries Division where water frontage is involved.

Applications for sand and gravel leases on the Great Lakes bottomlands are processed by the Lands Division, with authority to issue the lease being secured from the Natural Resources Commission.

The responsibility for issuance of mineral permits in southern lower Michigan is vested in the division administering the land and in the Upper Peninsula and northern Lower Michigan, in the Forestry Division except for parks and certain designated game areas. Issuance of permits requires the approval of the Natural Resources Commission and the State Administrative Board.

St. Clair Flats activities include issuance of leases, extensions, conversion of leases to deeds, collection of delinquent taxes and forfeitures for failure of leases to extend to pay taxes.

Program Authority: (Act 280, P.A. of 1909) Mineral Leases Act
(Act 17, P.A. of 1921) Department of Conservation ct
(Act 326, P.A. of 1913) Bottomlands Leases on St. Clair Flats Leases and Deeds Act

Tax Land Program: This section of the division is responsible for the administration of properties which have become state-owned through the operation of state property tax statutes. These lands currently are most normally confined to the major metropolitan areas and economically depressed neighborhoods within these areas. These lands occasionally include properties with frontage on the Great Lakes and their connecting water or within the area defined as the coastal boundary.

The management and disposition of these lands is provided for by existing state statutes which include the option for the state to retain and dedicate land for state use or convey to other governmental units. The former owners possess rights of redemption; if allowed to lapse, disposition of the land is made which involved examination, minimum in value appraisal, and offering for sale at public auction or dedication, and management for public use. Those lands that possess frontage on a body of water are given a thorough review and consideration by staff, with input from regions and interested divisions prior to disposition.

This section also maintains the records pertinent to all lands under control of the Department.

Program Authority: (Act 17, P.A. of 1921) Department of Conservation Act, General Acquisition of Land
(Act 320, P.A. of 1947) General Acquisition of Land Act
(Act 193, P.A. of 1911) Exchange of Land Act
(Act 206, P.A. of 1893) General Property Tax Law
(Act 223, P.A. of 1909) General Property Tax Law

Water Management Division

Flood Insurance Program: The program goal is to make federally subsidized flood insurance available in communities that agree to control future flood plain development to reduce future flood damages.

Program responsibility is to act as State Coordinator of this federal program and to review the Flood Insurance Rate Making Studies being done by the federal government to make sure they meet minimum state flood plain management standards.

Program Authority: (PL 90-448)
(PL 91-152)
(PL 93-234)

Floodway Control Program: The overall program goal is to regulate development and alteration of flood plains in the state to minimize future flood damage.

Program responsibility under the Flood Plain Encroachment Amendment to the Water Resources Commission Act is directed to assure that channel and floodway portions of flood plains are not inhabited in order to prevent interference or obstruction which may cause undue restrictions of flood flows. Staff assists and provides technical services to other state agencies, units of government, consulting engineers, and citizens regarding floodway hazard problems.

When activity is intended within a flood plain, staff review applications for such developments as condominiums, mobile home parks, campgrounds, water and waste treatment facilities, public and private bridge and culvert construction, and others and permit or reject the activity based on whether the activity harmfully interferes with stage of discharge characteristics of the stream.

Program Authority: (Act 245, P.A. of 1929) Water Resources Commission Act
(Act 165, P.A. of 1968) Floodplain Encroachment Amendments to Act 245

Both Act 245 and Act 165 are described in detail in the Direct and Significant Criteria portions of this report.

Hydrologic Engineering Program: Primary function is to advise and recommend on certain water resource problems.

Activities include issuance of dam permits; inspection of potentially hazardous dams; review of engineering reports; field investigations; review of plans submitted to establish inland legal lake levels; representation on lake improvement boards; state dam inventory; streamflow data collection and interpretation; and streamflow data collection at water quality monitoring stations. Program projects include examination

of flood plain alterations, determination of hydrologic interpretations, and reports in support of other DNR divisions. Participation in the Operation Foresight Program centered on the problems of repairing and maintaining structures to assure continued protection through current period of critically high water levels on the Great Lakes. Field inspections of the Great Lakes shore are carried out periodically.

Program Authority: (Act 245, P.A. of 1929) Water Resources Commission Act

Also described in Direct and Significant Criteria portion of this report.

(Act 184, P.A. of 1963) Dam Construction Act
(Act 146, P.A. of 1961) Inland Lake Level Act
(Act 345, P.A. of 1966) Inland Lake Improvement Act

Inland Lakes and Streams Protection: Basic program purpose is to regulate the alteration of Michigan lakes and streams, including connecting waters of the Great Lakes.

Program authorities require permits for impounding or enlarging bodies of water, and also for dredging, filling or year-round construction of structures on bottomland, or for construction of a channel connecting to an inland lake or stream. Permit requirements are stipulated for bridges crossing lakes or streams and for pipelines or other utility lines which cross or come within 50 feet of a lake or stream. Regulations also apply to construction and operation of marinas on inland waters; penalties for violations; grievance and hearing procedures. Program emphasis is directed to assure that resource values will not be threatened by channeling projects.

Program Authority: (Act 346, P.A. of 1972) Inland Lakes and Streams Act

Also described in Direct and Significant Criteria portions of this report.

Irrigation Management Program: The basic goal of the program is to control withdrawals and operations of all irrigation districts in the state.

Authorities provide for the establishment of irrigation districts in counties of 400,000 population or less to use waters from the Great Lakes, for which purposes of the Act include such portions of their tributary lakes and streams where the natural water levels are controlled by and at essentially the same water level as the Great Lake involved. District powers provide for creation of irrigation boards, for irrigation projects, for assessment and collection of taxes within the districts, for the issuance of bonds or irrigation orders, for maintenance assessments, for the cooperation of various governmental agencies with such districts, and for applications and acceptance of grants for and aid from federal or state governments or any agency or any private source.

Water withdrawals are confined to those uses which can reasonably be expected to benefit agricultural crops and cannot damage specific natural resources. Irrigation districts are subject to approval by the Department. Studies are undertaken to assess if proposed projects will injure riparian rights, public health and welfare, significantly affect Great Lake levels, or have adverse impact on fish and wildlife.

Michigan Departments of Public Health and Agriculture play vital roles in the maintenance of irrigation districts in the state.

Program Authority: (Act 205, P.A. of 1967) Irrigation Districts Act

Subdivision Control Program: The program goal is to regulate new water related subdivisions to minimize future flood damage.

Program responsibility under the Subdivision Control Act is directed to assure that each lot in a new subdivision has a building site and access above a 100-year flood plain.

Program Authority: (Act 228, P.A. of 1967) Subdivision Control Act

Also described in the Direct and Significant Criteria portions of this report.

Submerged Great Lakes Bottomlands Program: Primary objective of the regulatory portion of this program is to control projects which alter Great Lakes bottomlands or waters. Authorities provide that the waters and unpatented bottomlands of the Great Lakes, including Lake St. Clair, filled or unfilled, below a defined ordinary high water mark, are held in trust by the state. The DNR enters into agreements, leases and other conveyances, and regulates the uses of Great Lakes bottomlands, filled prior to passage of the Great Lakes Submerged Lands Act, or filled by state permit, are eligible for purchase from the state. Applications for permits and conveyances can only be made by the riparian or littoral owner, or record title holder.

Applicants must receive approval from the appropriate federal agency, Michigan Waterways Commission and local unit of government as part of the application process.

The Department determines by appraisal (Lands Division) the compensation to be paid the state for conveyances or lease of unpatented bottomlands.

Program personnel and other Department interests review applications and make a finding of the effects the proposed project will have on the public trust, including hunting, fishing, swimming and navigation.

Examples of activities on patented or unpatented bottomlands or in Great Lakes waters requiring state permits are: dredging, filling, erosion control, flood control, beach nourishment, drainage sanitation control,

straightening of shorelines, the construction of permanent improvements, pipelines, cables, etc.

Permits are also required for the construction of upland channels, canals, ditches, lagoons, ponds, lakes or similar waterways, where the purpose is ultimate connection thereof with any of the Great Lakes, including Lake St. Clair.

Program Authority: (Act 247, P.A. of 1955) Great Lakes Submerged Lands Act

Also described in Direct and Significant Criteria portions of this report.

Bureau of Legal and Policy Services

Law Enforcement Division

Marine Safety Program: Goal of this regulatory program is to promote the safe use of waters of the state.

Provisions include taxation and numbering of motorboats and vessels; rules regarding the operation of vessels and motorboats, rules for carrying equipment and for the use of waters for boating. Authorities provide for issuance of permits to place buoys or beacons in waters of the state and for sanctions to conduct races and regattas and establishment of local watercraft controls. Program also regulates inspection of boat liveries and vessels carrying passengers for hire.

In addition, a pleasure boating safety program is conducted on a statewide basis for youthful boaters. The objective of the six hour course is to teach safe boating practices, develop safety attitudes, and familiarize youngsters with general boating operations.

Program Authority: (Act 303, P.A. of 1967) Marine Safety Act
(Act 257, P.A. of 1952)
(Act 288, P.A. of 1965)

Salvage Program: Main goal is to regulate the salvage of abandoned historical artifacts, including shipwrecks on the Great Lakes bottomlands.

Four types of salvage permits are issued which are general sport diver salvage, specified sport diver salvage, commercial salvage and scientific salvage permits.

Program Authority: (Act 17, P.A. of 1921) Department of Conservation Act

Office of Program Review and Project Clearance

Environmental Review and Permits Program: Overall function is to coordinate environmental quality and permit considerations throughout the Department to develop decisions and actions in the interest of a balanced, quality environment.

Tasks include advising the Department Director, the Michigan Environmental Review Board, and federal agencies; assist in the review of environmental impact statements; serve as a watch-dog on pesticide use; maintain close communications with environmental groups; and assist with Department permit review.

Program Authority: (Executive Order 1971-0)
(Executive Order 1973-9)
(Executive Order 1974-4)

Bureau of Management Services

Engineering Division

General Services Program: Program objective is to provide supportive services to the Department by supplying engineering and architectural plans, contracts, reports, surveys and study recommendations.

Program staff assists in the preparation of budget requests for capital improvements, special maintenance, remodeling and additions. Other activities include review of local government plans and approval of construction of Federal Bureau of Outdoor Recreation and recreation bond projects, coordination of review of highway plans for protection of natural resources, surveys and reports for the State's Attorney General's Office and Water Resources Commission on filling, dredging, and submerged lands projects.

Program Authority: (Act 240, P.A. of 1937) Registration of Engineers and Architects Act

Information and Education Division

Information and Education Program: Overall purpose of the program is to keep the public abreast of Department changes and to provide services to various Department functions.

Program is responsible for most Department publications, including "Michigan Natural Resources" magazine, which has more than 200,000 bi-monthly readers. Program is also involved with organization and continued

updating of slide files, photographs and films. A weekly news bulletin is sent to more than 300 sources, including media and environmental sources. Activities include coordination of television and radio programs and education and training at the Ralph A. MacMullan Conservation School.

Program Authority: (Act 380, P.A. of 1965)

Bureau of Recreation

Mackinac Island Division

Mackinac Island Program: The Mackinac Island State Park Commission has jurisdiction over approximately seven miles of shoreline on Lake Huron at Mackinac Island and approximately one-half mile on Lake Michigan at Michilimackinac State Park. The programs of the Commission as they relate to the shorelines involve preserving them in their natural state as much as possible. During periods of high water, it has been necessary to bring in and place large boulders to break the wave action and to cut down as much as possible on land erosion.

The shore areas get considerable public use, particularly in the summer months. Approximately 750,000 people visit Mackinac Island each summer, and many of them use the shore areas. Another 300,000 people use the shore areas at Michilimackinac State Park. There are roads, hiking trails, and bicycle trails adjacent to the Mackinac Island shoreline, and in some cases these radiate from the shoreline to the interior. Swimming is limited because of the lack of sand and ordinarily cold water, but there is considerable use made of the coastal areas because of the scenic and historic sites.

These areas are also interpreted from the historical point of view. Road signs, information displays containing interpretive exhibits and brochures are used. For example, the lighthouse-maritime complex at Michilimackinac State Park utilizes the shoreline for historical interpretation.

The various programs are financed through General Fund appropriations and through the sale of revenue bonds which are redeemed from admission revenues.

Program Authority: (Act 355, P.A. of 1927)

Parks Division

Parks Program: Overall purpose is to acquire, maintain and make available for the use of the public, open spaces for recreation or for the preservation of natural beauty or historic features.

Responsibilities include providing for outdoor recreation as well as regulation of land to preserve scenery, natural and historic locations. The future land acquisition program will emphasize the consolidation of

lands within the existing state parks and to acquire valuable Great Lakes shoreland frontage felt desirable for state park purposes.

The future priorities of the program include regulating and expanding park areas to meet a variety of outdoor recreation needs, upgrading the quality of park facilities, increasing the levels of environmental education and resolving use-conflict issues.

Program Authority: (Act 218, P.A. of 1919) Michigan State Park Commission Act
(Act 17, P.A. of 1921) created the Conservation Department transferring state parks to that Department and abolishing the Park Commission

Recreation Services Division

Recreation Program: The Division has the mandate to: (1) provide technical and financial assistance to local units of government in the organization and development of community recreation; (2) assume the broad responsibility of the statewide recreation planning effort, including the preparation of the Michigan Recreation Plan; and (3) establish, maintain, monitor and coordinate a statewide recreation trails plan.

Finance Assistance: Financial assistance for local recreation is provided by various state and federal programs. The Division assists local government in applying for state and federal financial programs. Within the Department, the Division is involved in the administration of two financial assistance programs, namely:

1. The Land and Water Conservation Fund.
2. Recreation Bond Program.

Technical Assistance: Technical assistance, guidance and consultant services to local, state and federal agencies regarding community recreation in Michigan is provided by Division staff working directly with representatives from these agencies including city, village, township and county officials; public and private school administrations and staff; recreation directors, private recreation entities and organizations; individual citizens; and state and federal officials. Programs of technical assistance primarily to state and local government focus on:

1. Community Organization.
2. Community Recreation Planning.
3. Recreation Program Design.
4. Recreation Facility Design.
5. Training and Promotion.
6. Agency Coordination.
7. Grantsmanship.
8. Employment Services.
9. Governor's Recreation Advisory Committee.

Recreation Planning: Preparation and maintenance of the Michigan Recreation Plan results in a significant amount of data collection and the use of specialized skills in data interpretation. This information is made available to state and local agencies seeking planning and evaluative material applicable to their agency or community. Elements included in the plan and available to interested parties are:

1. Inventory of state recreation resources.
2. Identification of recreation participators, who and where they are.
3. Projections and forecasts based on trends, travel, data, resources, age, income, etc.
4. Needs; identification of needs and deficiencies related to users and resource capacities.
5. Delivery system; description of the roles and responsibilities of the levels of government and private sector and recommend changes.
6. Definition of goals and objectives of the Department and other recreation providers.
7. Identification of the problems and issues confronting recreation systems at all levels.
8. Propose an ACTION program for the Department and program proposals for local units of government and federal agencies.
9. Analyze the provision of recreation by local agencies and propose methods of meeting program needs.
10. Review findings in the plan with local, state and federal governments, private organization and citizen groups. Gather input and consider same when implementing aspects of the plan.

Trail System Planning and Coordination: Trails system planning and coordination includes the following activities:

1. Development and maintenance of a centralized inventory and maps of all classes of recreation trails, motorized and non-motorized, and federal, state, local and other publicly available trails.
2. Inventory and analysis of the recreation potential of existing abandoned railroad lines, lines currently petitioned to be abandoned and lines potentially abandonable under the Rail Reorganization Act of 1972.
3. Development of guidelines to establish statewide systems of connecting hiking, bicycling, riding and motorized vehicle trails.
4. Preparation of a statewide recreation trails plan as an element of the recreation plan.

Program Authority: (Act 326, P.A. of 1965)

Waterways Division

Docks Program: Major program purpose is to provide for construction of transient and seasonal berths on the Great Lakes and connecting waterways.

Construction is usually conducted on a grant-in-aid basis with local units of government. Standard policy provides for an equal matching grant program, by where federal funds are available, the grant ratio is 50% federal, 40% state, and 10% local. The local unit of government is responsible for operation and maintenance of the completed facilities.

Program Authority: (Act 320, P.A. of 1947) Recreational Docking Facilities Act
(Act 125, P.A. of 1955) Commercial Docking Facilities Act
(Act 187, P.A. of 1964) Cheboygan Lock and Dam Complex Act

Harbors of Refuge Program: Initially intended to provide harbors at about 30 mile intervals, the program has been modified to provide ancillary harbors at 15 mile intervals near high population centers.

Breakwaters and channels are constructed with financial participation from the Waterways Division and thereafter maintained by the United States Army Corps of Engineers. Docks and launching ramps within the harbor are constructed by non-federal interests, usually the Waterways Division and local community. In most instances, facilities are thereafter maintained by local units of government with assistance from Waterways for repair of major damage.

Program Authority: (Act 320, P.A. of 1947)

Public Access Site Program: Program purpose is to provide boat launching facilities on the Great Lakes, inland lakes and rivers and streams.

The program consists of both state-owned and locally-owned facilities, the former being operated by the Waterways Division and currently consisting of 579 individual sites, and the latter being conducted under a grant-in-aid program. Grants of up to 50% of the cost of a launching facility will be made to a local unit of government providing that unit of government furnishes the land, 50% of the project cost, and agrees to thereafter operate and maintain the facility.

Program Authority: (Act 337, P.A. of 1939)

Bureau of Renewable Resources Management

Fisheries Division

Access and Facility Development Program: Program purpose is to improve or construct access sites for use by fishermen.

With the success experienced in the introduction of salmon to Michigan waters, it has become apparent that access and facilities must be provided to accommodate large numbers of fishermen in relatively small areas each fall. Access and facility development includes fishing piers on the Great Lakes for shore fishermen.

Program Authority: (Act 17, P.A. of 1921) Creation of Department of Conservation

Artificial Spawning Marsh and Rearing Pond Program: Basic function is to provide adequate spawning and rearing conditions for the production of certain species of fish.

Construction and management of Northern Pike marshes and Walleye rearing ponds falls under this management activity. Pike and Walleye are stocked into waters where natural reproduction is lacking or is insufficient to maintain the fishery.

Program Authority: (Act 196, P.A. of 1957) Fish Breeders Act
(Act 230, P.A. of 1925) Discretionary Power Act

Fisheries Research Program: Main goal of this program is to provide supportive services to other fisheries programs.

Research activities and projects encompass practically all fisheries subprograms. Research provides short- and long-term review of the technical aspects of various subprogram activities. Research serves to improve existing programs and indicate direction for future years.

Program Authority: (Act III, P.A. of 1951) Dingel-Johnson Enabling Act
(Public Law 85-264)

Fish Passage and Barriers Program: Primary objective is to provide upstream passage for anadromous fish such as Great Lakes salmon and steelhead, and to construct barriers to prevent movement of spawning sea lamprey.

With the explosion of participation and interest in the Great Lakes salmon and steelhead programs, emphasis is directed toward construction of passage facilities which not only expand sport fishing opportunities, but also permit viewing by spectators of the annual salmon and steelhead migrations.

Program Authority: (Act 123, P.A. of 1929) Fish Passage Act

Habitat Protection Program: Primary objective is to protect fish habitat from the effects of various activities which may threaten fish production and perform corrective measures on degraded habitat.

Existing habitat requires protection from such activities as dredging, filling, road improvements, pipelines and other uses. Field personnel make preliminary investigations on new water use applications. Program staff cooperates with several other Department divisions in evaluating proposed projects.

Program Authority: (Act 230, P.A. 1925) Discretionary Power Act
(Act 123, P.A. 1929) Fish Passage Act
(Act 247, P.A. 1955) Great Lakes Submerged Lands Act

Hatchery and Production Program: The primary program goal is to assure an adequate supply of fish for planting to maintain a desirable population level of preferred species and supplement natural reproduction when necessary, especially for salmonid species.

Comprehensive plans for Michigan's fish hatchery program and a complete hatchery water quality evaluation have been completed. As a result of the studies, major remodeling of existing facilities was recommended. The hatchery and production program is high in Division importance and budget allocation. Species of fish produced at facilities sustain many statewide programs. Other vital services of this program include implementation and administration of fish disease control measures for public and private production facilities.

Program Authority: (Act 196, P.A. of 1957) Fish Breeders Act

Inventory and Assessment Program: This program functions as a supportive element for other fisheries programs. Data on fish populations and conditions provide necessary research for ongoing fisheries management.

Activities include inland lake and stream mapping, Great Lakes and inland assessment neting, electro-fishing, creel census, chemical and physical surveys of fish populations.

Program Authority: (Act 17, P.A. of 1921) Creation of Department of Conservation

Regulations Program: Overall program emphasis is aimed to control fish harvest and regulate methods of taking fish in both the commercial and sport fishing areas.

Scientific application of fish harvest rules is an extremely important fisheries management tool. Most game fish species are protected by closed seasons during spawning periods and natural reproduction is assured by minimum size limits which delay harvest until fish are sexually mature. Sport fishing creel limits and commercial catch quotas serve to distribute the catch among fishermen and regulate the total harvest of certain species.

Program Authority: (Act 165, P.A. of 1929) Michigan Sportsmen Fishing Law
(Act 84, P.A. of 1929) Commercial Fishing Law

Forestry Division

Forest Fire Program: Program objective is to minimize the frequency of forest fires and the extent of damages to natural resources and personal property.

Activities include maintaining fire field offices and repair shops throughout the state, providing aerial fire detection whenever and wherever necessary, providing information programs about fire prevention and control, administering the Department's communications, safety, air operations, and emergency services programs, acquiring federal excess property vehicles for local fire control agencies, constructing and maintaining roads and bridges on state land, and assisting other divisions in their programs.

Program Authority: (Act 329, P.A. of 1969) Forest Fire Law

Forest Management Program: General goal is to manage the state forests and to provide advice and assistance for management of private forests, inclusive of trees, plants, soils, water, air, minerals, fish and wildlife in such a manner as to yield a combination of products and services which provide the greatest economic, social and recreational benefits for the public.

Activities include improving the accessibility of state forests consistent with environmental protection and safety measures; establishing primitive and natural areas; developing management means to reduce the number of conflicts over use of forest resources; responding to changing trends in recreational pursuits; including ongoing evaluation of ORV recreation; providing timber, wildlife and other forest products, consistent with other management concerns; seeking management methods which maximize public use of state forests while maintaining resource protection; and encouraging protection and development of private forests for maximum contribution of public benefits.

Program Authority: (Act 193, P.A. of 1911) Land Eschanges
(Act 10, P.A. of 1953) Easements for Public Utilities

Forest Pest Control Program: Basic program goal is to protect forest resources from damages caused by insect pests.

Formal surveys are designed and conducted annually for the purpose of evaluating the threat and current and potential impact of principle forest species. In addition, general surveillance is made of state-owned forests and problems reported to entomologists. Ground and aerial surveys are used. Problem areas are checked and control measures recommended. Application of control measures depends upon conditions and may result in modification of silvicultural practices; infrequent aerial application of pesticides; pesticides applied by ground crews; oak wilt cooperative control program with the Michigan Department of Agriculture.

Major emphasis is placed on greater reliance of silvicultural forest management methods, thus reducing the need for use of chemical pesticides. Development of these methods require considerable field studies, which can be conducted cooperatively with other agencies.

Program Authority: (Act 17, P.A. of 1929) Protection and Conservation of Forest Resources

Forest Recreation Program: Main objective is to provide outdoor recreation in a forest setting through a network of campgrounds with a minimum of facilities such as hand operated pumps, vault type toilets, fire circles, and refuse containers. Forest recreation includes shore-to-shore hiking, natural areas, forest drives, hiking trails and snowmobile trails. One hundred and seventy state forest campgrounds are dispersed throughout 3,700,000 acres of state forest lands.

Program Authority: (Act 380, P.A. of 1965) Executive Organization

Office of Surveys and Statistical Services

Surveys and Statistical Services Program: Primary function is to serve as statistical and survey specialists for all of the DNR.

Major activities include surveying licensed hunters and sport fishermen to obtain estimates of harvests and effort, devising methods and conducting surveys for fish and wildlife population estimates, and consulting about mathematical and statistical matters with fisheries and wildlife researchers as well as other workers. Data is supplied to others for input into management decisions as well as for letters, legal briefs, talks, charts, and reports. Technical supervision is provided for various permit selections such as hunter's choice deer permits, turkey permits, and advance registration for waterfowl hunting at certain managed areas.

Program Authority: (Executive Order 1973-2a)

Wildlife Division

Endangered Species Program: Basic goal is to maintain for future generations all species of Michigan wildlife (some now rare and endangered), through maintenance and development of essential habitat to correct environmental deficiencies.

Program includes identification of endangered species in Michigan along with management guidelines to protect. Management guidelines are implemented by different Department divisions in cooperation with state and federal agencies. The Kirtland's Warbler protection activities is a major program element.

Program Authority: (Act 203, P.A. of 1974) Endangered Species Act

Farmland Urban Wildlife Program: Program is directed to evaluate and improve hunting habitat areas, primarily in farmland/urban areas.

The habitat improvement program involves major changes in plant succession on southern Michigan state game and recreation areas, providing proper land management on a continuing basis, treating approximately 10,000 acres annually. Also, development and refinement of an annual large-scale pheasant put-take program provides hunting opportunity on public lands close to urban areas.

Other program tasks include statewide surveys of pheasants, bob white quail, turkeys, and to a lesser degree, morning doves, Hungarian partridge, and experimentally released pheasants; surveys provide population data, production and kill information statewide.

Program Authority: (Act 230, P.A. of 1925) Protection and Preservation of Wildlife
(Act 275, P.A. of 1911) Protection of Game and Regulation of Take and Possession

Forest Wildlife Program: Primary function is to plan, develop and administer forest management activities.

Wildlife species are inventoried and then managed through establishment of hunting regulations and development of habitat improvement programs on state-owned lands. Cooperative land management programs are also developed on federal and private lands. Special land acquisition, land management programs, and special administrative regulations are developed for endangered or threatened species living in forests.

Program Authority: (Act 230, P.A. of 1925) Protection and Preservation of Wildlife
(Act 275, P.A. of 1911) Protection of Game and Birds and Vegetation of Take and Possession

Research Program: Overall program purpose is to sample, evaluate and test various components of wildlife management to assure wise use of resources and wildlife propagation.

Four sections pursue programs of scientific study: Forest Wildlife, Farmland Wildlife, Waterfowl and Wetlands, and Pathology and Physiology. Projects and investigations are carried out following accepted procedures of research design and scientific method.

Field studies include: (1) controlled tests of large-scale deer habitat improvement at three levels of intensity, with measurement of effects upon animals, vegetation and people (2) region-wide surveys of state game areas to determine how people are using them and to what extent various uses conflict with management objectives; (3) studies of ducks and the habitats they select in their reproductive cycle, to learn their requirements and how they can be optimally fulfilled through wetlands

management; and (4) studies of a Canada goose flock established in southern Michigan to determine its size, its nesting site selection and its interactions with people. Research on penned deer is carried on to better define nutritional requirements and to learn how behavioral and physiological patterns will interact with management efforts. Clinical and laboratory methods are used to monitor, diagnose and evaluate wildlife health and disease factors, and research is done on certain specific diseases as needed, because of potential problems involving human health, domestic animals and other wildlife.

Program Authority: (Act 230, P.A. of 1925) Protection and Preservation of Wildlife
(Act 286, P.A. of 1929) Game Law

Waterfowl Management Program: Broad goals are designed to provide quality recreation for 100,000 waterfowl hunters and to provide viewing opportunities for 1½ million non-hunters.

Specific goals include acquisition and maintenance of wetlands, increase public awareness of viewing and hunting opportunities, development of observation facilities, roads and other service facilities. Program activities include long-range planning, data collection, monitoring for disease and pollution, habitat investigations, cooperation with other state and federal programs, and public information. Wetlands programs effect coastal area management in three ways which are: (1) regulation of waterfowl hunting and populations through selection of regulations, establish of refuges and sanctuaries, and control of human use of these areas; (2) preservation of existing habitat by an active land acquisition program and by cooperation with other Department divisions to regulate dredging and filling operations; (3) development of improvement of wetlands habitats, and associated upland parcels. This involves construction of dikes, weirs, pump stations and ditches to control water levels. It also includes a farming program partially involving sharecroppers.

Program Authority: (Act 28, P.A. of 1887) Appointment of Fish and Game Warden
(Act 280, P.A. of 1909) Creation of Public Domain Commission
(Act 275, P.A. of 1911) Protection of Game and Birds
(Act 230, P.A. of 1925) Protection for Wildlife
(Act 286, P.A. of 1929) Game Laws

Wildlife Services Program: Primary function is to provide a number of administrative, functional and supportive services to entire wildlife program.

Activities involve general regional and district administration, land exchange and acquisition, coordination of game area land use, office management, in-service training programs, budget and program development, graphic arts, and public relations, nuisance bird and animal control,

administration of wildlife regulatory programs concerned with wild animal permits for pets, animal exhibits, animal importation and scientific collection, administration of Wildlife Sanctuary Law, Game Breeder's License Law, Shooting Preserve Law and the Special Dog Training Areas Law. Program staff also administer a DNR-landowner cooperative hunting program (Williamston Plan).

Program Authority: (Act 184, P.A. of 1929) Wildlife Sanctuaries
(Act 191, P.A. of 1929) Game Breeder's Law
(Act 134, P.A. of 1957) Shooting Preserves

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

Following are descriptions of Michigan Department of Public Health incentive programs involved with coastal management in Michigan.

Bureau of Disease Control and Laboratory Services

Microbiological Services Program: Primary function is to provide laboratory diagnostic services to aid in the control of diseases of public health importance.

The Bureau of Disease Control and Laboratory Services provides the Department of Natural Resources with bacteriological analyses of lake and stream waters; potable waters, waters from sewage lagoons and waters from special bacteriological problem situations.

Program Authority: (Act 109, P.A. of 1907) Water Examinations
(Act 98, P.A. of 1913) Water Works and Sewage Disposal Systems
(Act 294, P.A. of 1965) Ground Water Quality Control
(Act 218, P.A. of 1967) Control of Bathing Beaches
(Act 288, P.A. of 1967) Subdivision of Land

Bureau of Environmental and Occupational Health

Campgrounds Program: Future goals are designed to assure that all persons using campground facilities, and those living near campgrounds are provided a safe and quality environment to minimize the spread of communicable disease and safeguard against health and safety hazards.

Campgrounds are inspected yearly. Sanitarians in local health departments conduct inspection activities, initial reviews of plants and inspections of governmentally owned campgrounds. Primary emphasis is directed towards evaluating water supplies and sewage treatment in campground facilities.

Program Authority: (Act 171, P.A. of 1970) Campground Act.

Covered in greater detail in Land and Water Uses section of this document.

Groundwater Quality Control Program: Long-term objectives are directed toward the proper location and construction of private water supplies to prevent hazards to users, and to prevent degradation of groundwater resources from land disposal of wastewater discharges in collaboration with the Department of Natural Resources.

Major program activities include training of well contractors and local health department personnel; engineering and geologic consultation; registration of well drillers and participate with field work. Where problems

with private water supplies exist, they often are created by poor well construction and improper abandonment of old wells which can provide avenues for pollution to enter groundwater aquifers.

Program Authority: (Act 294, P.A. of 1965) Groundwater Quality Control
(Act 218, P.A. of 1972) Dewatering Wells and Contractors

Insect and Rodent Control Program: The primary objective of the program is to promptly identify and control arthropod-borne diseases. Another important goal of the program is to prevent adverse health effects on citizens and their environment because of the improper handling and use of pesticides.

The program is directed to the control of insect and rodent problems in the state. Emphasis is aimed at the control and prevention of Eastern Equine Encephalomyelitis, California Encephalitis, dog heartworm, St. Louis Encephalitis, Rocky Mountain Spotted Fever, and other diseases transmitted by arthropods. Field consultants advise on possible rodent or insect problems.

Training and information about the control of rats and arthropods is a major program responsibility.

Program Authority: (Act 146, P.A. 1919) Powers of Health Director

Land Subdivision and Planning Program: Long-range goals are developed to assure in-depth review and investigation of proposed development to determine adequacy of individual water supplies and on-site sewage disposal in proposed plats, increasing the effectiveness of local health participation in community growth and development in stimulating local communities to develop water and sewer services on a cooperative basis, and to promote sound land use planning procedures.

Specific program tasks include providing technical services in the formulation of subdivision evaluations; consultation and coordination with the Department of Natural Resources, Division of Land Resource Programs, to assure that public health and environmental health considerations are incorporated into a state land use plan; provide planning and technical expertise to community developments; review of environmental impact statements, dredging and filling applications; annexation or incorporation proposals; conducting group training sessions for sanitarians, engineers, surveyors, and developers; and to consult with all levels of government with regard to aspects of land and water management.

Program Authority: (Act 288, P.A. of 1967, as amended) Subdivision Control Act

Marina Sanitation Program: Program objectives are formed to assure that all users of pleasure watercraft and persons living near or associated with marinas are provided a safe and quality controlled environment to

provide safeguards against health and safety hazards on a limited basis, staff provide consultation to marinas, investigate complaints and attend to emergency situations. Authorities require that marinas selling fuel or providing dockside service centers must provide pump-out facilities for marine toilet holding tanks on pleasure watercraft. Marina docks that hold 15 watercraft or less are exempt from the requirement. Facilities must also include safe drinking water supplies, proper toilet facilities, adequate sewage disposal, and proper handling of refuse. Authorities also regulate the disposal of oil and sewage from watercraft.

Program Authority: (Act 167, P.A. of 1970) Watercraft Pollution

Mobile Home Park Program: Program goals are directed to assure that all residents of mobile home parks and those living near such parks are provided a safe and quality environment to minimize the spread of communicable disease. State and local responsibilities include inspection of sites, review of plans, issuance of construction permits and issuance of licenses. Sewage treatment and water supplies are primary health concerns. Continuing emphasis is placed on increasing surveillance of water supplies and sewage treatment systems.

Program Authority: (Act 243, P.A. of 1959, as amended) Mobile Home Parks

Covered in greater detail in Land and Water Uses section of this document.

Public Swimming Pool Program: Program objectives are to prevent the transmission of disease and toxic substances and to prevent drownings and other accidents due to faulty design, construction, equipment and operation of public swimming pools.

The major program activities include review and approval of plans and specifications for new public swimming pools and for modifications to existing ones, field evaluations of new public pools for issuance of initial operation permits, and the annual renewal of operation permits. These activities are carried out by staff engineers working on a district basis. Local health departments participate by providing comments on proposed projects, making comprehensive inspections, making recommendations about operation permits, reviewing operation reports, and arranging for weekly bacteriologic sampling.

Program Authority: (Act 230, P.A. of 1966) Public Swimming Pools

Public Water Supply Program: Most important program objectives include the prevention of waterborne diseases attributable to water supplies, providing and maintaining adequate quantity and high quality water on existing and future water supply systems, and providing sufficient water supplies to areas critically deficient in local water resources.

Water supply activities are carried out by assigning geographic areas to district engineering personnel. Engineering plans for construction are reviewed and monthly operation reports are provided. Major program

emphasis is directed towards continued surveillance for the type of supply utilized and adequacy of required treatment. Other tasks include examination of water supplies for semi-public purposes, implementing electronic processing systems for storage and retrieval of data, and to recognize, identify and eliminate potential health hazards from water supplies.

Program Authority: (Act 98, P.A. of 1913, as amended) Public Water Supplies
(Act 346, P.A. of 1968) Fluoridation of Public Water Supplies

Radiological Health Program: Broad, long-term goals include the development of reasonable balance between accepted exposure risk to radiation and commensurate benefit; elimination of all non-productive public, patient and occupational radiation exposure; and the reduction of probability for radiation accidents; and the development of viable plans to cope with accidents.

Authorities provide responsibility to coordinate radiation control programs of all state departments. Rules are promulgated for licensing and registration of radiation sources, as well as to establish standards related to such sources. Licensing regulations apply to all radiation sources, excluding nuclear power plants and sources licensed by the Nuclear Regulatory Commission. Regulations are developed in accordance with Nuclear Regulatory Commission and other federal guidelines.

Other program responsibilities include off-site radiation monitoring of nuclear power plants, investigations of hospitals, doctor's offices, industry and educational institutions, evaluation of structural shielding plans of existing and new radiation facilities.

Program Authority: (Act 54, P.A. of 1965) Atomic Energy Agreement
(Act 305, P.A. of 1972) Radiation Control

MICHIGAN DEPARTMENT OF STATE

Following is a description of a Michigan Department of State incentive program involved with coastal management in Michigan.

History Division

Michigan History and Research Program: Primary functions are to conduct research to identify archaeological and historic sites to protect and investigate historic and archaeologic resources; to compile and analyze reports and documentation relating to Michigan history; and to assist other agencies with historical and archaeological research and information efforts.

Specific shorelands related tasks include a report on the distribution and abundance of archaeological sites in the coastal area of Michigan. History Division functions as a review and research arm under the Historic Districts Act. Through the authority of this law, local units may establish a historic district, accept federal and state funds for historic purposes, and administer the grants.

Program Authority: (Act 169, P.A. of 1970) Historic Districts

Historic Districts Act discussed in greater detail in Direct and Significant Criteria section of this report.