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Public Review Draft

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Ohio Coastal Zone Management Program

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**State of Ohio
Department of Natural Resources
Division of Water**

This report was prepared by the Ohio Coastal Zone Management Staff
Columbus, Ohio
May 1979

To receive a copy of the Ohio Coastal Zone Management Program Public
Review Draft or further information about the program, please contact:

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This draft document represents an important milestone in the effort to develop a program for the management of Ohio's Lake Erie resources. The natural, economic, recreational and aesthetic values of Lake Erie and its shore are important to the environmental quality and continued growth of the entire state. This recommended program encourages development in suitable locations, promotes conservation of limited resources, supports preservation of environmentally sensitive resources and provides a strong role for local government in the joint local-state management process.

This document is the product of a four year effort conducted to reflect the concerns of the coastal residents, their elected officials, various interest groups and affected state and federal government agencies. Distribution of this document initiates an intensive program review process leading to federal approval for implementation funding assistance of approximately one million dollars annually through the federal Office of Coastal Zone Management.

Following the initial distribution and review period, a series of public meetings will be held in the coastal area to discuss the Program's recommendations and to receive local input. I invite you to participate in the review of this proposed Program and encourage you to watch for these meeting announcements. Your comments will assist us in the preparation of the final CZM program document. Written comments on this draft should be addressed to:

Bruce E. McPherson, Administrator
Coastal Zone Management Program
Ohio Department of Natural Resources
Fountain Square, Building E
Columbus, Ohio 43224

Sincerely,

A handwritten signature in black ink that reads 'Robert W. Teater'. The signature is written in a cursive style with a large, looping 'R' at the beginning.

ROBERT W. TEATER
Director

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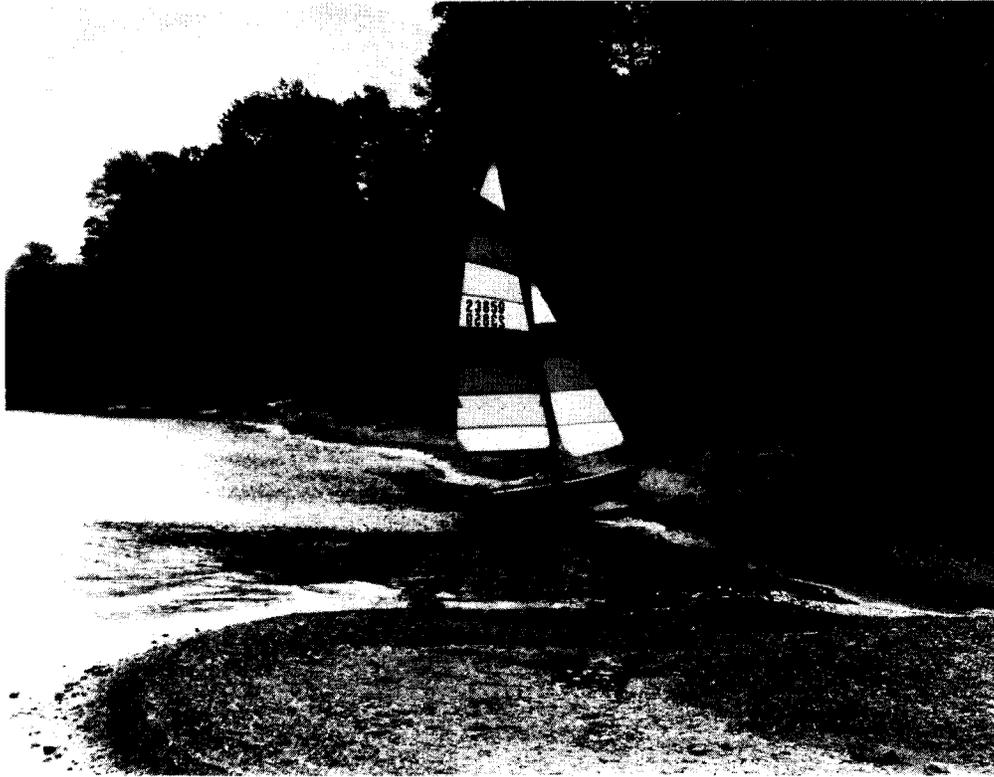
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OHIO COASTAL ZONE MANAGEMENT PROGRAM
PUBLIC REVIEW DRAFT

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Summary

Summary



The coastal area of Lake Erie is the single most valuable land-water area in Ohio. Proper management is essential for the wise use of its resources. Ohio's Coastal Zone Management (CZM) Program establishes an institutional arrangement to deal with important coastal resources and issues in a comprehensive manner. The Program will: 1) strengthen coordination of government activities at all levels, 2) designate many important natural and economic resource areas to receive special management attention by local and state governments and 3) provide opportunities for the public to advise all implementation activities.

The Coastal Zone Management Act was enacted by Congress in 1972 to encourage coastal states to develop and implement programs to protect coastal resources, address coastal problems and provide for management of coastal development. Planning for erosion, shoreline access and energy facility siting is required by 1976 amendments to the Act.

The Ohio Department of Natural Resources was designated by the Governor in 1973 to develop a CZM Program for Lake Erie and its shoreline in Ohio. First year efforts developed a resource data base and determined local government and citizen interest in Lake Erie. In the Program's second year, detailed studies of important resources and problems were conducted and county advisory groups were formed to discuss policy alternatives and designation of geographic areas for special management attention. The third year of program development resulted in proposed objectives and policies together with the organization network and authorities to implement them.

For the most part, state and local agencies will use existing authorities to implement this program. New authorities are needed

only to address coastal erosion and flooding. All authorities will be coordinated and exercised in a manner consistent with the adopted CZM Program.

The overall goals of the CZM Program are:

To preserve, protect, develop and, where possible, to restore or enhance the resources of Ohio's coastal area for this and succeeding generations; and

To achieve wise use of land and water resources in the coastal area through development and implementation of management programs by local, state and federal agencies and public involvement.

To achieve these goals the CZM Program recommends specific policies within the following six issue areas:

Coastal Erosion and Flood Hazard Areas,

Air and Water Quality,

Recreation and Public Access,

Environmentally Sensitive Areas,

Energy and Mineral Resources, and

General Development.

The financial resources to carry out these policies will come in part from annual federal grants of approximately \$1.3 million from the Office of Coastal Zone Management, U.S. Department of Commerce. These grants will be passed through to local governments and state agencies to fund implementation activities. The 20% state matching funds required will be met through program administration, technical assistance and public education.

CZM Program technical and financial assistance will support a variety of local programs and projects. Grants will help local governments to work with their residents to establish erosion protection districts, designate and manage Special Management Areas, determine and mitigate impacts of energy facilities through Coastal Energy Impact Program grants, and plan shoreline recreation facilities.

The Program does not propose that state government take over local zoning authorities; it does not consist of a detailed, parcel-by-parcel land use plan to guide development; it does not create a new level of government nor a new agency with broad powers in the coastal area; and it does not affect existing development.

Basically, the Program establishes a set of objectives and policies regarding use and development of the coastal area and provides sufficient intergovernmental coordination and impetus to ensure that they are implemented. Implementation of the CZM Program will provide many important benefits to Ohio and especially to the residents and local governments in the coastal area. The benefits include:

Technical and financial assistance to public and private shoreline owners for erosion control;

Streamlining of various governmental coastal permit procedures;

Improvement of coastal water and air quality;

Protection of coastal natural areas, wetlands and fish and wildlife habitats;

Expansion of coastal recreation opportunities, especially boating and fishing access;

Consideration of coastal resources in the siting of energy production facilities; and

Technical and financial assistance to local governments to develop and implement comprehensive shoreline master plans.

Specifically, the CZM Program proposes: 1) a boundary for the coastal area; 2) improved coordination of governmental activities in the coastal area; 3) policy recommendations within the six issue areas; and 4) designation of Special Management Areas. Each of these topics is explained below.

Boundary of the CZM Program's Coastal Area

The CZM coastal area extends from shore out to the U.S.-Canadian boundary (including all islands), and inland to the extent necessary to include all land and water uses which have a direct and significant impact on coastal waters and resources (see Figure 2). The exact delineation of the inland boundary was largely determined

by county shoreline advisory groups. The groups included within the boundary all lands subject to lake flooding and erosion, estuaries and wetlands, coastal recreation areas, activities degrading water quality and areas of lake-related uses. Within the coastal area, only land and water uses with a direct and significant impact on coastal resources will be subject to the CZM Program.

Organization and Authorities

Since CZM Program objectives and policies will be implemented by existing local and state agencies, several means are proposed to provide adequate coordination.

The Department of Natural Resources, as designated lead agency, will administer the Program, monitor its implementation, provide policy consistency findings for federal projects and permits, serve as an initial, informal means of conflict resolution and assist state and local agencies in considering the national interest in their projects.

State agencies will implement appropriate state responsibilities on a day-to-day basis. Proposed legislation will require activities of these agencies to be consistent with program objectives and policies. A State Agency Coordinating Group will facilitate effective and efficient implementation.

Local governments and agencies will implement local responsibilities on a day-to-day basis. Coordination of such implementation efforts will be through county planning commissions, local CZM advisory groups and ODNR as lead agency.

Areawide planning agencies will assist in review of coastal activities and programs through their clearinghouse responsibilities to assure adequate consideration of regional interests in coastal projects.

Objectives and Policies

Objectives and policies for the six issue areas appear below. Most of these policies can be implemented without new legislation, e.g. enforcement of air and water quality regulations by the Ohio Environmental Protection Agency and local boards of health. However, proposed legislation will require communities to establish a 30-year erosion hazard area setback for construction and participation in the regular phase of the National Flood Insurance Program or adoption of equivalent regulations.

Other CZM Program policies do not rely upon legislative authority for their implementation, e.g. restoration of wetlands which have been altered or destroyed. However, means are recommended to encourage their implementation.

CZM POLICIES AND RECOMMENDATIONS

Coastal Erosion and Flood Hazard Areas

OBJECTIVES

Minimize the dangers and impacts of erosion and flooding upon the health, safety and welfare of the occupants of Ohio's coastal area;

Promote effective hazard area protection; and

Eliminate public investment for noncompatible development in coastal hazard areas.

- POLICY (1) ODNR, through its Lake Erie erosion assistance program, will assist local governments and shoreline residents in establishing erosion protection districts and will continue to provide grants for approved erosion control projects.
- POLICY (2) Local shoreline governments will establish and enforce a building setback regulation for new construction and redevelopment within the designated 30-year Lake Erie erosion hazard area.
- POLICY (3) Local shoreline governments with designated flood hazard areas will participate in the National Flood Insurance Program or adopt equivalent flood plain regulations.
- POLICY (4) ODNR, by centralizing Lake Erie permitting authorities within one office, will expedite and simplify permit application procedures for erosion control and coastal activities.
- POLICY (5) ODNR will develop a shoreline erosion assistance manual for public and governmental agency use in addressing erosion problems.

POLICY (6) The State of Ohio will participate in the International Joint Commission's investigations to determine the feasibility of reducing extreme high water levels in Lake Erie.

AIR AND WATER QUALITY

OBJECTIVE

Enhance the quality and management of air and water in the coastal area.

- POLICY (7) Ohio EPA and the Ohio Air Quality Development Authority will continue to develop means to control air pollution, enforce state air quality regulations and provide financial and technical assistance for planning and implementing air pollution control strategies in the coastal area.
- POLICY (8) Ohio EPA and the Ohio Water Development Authority will continue to develop means to control water pollution, enforce state water quality regulations and provide financial and technical assistance for planning and constructing water pollution control projects in the coastal area.
- POLICY (9) ODNR and OEPA, through implementation of Ohio's Agricultural Pollution and Urban Sediment Pollution Abatement Program and federal Clean Water Act requirements, will improve efforts to reduce sediment and nutrient loadings reaching Lake Erie.
- POLICY (10) The CZM Program will assist local governments and port authorities in locating acceptable dredged material disposal sites in accordance with standards of the federal Clean Water Act.
- POLICY (11) ODNR, Ohio EPA and other state and local enforcement officers will improve enforcement of the state dumping and stream litter laws along Lake Erie and its tributary waters.
- POLICY (12) Ohio EPA, through requirements of the federal Clean Water Act, the Toxic Substances Control Act, Resource Conservation and Recovery Act and the Ohio Solid Waste Disposal Law, will regulate discharge and disposal of toxic and hazardous materials.

RECREATION AND PUBLIC ACCESS

OBJECTIVE

Improve existing and develop new public shoreline recreation and access opportunities.

- POLICY (13) ODNR, through the State Parks Program, Community Parks and Recreation Program and Urban Rivers and Waterfront Development Program, will continue to increase public recreation facilities and access in the coastal area.
- POLICY (14) ODNR, through its fish and wildlife management programs, will continue to increase public fishing access and hunting opportunities in the coastal area.
- POLICY (15) ODNR, through the Division of Watercraft community assistance program and the Lake Erie refuge harbors program, will continue to increase opportunities for public recreational boating in the coastal area.
- POLICY (16) ODNR, through the Statewide Trails Program, will encourage development of hiking and bicycling trails along the Lake Erie shoreline.
- POLICY (17) The CZM Program will encourage the retention of surplus public property along the shoreline in public ownership.

ENVIRONMENTALLY SENSITIVE AREAS

OBJECTIVE

Protect, conserve and restore environmentally sensitive areas including wetlands, natural areas, wildlife habitat and endangered species habitat.

- POLICY (18) ODNR, through the State Nature Preserve Program, Natural Heritage Program, Natural Landmark Program and permit and project review, will preserve endangered species, significant natural areas and other natural features.
- POLICY (19) ODNR, through state review of permits pursuant to Section 404 of the Clean Water Act and through CZM Act federal consistency provisions, will protect coastal wetlands.

- POLICY (20) ODNR, by financial and technical assistance, will encourage local governments to preserve environmentally sensitive areas through local planning, regulation and management.
- POLICY (21) ODNR, through landowner education and promotion of the federal Water Bank Program will encourage restoration of wetlands which have been altered or destroyed.
- POLICY (22) ODNR, through state wildlife areas and fish and wildlife management programs will preserve and protect important fish and wildlife habitats and will review all activities affecting these areas.
- POLICY (23) ODNR, through continued research, cooperation and coordination with adjacent states and Canada, will encourage improved management of Lake Erie fisheries.

ENERGY AND MINERAL RESOURCES

OBJECTIVES

Assure that development and utilization of the coastal region's energy resources and supplies occurs in a wise and responsible manner;and

Promote wise use and proper extraction of mineral resources in the coastal area.

- POLICY (24) The Ohio Power Siting Commission, through the established state certification process, will regulate the siting of electric generation and transmission facilities in the coastal area.
- POLICY (25) The CZM Program, through specific project review and planning assistance to local governments and port authorities, will encourage the location of coastal energy refining, storage, stockpiling and transshipment facilities in or adjacent to commercial ports and electrical generating facilities.
- POLICY (26) ODOE, through the Coastal Energy Impact Program, will provide for assessment and analysis of anticipated energy facility impacts in the coastal area.

POLICY (27) ODNR will continue to regulate extraction of coastal mineral resources, including oil and gas, and reclamation and sequential use of affected land.

POLICY (28) ODNR will continue to regulate drilling of oil and gas in the coastal area.

GENERAL DEVELOPMENT

OBJECTIVE

Encourage wise shoreline development in coastal communities.

POLICY (29) Local governments, through the CZM community assistance program, will be encouraged to develop and implement comprehensive shoreline development plans consistent with CZM Program objectives.

POLICY (30) ODNR will establish a CZM Local Assistance Office in the coastal area to facilitate implementation of the CZM Program and to achieve greater coordination among shoreline residents, coastal communities and state government.

POLICY (31) ODNR in cooperation with the Department of Administrative Services, will investigate and recommend legislation for the determination of a static boundary line between the state-held trust lands (the bed of Lake Erie) and other shoreline property.

POLICY (32) Ohio's Lake Erie ports, through a CZM Port assistance program, will be encouraged to develop comprehensive port facility and development plans.

POLICY (33) ODNR and the regional transportation agencies in the coastal area, through coordination with the Ohio Department of Transportation and specific plan and project review will encourage consideration of coastal concerns and resource protection in coastal transportation planning and development.

POLICY (34) ODNR, through participation on the International Great Lakes Levels Board, will support investigations of the impacts and feasibility of extending the navigation season the Great Lakes.

Policy (35) ODNR, through acquisition of shoreline access areas and coordination with local governments, will provide visual access and encourage protection of the visual quality of the shoreline.

Special Management Areas

Several types of environments as well as specific sites are proposed by the CZM Program for designation as Special Management Areas (SMAs). These designated areas are sufficiently important or unique that immediate attention should be directed toward them. A process to designate additional sites in the future is also proposed.

The Program proposes to designate both generic and site-specific SMAs in two categories, Areas of Particular Concern (APCs) and Areas for Preservation and Restoration (APRs). APCs are areas experiencing critical use pressures or problems needing management guidelines or controls. APRs are designated to preserve or restore natural, recreational or aesthetic resource values. Generic APCs and APRs refer to a group or type of area experiencing similar conflicts or problems in the coastal area, e.g. wetlands. A site-specific APC or APR identifies a single site, e.g. the Lorain Lighthouse. The proposed SMA designations are listed below.

SPECIAL MANAGEMENT AREAS

Areas of Particular Concern

Generic

- Prime fish habitats
- Ports and harbors
- State nature preserves and wildlife areas
- Coastal erosion and flood hazard areas
- Public parks and access areas

Site-Specific

- Cullen Island
- Maumee Bay State Park
- Battery Park
- Huron Harbor dredge disposal site
- Old Woman Creek Estuarine Sanctuary
- Lorain Harbor dredge disposal site
- Cleveland Lakefront State Park
- Geneva State Park

Areas for Preservation and Restoration

Generic

Wetlands

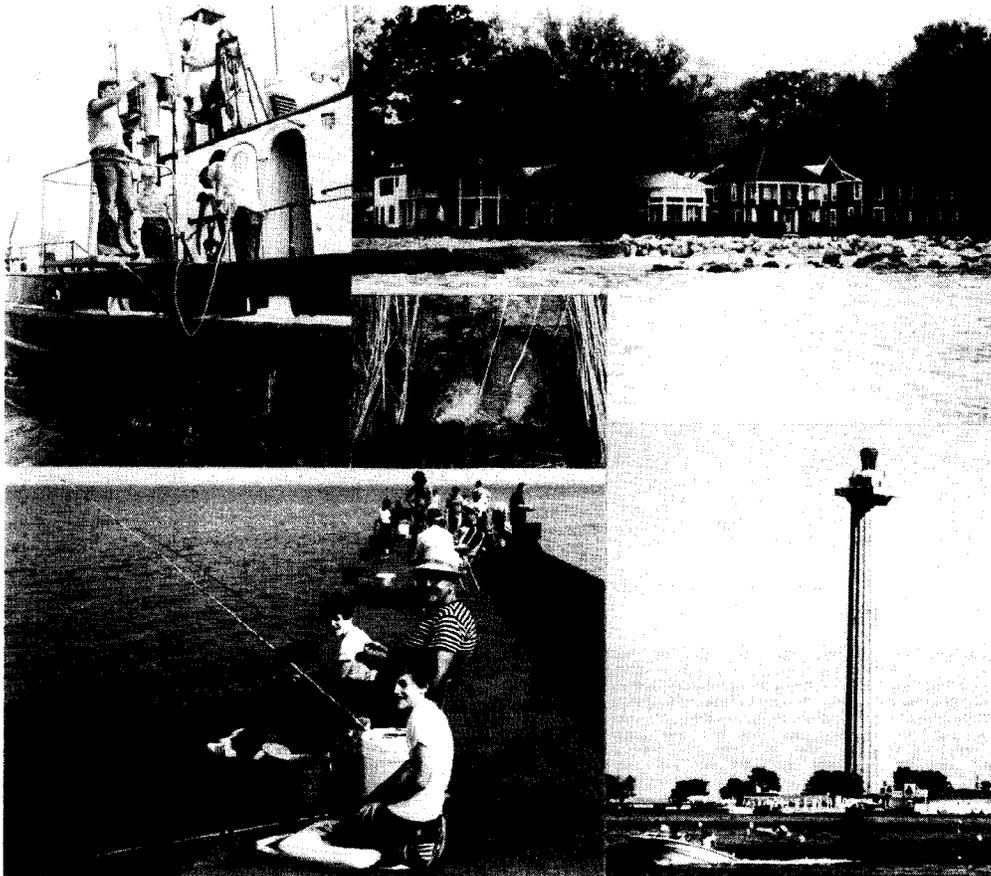
Historic and archeologic sites

Site-Specific

Wildlife Realty marshes

Lorain Lighthouse

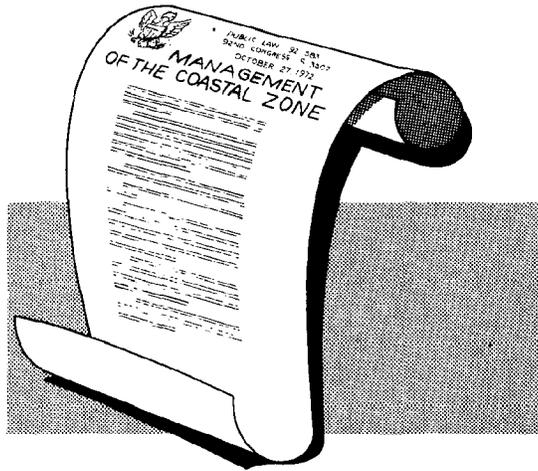
For each of these designated areas general management guidelines are specified. An agency or organization which will address concerns in the area and implement the guidelines is also specified. Program funds will assist these activities.



Introduction

Chapter 1

The Federal Coastal Zone Management Act



In response to the intense pressures upon coastal areas of the United States, Congress enacted the Coastal Zone Management Act (P.L. 92-583). This Act (CMZA) was signed into law on October 27, 1972. The CMZA 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). Substantial amendments were legislated 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 area 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 CZMA 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 derived from resource capability and suitability analyses, socio-economic considerations and public preferences;

Identifies the inland and lakeward 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 ensure conformance to it.

In developing 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 for 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 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 onshore 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, historic, 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.

PUBLIC MEETINGS
PUBLIC MEETINGS
PUBLIC MEETINGS



Chapter 2

Ohio's Program

The Governor of Ohio, by Executive Order in 1973, placed responsibility for developing a Coastal Zone Management Program within the Ohio Department of Natural Resources (ODNR). The state has subsequently accepted three annual grants from OCZM, matching them with state funds. Ohio's Coastal Zone Management (CZM) Program has been developed through the strong adherence to the following two principles:

1. Policies and program objectives must be based upon sound resource and institutional data basis; and
2. Program development must include a continual and broad-based public and local governmental involvement.

The first year of Ohio's CZM Program was largely devoted to developing the resource and institutional data bases from existing information. Twenty-seven resource types were identified, inventoried and mapped. Computerized land capability analyses (Ohio Capability Analysis Program) were initiated for the nine shoreline counties. Local citizens and governmental officials became involved through a series of workshops conducted in the counties. Opinions on coastal issues were sought through questionnaires distributed to diverse individuals, groups and agencies. Public concern was strong with regard to erosion and flooding, declining wildlife resources, loss of valuable natural and historic sites, air and water quality, mineral development and recreational problems.

The identification of issues/conflicts and gaps in the information base indicated the need for detailed studies in the

second year program. Eleven separate studies were conducted by staff from ODNR, the Ohio Environmental Protection Agency (OEPA) and the Ohio State University (Table 1). The studies included current resource data, status of the conflicts involved and recommendations for improved management.

County Advisory Groups, organized early in the second year, formed the heart of the public involvement effort. The groups were considered as models for other states' programs for their diversity of representation. Bimonthly meetings centered on nomination of areas of particular concern, determination of the coastal area boundary and designation of uses subject to management. The year culminated in the compilation of 75 policy alternatives addressing seven identified issues of public concern regarding the management of the Lake Erie shoreline.

County and regional planning commissions contributed significantly through studies which assessed the nature and extent of various land and water uses and their impacts upon the shore area.

Public education complemented public contribution. Staff members conducted numerous discussions of shoreline issues at public meetings in the coastal counties. Newsletters, brochures and information packets were distributed to coastal residents.

Third year efforts focused on taking the various recommendations and input resulting from the detailed studies, advisory groups, local governments and state agencies and developing them into a set of recommended program objectives and policies. These policies and a proposed organization and implementation mechanism, are set forth in this document as the recommended Coastal Zone Management Program for Ohio's Lake Erie shoreline.

Ohio's participation in the Coastal Zone Management Program reflects a commitment to the protection and wise development of Lake Erie's valuable resources. The state recognizes that the tremendous recreational, economic, aesthetic and ecological benefits of its shoreline present a daily challenge for citizens and government working together.

Our long and sometimes careless use of our coastal resources has seriously impaired our ability to utilize them freely. If we are to continue to reap the benefits, we must achieve an enlightened respect for these resources and others who depend upon them. We must realize the responsibilities incumbent upon us when we choose to inhabit and develop for our purposes an area which is constantly changing and subject to intense pressures. Imaginative changes are mandated now. Ohio's Coastal Zone Management Program seeks to provide the framework within which these changes can occur.

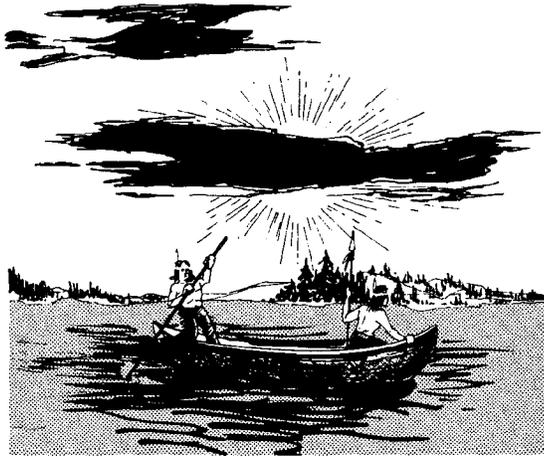
TABLE 1
STUDIES COMPLETED IN THE SECOND YEAR PROGRAM

<u>Study</u>	<u>Agency</u>
Environmental Areas Survey	ODNR - CZM Staff
Land Ownership Patterns	ODNR - CZM Staff
Sand and Gravel Resources	ODNR - Geological Survey
Fisheries Resources/Spoil Disposal Implication	ODNR - Wildlife
Island Resources	Ohio State University
Historic Resources	ODNR - CZM Staff
Flood Plains	ODNR - CZM Staff
Erosion Areas	ODNR - Geological Survey
Air Quality Assessment	Ohio EPA
Water Quality Assessment	Ohio EPA
Ports and Harbors	ODNR - CZM Staff



Ohio's Coastal Area

Chapter 3



Setting: Past and Present

The seacoasts of the United States are some of the most vital and productive ecosystems on earth. Commerce and industry's water dependence and the desirability of nearshore living have attracted fully half the U.S. population to the coastal area.

Our nation's "fourth seacoast" extends 4,600 miles along the southern shores of the Great Lakes, the largest and most important "inland sea" in the world. Ohio is fortunate to occupy a favored position along this nationally significant shoreline. The state and its citizens are entrusted with the stewardship of 262 miles of mainland and island shores and 3,277 square miles of its waters (Figure 1). Along these Lake Erie shores and within and beneath its waters, a wealth of natural, scenic and economic resources exists.

More than 15,000 acres of valuable wetlands support at least 250 species of nesting birds, including the nation's symbol, the bald eagle. The shallow waters of the island region and Maumee and Sandusky Bays provide fish breeding grounds and nurseries of worldwide significance. Salt, sand and gravel and gypsum are abundant in the coastal area, making Ohio an important mineral producer. The Lake's waters and numerous fine sand beaches attract millions of residents and visitors annually for swimming, fishing, boating and camping. The rockbound shores and slow-paced atmosphere of the Lake Erie islands provide a unique respite from mainland cares. The Lake ports' proximity to valuable midwest coal fields and grain centers has established their preeminence as transshipment points for lakewide and worldwide commerce. As a consequence, industry has become strongly dependent upon this critical location and some of the region's most important urban centers have developed here.

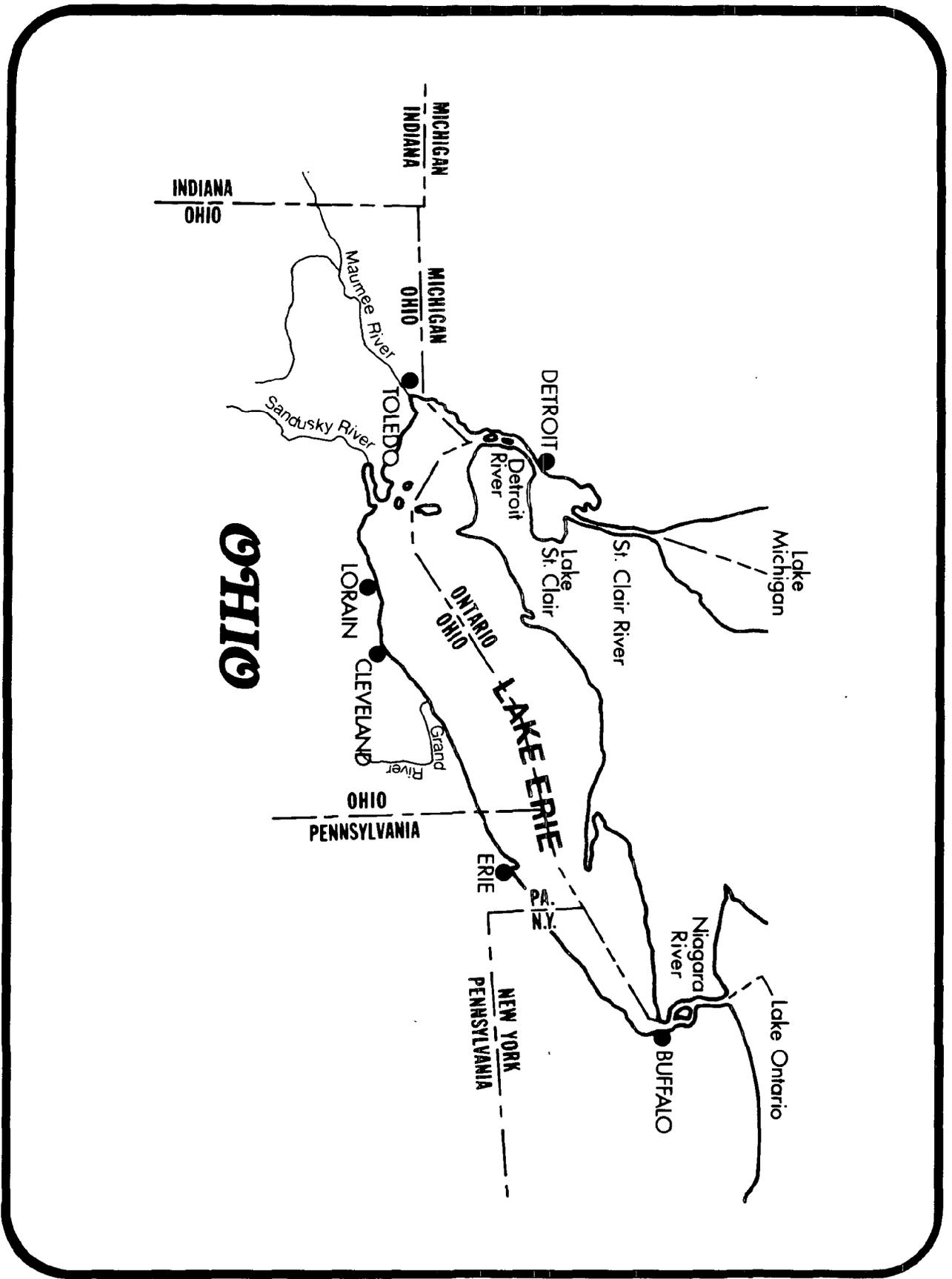


FIGURE 1

The incredible natural heritage of Ohio is the result of geologic processes over billions of years. The Great Lakes region has been shaped by molten rock, periods of sedimentation and erosion, and glacial scouring and deposition. The present land surface has been modified by weathering and erosion by the extensive lake and stream system we know today.

Volcanic-type materials formed the foundations of the region billions of years ago. Shallow seas have periodically covered the area (most recently approximately 300 million years ago) and deposited layers of sediments which later hardened into sandstone, shale, limestone and dolomite. Varying erosion resistances of these sedimentary rocks account for current landforms; nonresistant shales generally form the lake bottoms while bluffs, sills and islands are composed of the resistant limestones and dolomites. A river system emptying into the St. Lawrence or Hudson Bay cut wide valleys into these sediments.

Glacial advance into the region began between one and two million years ago. Longer winters prevented snowmelt year round, causing the Hudson Bay glacial system to spread its icy fingers as far south as Ohio, Indiana and Illinois. For a million years these ice sheets retreated and readvanced until the last retreat less than 20,000 years ago. Meltwaters at the glacier's lobes formed pools in the basins formed by glacial scouring. And thus the lakes were born. Early Lake Maumee, Lake Erie's ancestor, was the first to form, approximately 14,000 years ago. As the pools enlarged and consequently overflowed, drainage flowed to the west to Saginaw Bay, the Mississippi River and Gulf of Mexico. With the rise and fall of the lakes, various beach ridges formed and the drainage patterns changed numerous times. The present Great Lakes as a whole have emptied into the sea via the Gulf of St. Lawrence for less than three thousand years. Lake Erie has drained to the east through the St. Lawrence for 12,000 years.

Geologic processes are slow and sometimes imperceptible. Changes are continually occurring and the Lake Erie we know today will not be the same tomorrow. Bluffs and beaches erode away only to be deposited on the lake bottoms or elsewhere along the shore in new dunes and beaches. Isostatic rebound, the earth's rising from the release of the glacier's weight, is still occurring.

Lake Erie's natural, geographic and economic wealth has been recognized for thousands of years. Countless peoples have sought its bounty since the retreat of the last glaciers. Consequently, the Lake and its surrounding region have experienced a romantic and often tumultuous history.

Paleoindian hunters were the first to cull the region's resources, tracking mastodon and caribou which roamed northern Ohio nearly 14,000 years ago. The fertility of the tributary valleys, the suitability of the hillsides' rocks and clays for pottery, and the warmth provided by pelts from the marshlands' fur-bearing mammals accounted for the transition to more sedentary cultures. The Erie Indians later hunted and trapped the smaller game and fished the lakes and streams until driven out by the Iroquois.

European explorers happened upon Lake Erie in the seventeenth century on their way to the "Orient". Fur traders braved the Lake's furious and unpredictable storms, giving rise to countless stories of high adventure and shipwrecks. The American colonists finally gained dominance on the land, ending Indian influence in their 1794 victory at Fallen Timbers near the present site of Toledo. But British naval power and economic control of the fur trade continued to exclude the Americans from the waters of the Great Lakes. The fiery Battle of Lake Erie was a decisive victory for the Americans, part of a series of events which wrested supremacy from the British and finalized the U.S.-Canadian Border. The International Peace Memorial at Put-in-Bay memorializes this battle as well as an end to all war on the Great Lakes declared by the 1817 Rush-Bagot Agreement.

These many peoples who have passed through the lake region stood in awe of the vast resources they found there. Coyotes, bobcats and bald eagles inhabited the virgin forests. Lakewaters brimmed with sturgeon and sauger. Seas of grassy savannahs supported wild oats three meters high. This deceptive bounty prompted J. Disturnell to remark in 1863 that the fisheries were "so inexhaustible...that were a population of millions to inhabit the lake shore, they would furnish an ample supply...without any sensible diminution." And thus the need for resource stewardship was overlooked by the new wave of settlers attracted to the region during our nation's early history.

By 1900, the population of the Lake region (bordering counties) had not yet reached one million. But, despite Disturnell's optimism, the 815,000 settlers had wrought considerable changes in the land, the Lake and its resources. Twenty-five million acres of woodlands were cleared in fifty years in the late 1800's. Savannahs were burned and swamps tiled and drained. The Lake soon became the dumping grounds for raw sewage from scores of small towns. Effluents from tanneries, breweries, chemical works, oil wells, and mines, and sawdust from lumber yards on all the Great Lakes accelerated the normally slow process of the Lake's aging. Nearly the entire sturgeon population was beaten with axes or hauled onto shore, heaped into piles and burned.

In time, the U.S. and Canada began to recognize the serious threats to the Great Lakes region. It became apparent to both countries that degradation at any point on the Lakes by any state, province or nation could have widespread effects upon the Lakes and their shoreline residents. Thus, in 1909 the U.S. and Canada joined to sign the Boundary Waters Treaty, under which the International Joint Commission (IJC) was established in 1912. The Commission became responsible for investigating and making recommendations for resolving specific Great Lakes problems referred to it by either or both of the two governments. The U.S. established its unilateral interest in Great Lakes water quality with pollution investigations conducted from 1910-1912 by the U.S. Public Health Service.

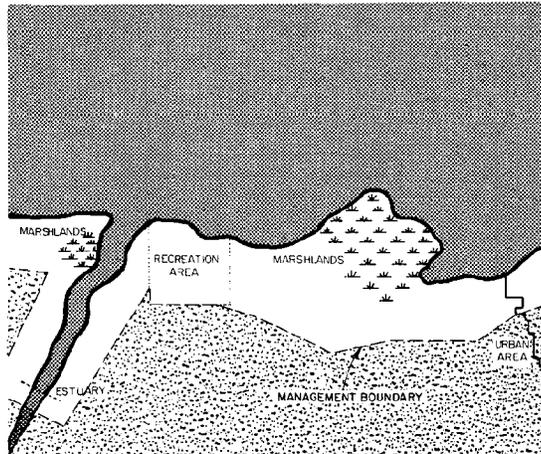
But the problems have not been easily resolved and new conflicts have frequently arisen. The difficulties inherent in developing critical shorelands peaked as the 1960's came to a close. Public concern was inflamed when oil on the Cuyahoga River burned in 1969, high coliform bacteria counts closed beaches and the anoxic area of the Central Basin extended to 6,600 km² in 1970. The Lake had not died but it had aged--15,000 years since 1920. Utilities, navigation, industries, municipalities, recreation and environmental interests joined to voice their concern over losses due to low lake levels. Hundreds of thousands of acres of prime agricultural farmlands and valuable marshes had been lost to urbanization.

This public outcry stimulated a massive governmental response. Numerous organizations, task forces, agencies and federal, state, local and provincial laws were created to respond to the multifaceted conflicts. The International Great Lakes Levels Board was formed under the IJC in 1964 to deal with the many aspects of lake level control and its impacts. In 1970, the binational Project Hypo was conducted to determine the degree and causes of oxygen depletion in Lake Erie's Central Basin. Organizations such as Great Lakes Tomorrow, Citizens for Clear Air and Water and the League of Women Voters became vocal defenders of the environmental integrity of Ohio's Lake region. The Great Lakes Basin Commission took an initial step toward developing a comprehensive plan for water resources use in their Framework Study begun in 1970. The Study compiled resource information on limnology, navigation, shore erosion, recreation and numerous other areas and included recommendations for improved resource development. The Ohio State University's Stone Laboratory conducted research on Lake Erie's fish and benthic communities and the effects of various land and water uses upon them. The Ohio Department of Natural Resources, Division of Wildlife, developed a Fish Work Group Report which addressed the entire Lake Erie drainage basin through specific biological, social and economic discussions. This 1970 report reviewed historic, current and projected human activities and their impacts upon the Lake Erie fisheries resources.

Regional agencies (Northeast Ohio Areawide Coordinating Agency and Toledo Metropolitan Area Council of Governments) were charged with carrying out the local water quality management plans mandated by the Federal Water Pollution Control Act Amendments of 1972. Also in 1972, the IJC established the Water Quality Board and the Pollution from Land Use Activities Reference Group (PLUARG). In the same year Congress passed the Coastal Zone Management Act (P.L. 92-583).

With the many structures in existence today the U.S. and its states and Canada and its provinces now have the framework within which to address the multiplicity of Great Lakes problems. Development of Ohio's Coastal Zone Management Program under the guidelines of P.L. 92-583 has been directed toward utilizing this framework to effect sound and rational decisions regarding its coastal resources.

Chapter 4



Extent of the Coastal Area

The CZM Program has conducted an extended process to determine which areas along the Lake Erie shoreline should be included within the officially designated coastal area. The Coastal Zone Management Act of 1972 provided the basis for initial work toward the boundary determination. The Act requires that the coastal area extend from shore to the U.S.-Canadian border, and inland to the extent necessary to address "land and water uses which have a direct and significant impact on coastal waters". Additional federal regulations pursuant to the Act require that the coastal area also include designated Special Management Areas and transitional areas between aquatic and terrestrial environments including, but not limited to, wetlands, islands and beaches.

The CZM Program conducted a survey of natural resources within the nine counties adjacent to Lake Erie in Ohio and attempted to determine which are coastally related. The Program identified important coastal issues through analysis of results from 9,000 questionnaires. The CZM Program staff then identified eight alternative means for boundary determination which would deal with some or all of these issues and resources. The Program recommended a boundary (approximately 1,000 meters inland from the shoreline) which would be enlarged around critical coastal resource areas and reduced in most urban and developed areas.

All of this information was subsequently discussed by local advisory groups in each shoreline county as a basis for local determination of the inland boundary. Consensus developed that the following uses and resources should form the basis for boundary determination:

- Lands subject to lake erosion;

- Lands subject to lake flooding;
- Estuaries and coastal wetlands;
- Lake-related recreation areas, including beaches;
- Activities impacting lake water quality; and
- Areas with lake-related uses.

Most local advisory groups established a subcommittee to recommend the boundary line in their area. Members felt that recognizable cultural and political features should form the boundary where possible. Maps were then presented to the full advisory groups for review and approval. Local units of government and county planning agencies also reviewed the recommended boundary, either through the advisory groups or at special meetings. Based upon this input a final boundary recommendation was made. A narrative description of the boundary follows below, and maps showing the recommended boundary are contained in the Appendix H. A generalized map of the coastal area appears in Figure 2.

Ohio's coastal area will thus include all Lake Erie waters in the state, all islands and inland shorelands as mapped. It was developed in coordination with the CZM Programs of Michigan and Pennsylvania. Excluded from the coastal area are all lands owned, leased, held in trust by or whose use is otherwise subject solely to the discretion of the federal government (see Appendix A for a list of such properties). In Ohio, the Ottawa National Wildlife Refuge system and several dredged material disposal sites are the only substantial tracts under federal authority.

The boundary depicts the recommended coastal area within which the CZM Program will be administered. Not all land and water areas or activities within the defined coastal area, however, will be affected by the CZM Program. Rather, only coastal activities and resources directly related to the lake environment or impacting upon it will be "managed activities". These are described in detail in Chapter 14, Organization and Implementation Authorities. All units of government within the coastal area will be eligible for local management and implementation grants as well as technical and planning assistance.

DESCRIPTION OF THE INLAND BOUNDARY OF THE COASTAL AREA*

LUCAS AND WOOD COUNTIES

Commencing at the intersection of Hagman Road and the Ohio-Michigan state line and proceeding south on Hagman Road 3,000 feet;

Northeast from that point along a line to Suder Avenue at a point 1,000 feet south of the Ohio-Michigan state line;

South on Suder Avenue to Benore Road;

Northwest on Benore Road to Matzinger Road;

Southwest on Matzinger Road to Stickney Road and continuing along a line at the same compass heading to a point on Detroit Avenue 300 feet north of the center of the Ottawa River;

South on Detroit Avenue to I-75;

East on I-75 to Stickney Avenue;

North on Stickney Avenue 3,000 feet;

Northeast from that point along a line to the intersection of Ottawa River Drive and I-75;

East on Ottawa River Drive to 108th Street;

East on 108th Street to 290th Street;

South on 290th Street to intersection of 290th Street extended south and Summit Street;

Southwest on Summit Street to Knapp Street;

Southwest on a line parallel to the center thread of the Maumee River to intersection of Orchard Street and Broadway;

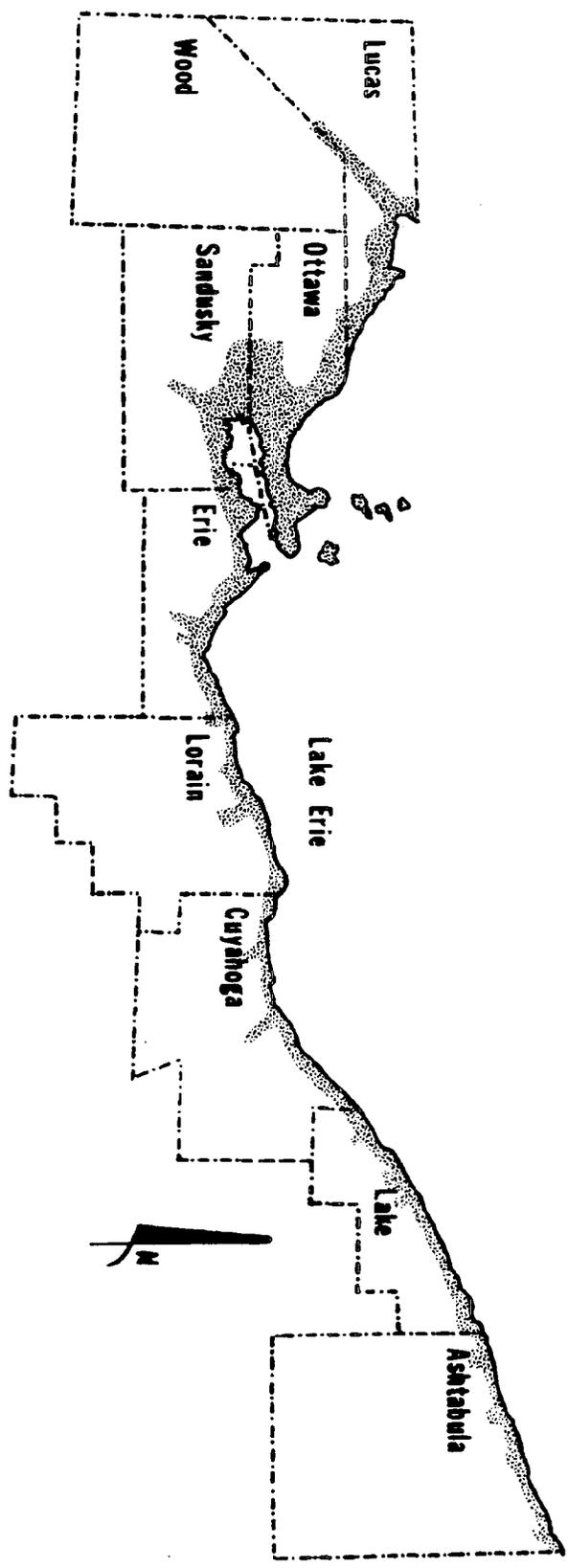
Southwest on Broadway, City of Toledo, to intersection of Glendale Avenue and Harvard Boulevard;

Southwest on River Road, City of Maumee, to Broadway, City of Maumee;

*Unless otherwise noted the boundary follows the center of railroad and highway rights-of way.



Inland Boundary of Ohio's Coastal Area



MAP 1

Southwest on Broadway, City of Maumee, to intersection of western corporate boundary of City of Maumee and South River Road;

Southwest on South River Road to Interstate Route 475;

Southeast on Interstate Route 475 into Wood County to Toledo-Grand Rapids Road (Rt. 65);

Northeast on Toledo-Grand Rapids Road to intersection of Front Street and southern corporate boundary of the City of Perrysburg;

Northeast on Front Street to northern corporate boundary of the City of Perrysburg;

Southeast on northern corporate boundary of City of the Perrysburg to Baltimore and Ohio Railroad tracks;

Northeast on Baltimore and Ohio Railroad tracks into Lucas County to the Conrail tracks;

North on Conrail tracks to Fassett Street;

East on Fassett Street to Yondota Street;

North on Yondota Street to the Conrail tracks;

Northeast on the Conrail tracks to a line extended southwest from Front Street;

Northeast on line extended southwest from Front Street and on Front Street to Millard Avenue;

Southeast on Millard Avenue to Otter Creek Road;

Northeast on Otter Creek Road to Cedar Point Road;

East on Cedar Point Road to Norden Road;

South on Norden Road to Corduroy Road;

East on Corduroy Road to Yondota Road;

South on Yondota Road to Veler Road extended west;

East on Veler Road extended west and on Veler Road to Bono-Port Clinton Road (Route 2);

South on Bono-Port Clinton (Route 2) to Lucas-Sandusky County line;

OTTAWA COUNTY

Continuing south on Route 2 from the Lucas-Ottawa County line and then east on Route 2 to Route 590;

South on Route 590 to the point common to sections 22, 23, 26 and 27 of Benton Township;

East from that point along the section line to Benton-Carroll Road;

North on Benton-Carroll Road to midpoint of east boundary line of Section 24 of Benton Township;

East from that midpoint to Genzman Road;

East on Genzman Road and on Genzman Road extended east, to Carroll-Erie Road;

South on Carroll-Erie Road to Route 163;

West on Route 163 to Route 19;

South on Route 19 to Portage River South Road;

Southeast on Portage River South Road to Woodrick Road;

South on Woodrick Road to the Sandusky-Ottawa County line;

SANDUSKY COUNTY

East from Woodrick Road along the county line to Church Road;

South on Church Road to petroleum pipeline;

Southeast on pipeline to Route 53;

Southwest on Route 53 to Port Clinton Road;

South on Port Clinton Road to North Front Street;

Southwest on North Front Street to the Norfolk and Western Railroad tracks;

Southwest on the Norfolk and Western Railroad tracks to the Norfolk and Western and Conrail tracks;

South on the Norfolk and Western and Conrail tracks to Sand Avenue;

North on Sand Avenue to the Norfolk and Western Railroad tracks;
Northeast on the Norfolk and Western Railroad tracks to North River Road;
North on North River Road to Kelley Road;
East on Kelley Road to Werth Road;
North on Werth Road to North River Road;
East on North River Road to Gable Road;
Northeast on Gable Road to the petroleum pipeline;
Southeast on the pipeline to Route 6;
East on Route 6 to Erie-Sandusky County line;

ERIE COUNTY

Continuing east on Route 6 from the Sandusky-Erie County line through Margaretta and Sandusky Townships and the City of Sandusky to Monroe Street in eastern Sandusky;
East on Monroe Street and its extension as First Street to Farwell Street;
South on Farwell Street to its end and continuing south from that point along line to the intersection of Perkins Avenue and Route 250;
East on Perkins Avenue to the Conrail tracks;
East on the Conrail tracks to a point 800 feet west of Camp Road, then east on Route 6 to the intersection with Route 13 in Huron;
South on Route 13 to a point 4,500 feet south of the Scheid Road intersection;
East from that point along a line across the Huron River to River Road;
North on River Road to the Conrail tracks;
East on the Conrail tracks to Berlin Road;
Southeast on Berlin Road to Darrow Road;

East on Darrow Road to Route 61;
North on Route 61 to the Conrail tracks;
Northeast on the Conrail tracks to West River Road in Vermilion;
Southeast on West River Road to the Erie-Lorain County line;

LORAIN COUNTY

Continuing south on West River Road from the Erie-Lorain County line to Route 2;
East on Route 2 to Vermilion Road;
North on Vermilion Road to Route 6 (Cleveland-Sandusky Road);
East on Route 6 to Oak Point Road;
Southeast on Oak Point Road to Yorktown Road;
East on Yorktown Road to Longbrook Road;
North on Longbrook Road to Kolbe Road;
North on Kolbe Road to Beavercrest Drive;
West and north on Beavercrest Drive to Route 6;
East on Route 6 to the Baltimore and Ohio Railroad tracks;
Southeast on the Baltimore and Ohio Railroad tracks to Lake Terminal Railroad tracks;
East on Lake Terminal Railroad tracks to Lorain-Sheffield corporate boundary;
North on the corporate boundary to southern extension of Lake Breeze Road;
North on this extension to Route 611;
West and northwest on Route 611 to Colorado Boulevard;
Northwest on Colorado Boulevard to Route 6 (East Erie Avenue in Lorain);

East on Route 6 (Lake Road in Avon Lake) to Lorain-Cuyahoga County line;

CUYAHOGA COUNTY

Continuing east on Lake Road from the Lorain-Cuyahoga County line to Avalon Drive;

East on Avalon Drive to Beach Cliff Boulevard;

North, east and southeast on Beach Cliff Boulevard to Wooster Road;

South on Wooster Road to Rocky River Reservation boundary line;

South, east and south on property line to Hilliard Boulevard;

East on Hilliard Boulevard to Riverside Drive;

North and northeast on Riverside Drive to Graber Drive;

Northwest on Graber Drive to Detroit Road;

Northeast on Detroit Road to Sloane Avenue;

North on Sloane Avenue to Lake Road;

Northeast on Lake Road to Lake Avenue;

North and east on Lake Avenue to Cove Avenue;

North on Cove Avenue to Edgewater Drive;

East on Edgewater Drive to Cleveland Memorial Shoreway;

East on Cleveland Memorial Shoreway to West 28th Street;

North on West 28th Street to Division Street;

West on Division Street to River Road;

Northeast on River Road to Elm Road;

Southeast on Elm Road to Riverbed Road;

South on Riverbed Road to the Conrail tracks;

East on the Conrail tracks to the Baltimore and Ohio Railroad tracks;

South on the Baltimore and Ohio Railroad tracks to Harvard Avenue;
East on Harvard Avenue to the Newburgh and South Shore (N&SS) Railroad tracks;
North on N&SS Railroad tracks to the Baltimore and Ohio Railroad tracks;
North on the Baltimore and Ohio Railroad tracks to Canal Road;
North on Canal Road to The Norfolk and Western Railroad tracks;
North on the Norfolk and Western Railroad tracks to Cleveland Memorial Shoreway;
Northeast on Cleveland Memorial Shoreway to the Conrail tracks;
Northeast on the Conrail tracks to East 99th Street;
North on East 99th Street to Lake Shore Boulevard;
Northeast on Lake Shore Boulevard to Cuyahoga-Lake County line;

LAKE COUNTY

Continuing northeast on Lake Shore Boulevard to East Shore Boulevard;
Northeast on East Shore Boulevard to Minnewana Road;
Northeast on Minnewana Road to the corporate boundary of the City of Eastlake;
East on Eastlake corporate boundary to Erie Road;
South on Erie Road to Lake Shore Boulevard;
Northeast on Lake Shore Boulevard to Forest Road;
North on Forest Road to Portage Drive;
East on Portage Drive to Lake Shore Boulevard;
Northeast on Lake Shore Boulevard to Beachview Road;
North and northeast on Beachview Road to Eaglewood Drive;
South on Eaglewood Drive to Lake Shore Boulevard;

Northeast on Lake Shore Boulevard to Orchard Road;
North on Orchard Road to Erie Drive;
Northeast on Erie Drive to Chestnut Drive;
East on a line from the intersection of Chestnut Drive and Erie Drive to the intersection of Mohawk Drive and Tioga Boulevard;
East on Mohawk Drive to Iroquois Avenue;
North on Iroquois Avenue to Sunset Drive;
Northeast on Sunset Drive to Seminole Street;
East on a line from the intersection of Sunset Drive and Seminole Street to Cedarwood Road;
North on Cedarwood Road to Sunset Drive;
Northeast on Sunset Drive until dead end;
East on Sunset Drive extended eastward to Reynolds Road;
North on Reynolds Road to Salida Road;
Northeast on Salida Road to Andrews Road;
North on Andrews Road to Route 283;
East on Route 283 to Harbor Drive;
Northeast on Harbor Drive to 580 foot contour line;
580 foot contour line around Marsh Creek and Mentor Marsh to Route 44 and Route 283;
North on Route 44 to northern corporate boundary of Grand River;
East on Grand River corporate boundary to Williams Street;
Southeast on Williams Street to Olive Street;
East on Olive Street to River Street;
South on River Street to Richmond Road;
South on Richmond Road to Route 535;

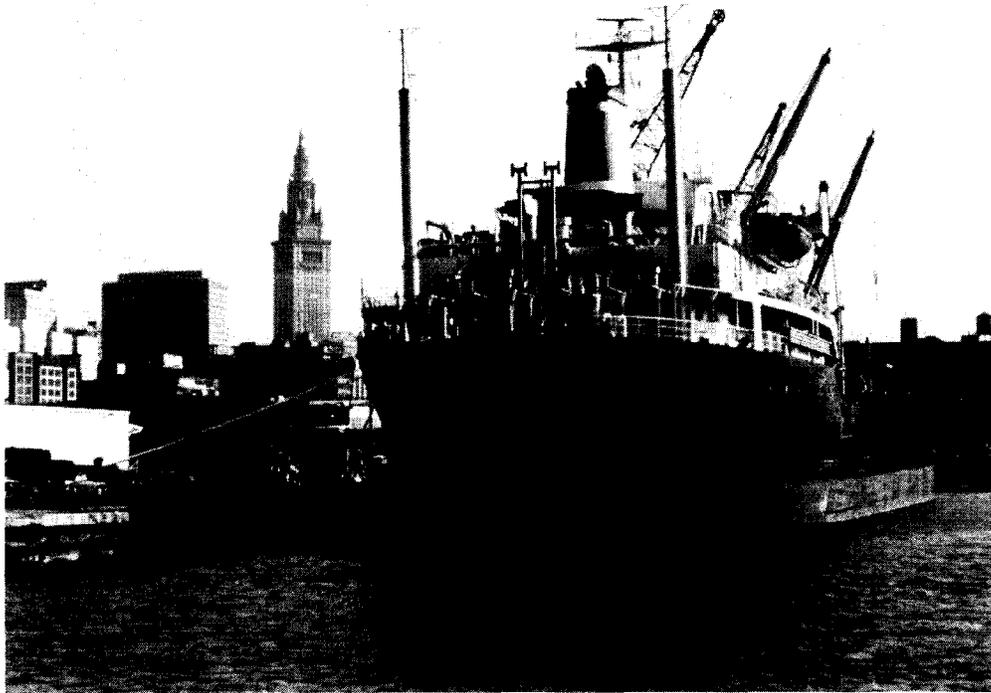
Northwest on Route 535 to Stanford Street;
East on Stanford Street to Skinner Avenue;
North on Skinner Avenue to St. Clair Street;
West on St. Clair Street to East Street;
South on East Street to High Street;
Northwest on High Street to 4th Street;
East on 4th Street to Eagle Street;
North on Eagle Street to Prospect Street;
East on Prospect Street to the corporate boundary of the Village of Fairport Harbor;
South on Fairport Harbor corporate boundary to 2nd Street;
East on 2nd Street and 2nd Street extended east to the Fairport, Painesville and Eastern (FP&E) tracks;
East on FP&E Railroad tracks to Perry Park Road;
North on Perry Park Road to Parmly Road;
East on Parmly Road to power lines;
Northeast on power lines to eastern property line for the Perry Power Plant;
North on the eastern property line of the Perry Power Plant to Lockwood Road;
East on Lockwood Road to McMackin Road;
North on McMackin Road to Chapel Road;
East on Chapel Road to Homestead Road;
North and east on Homestead Road to East Tuttle Park Road;
North on East Tuttle Park Road to Northway Drive;
East on Northway Drive to Sandgate Road;
North on Sandgate Road to Shore Drive;

East on Shore Drive to Dunbar Road;
South on Dunbar Road to Berwick Street;
East on Berwick Street to Travers Road;
North on Travers Road to Devon Street;
East on Devon Street to Redbird Road;
North on Redbird Road to Lake Road;
Northeast on Lake Road to Bennett Road;
North on Bennett Road to Lake Road;
East on Lake Road to Dock Road;
South on Dock Road to Vrooman Road;
East on Vrooman Road to County Line Road;
North on County Line Road to Lake Road and the Lake-Ashtabula County
line;

ASHTABULA COUNTY

Continuing east on Lake Road from the Lake-Ashtabula County line to
Geneva State Park boundary;
South and east on Geneva State Park boundary to Route 534;
North on Route 534 to Route 531;
East on Route 531 to Myers Road;
South on Myers Road 100 feet;
Northeast on a line parallel to Route 531 and 100 feet south of Route
531 to Nineveh Road;
North on Nineveh Road to Lake Road in Ashtabula;
East on Lake Road to West 9th Street;
East on West 9th Street to Conrail tracks;
South on Conrail tracks to Lake Avenue in Ashtabula;

Southeast on Lake Avenue to West 24th Street;
Northeast on West 24th Street to Harbor Avenue;
North on Harbor Avenue to Conrail tracks;
North on Conrail tracks to East 6th Street;
East on East 6th Street to Lake Road;
East on Lake Road to La Bounty Road;
South on La Bounty Road 100 feet;
Northeast on a line parallel to and 100 feet south of Lake Road to
Route 193;
North on Route 193 to Lake Road;
East on Lake Road to Lake Avenue in Conneaut;
East on Lake Avenue to the Besemer and Lake Erie (B&LE) Railroad
tracks;
South on B&LE Railroad to Conrail tracks;
East on Conrail tracks to Woodworth Road;
North on Woodworth Road to Lake Road;
East on Lake Road to Ohio-Pennsylvania state line.



***Objectives
&
Policies***

Chapter 5

Coastal Erosion and Flood Hazard Areas



Erosion

Erosion along Ohio's Lake Erie shoreline is a serious problem requiring increased awareness and effective action by the state. Each year nearly 800,000 cubic meters (1.6 million tons) of Ohio's land resources erode into the Lake with significant and far-reaching implications for public health, safety and welfare. The most recent period of high lake levels, in the early and middle 1970's, caused an estimated \$100 million in damages to commercial, residential, industrial and agricultural property. Nearly 1,200 habitable structures are currently located within the 30-year recession hazard area and therefore could be lost to erosion by the year 2010. Beaches have given way to wind and water action, leaving bluffs increasingly vulnerable to the forces of erosion. The erosion of dikes and barrier beaches has allowed the destruction of numerous wetlands of great value to coastal wildlife populations.

Sedimentation resulting from erosion is an additional problem beyond the obvious losses of land and property. Resultant turbidity adversely affects recreational opportunities and increases costs of public water supply treatment. Sedimentation disrupts valuable fish habitat, adversely affecting the fisheries resource and the commercial and recreational fishing it supports. These factors indicate a need for increased concern and financial interest in the erosion problem.

Four factors have hindered our ability to reduce the erosion problem. First, the lack of a comprehensive erosion management plan continues to encourage a piecemeal, fragmented approach by individuals and public entities. Public officials thus have no basis upon which to determine priorities and costs for protection.

The processes and effects of erosion on Ohio's Lake Erie shoreline have been well documented by the Division of Geological Survey. Recession rates have been studied and recorded from the year 1876. Recent studies by the Division of Geological Survey, partially funded by the Coastal Zone Management Program, describe and graphically depict the shoreline setting, beaches, recession rates including projections of the shoreline location in 2010, and the location of existing protective structures. ODNR's Office of Chief Engineer has built a number of protective structures on the shoreline and has provided advice to communities and private citizens. Data indicating degrees of effectiveness of various types of structures are therefore available. The Office of Chief Engineer and the Buffalo District of the U.S. Army Corps of Engineers are currently conducting a demonstration program to test low cost offshore protective structures. The effects of structures upon the shoreline have been discussed in reports by the Geological Survey.¹ The financial and physical losses incurred have been documented in the recent Shoreline Damage Study conducted by the Ohio State University for the U.S. Army Corps of Engineers. Sufficient data are now available to develop a practical assistance manual which will indicate for elected officials, communities and private citizens what can be done and approximately how much it might cost.

Second, the overlapping of authorities in the permit review process causes unnecessary confusion and delay for shorefront owners and governmental entities desiring to protect their shores. Depending upon its nature and location, placement of a structure may require permits, leases or certification from four government agencies--U.S. Army Corps of Engineers, ODNR Office of the Chief Engineer, Ohio Environmental Protection Agency and Ohio Department of Administrative Services. In addition, local boards of health regulate nuisance materials placed in Lake Erie or on its banks or bluffs for erosion control. The U.S. Army Corps of Engineers permit programs operated by authority of Section 404 of P.L. 92-500 and Section 10 of the River and Harbor Act of 1899 are the most comprehensive. The Section 404 and Section 10 permit application process considers numerous factors including water quality, fish and wildlife, aesthetics, water supply and safety. This review process solicits comments from all related federal, state and local agencies as well as the public in general. A more streamlined permit process is needed to facilitate the construction of approved erosion protection projects.

¹ Robert P. Hartley, Effects of Large Structures on the Ohio Shore of Lake Erie, Ohio Department of Natural Resources, Division of Geological Survey, 1964; and Charles H. Carter, Natural and Manmade Features Affecting the Ohio Shore of Lake Erie, Ohio Department of Natural Resources, Division of Geological Survey, 1973.

Third, financing constraints have proven to be insurmountable for the private property owner as well as local communities. Despite the availability of funds for state cost sharing of erosion projects through the mineral extraction revenue fund administered by the Chief Engineer, no projects to protect private property have been funded. Only a few have been completed successfully by local governments. Project planning and design costs and high overhead costs resulting from public bidding and contracting requirements contribute to the difficulty of cost sharing the project. An improved system of providing financial assistance must take into account the need to overcome these constraints.

Finally, planning for shoreline protection must recognize that erosion is a natural process which will never be eliminated entirely. Despite the hazards to public health, safety and welfare, and the ability to predict future erosion rates, construction continues within known high-risk erosion areas. Erosion control structures are not feasible or cost effective in many areas along the shoreline. Other management approaches including building and zoning regulations must be considered. The need for a locally administered erosion setback requirement is apparent. Developers and potential shorefront owners must also be provided with adequate erosion hazard information upon which to base development decisions. Increased efforts are necessary to provide this information and management assistance.

Flooding

The destructive capacity of lake and riverine flooding in Ohio's Lake Erie coastal area also has been observed and documented. A CZM report, Coastal Hazards: Erosion, Recession and Flooding, outlines the causes and effects of flooding and describes the critical nature of the area where lake and riverine flood forces collide. Previous studies have detailed the results and damages from particular occurrences on a localized basis. In addition, the U.S. Geological Survey recently published a report documenting flooding damages for the entire Ohio Lake Erie basin. The U.S. Department of Housing and Urban Development administers the National Flood Insurance Program which is providing detailed flood hazard information to all designated and participating communities. All but two of Ohio's designated coastal flood hazard communities are currently participating in the Flood Insurance Program. Most have flood insurance studies completed or underway; however, thus far, many have not adopted all of the required regulations (Table 2).

While the areas subject to flooding are reasonably well-known, the timing and occurrence of such flooding is highly unpredictable, often resulting from sudden storms and short-term fluctuations in barometric pressure. More predictable flooding takes place in the

TABLE 2

NATIONAL FLOOD INSURANCE PROGRAM PARTICIPATION STATUS
OF COASTAL MUNICIPALITIES AND TOWNSHIPS
APRIL 1979

<u>Community</u>	<u>Participation Status¹</u>	<u>Flood Insurance Study²</u>
ASHTABULA COUNTY		
Ashtabula	E	C(03-13-79)
Conneaut	E	C(03-14-79)
Geneva-on-the-Lake	E	C(01-03-79)
Ashtabula Township	E	U
Geneva Township	E	U
Saybrook Township	E	U
LAKE COUNTY		
Eastlake	E	C(03-03-76)
Fairport Harbor	NP	C(09-11-78)
Grand River	E	C(08-21-78)
Mentor	R	C(06-03-76)
Mentor-on-the-Lake	E	C(09-12-78)
North Perry	E	C(08-22-78)
Painesville	R	C(01-14-75)
Wickliffe	E	C(01-29-79)
Willoughby	E	C(02-01-79)
Willowick	E	C(10-02-78)
Madison Township	E	U
Perry Township	E	U
Painesville Township	E	U

¹E - emergency program, final approved ordinances not in effect

R - regular program, final approved ordinances in effect

NP - nonparticipating communities

²C - completed study, completion date given

U - study underway

P - study proposed

N - no study proposed as yet

TABLE 2 (continued)

<u>Community</u>	<u>Participation Status¹</u>	<u>Flood Insurance Study²</u>
CUYAHOGA COUNTY		
Euclid	E	P
Bay Village	R	C(08-18-76)
Bratenahl	E	P
Cleveland	R	C(03-23-77)
Lakewood	R	C(09-29-76)
Rocky River	R	C(10-27-77)
LORAIN COUNTY		
Avon Lake	R	C(08-18-76)
Lorain	R	C(12-09-76)
Sheffield Lake	R	C(11-10-76)
Vermilion	R	C(10-27-77)
Brownhelm Township	R	C(12-31-70)
ERIE COUNTY		
Bay View	R	C(06-02-76)
Huron	R	C(03-22-77)
Sandusky	R	C(07-22-76)
Berlin Township	E	U
Huron Township	E	U
Perkins Township	E	U
Margaretta Township	E	U
Vermilion Township	E	U
Kelleys Island	E	P
SANDUSKY COUNTY		
Riley Township	E	C(10-25-77)
Townsend Township	E	C(10-25-77)
Rice Township	E	C(10-25-77)
Sandusky Township	E	C(10-25-77)
Fremont	E	P
OTTAWA COUNTY		
Marblehead	NP	P
Oak Harbor	E	P
Port Clinton	R	C(06-01-76)
Bay Township	R	C(03-22-77)
Benton Township	R	C(03-22-77)
Carroll Township	R	C(03-22-77)
Catawba Township	R	C(03-22-77)
Danbury Township	R	C(03-22-77)
Erie Township	R	C(03-22-77)
Portage Township	R	C(02-33-77)
Put-in-Bay	R	C(06-01-76)

TABLE 2 (continued)

<u>Community</u>	<u>Participation Status¹</u>	<u>Flood Insurance Study²</u>
WOOD COUNTY		
Perrysburg	E	P
Rossford	E	P
Perrysburg Township	E	P
LUCAS COUNTY		
Harbor View	R	
Oregon	R	C(10-18-76)
Toledo	E	U
Jerusalem Township	E	U
Washington Township	E	U
Maumee	E	U

spring when rainfall and snowmelt occur at a time when the ground is either saturated or frozen and runoff is high. Ice jams also compound the flooding problem at these times.

During periods of high lake levels, such flooding can be especially severe. A single storm in April 1966 produced an instantaneous lake stage of 7.1 feet above Low Water Datum (568.6 feet) at Toledo Harbor and caused nearly one million dollars in damages along Ohio's western shoreline. More recently, waves and high water resulting from the November 1972 storm caused an estimated \$22 million in damages to Ohio's shores. This storm, one of northern Ohio's most severe natural disasters, forced hundreds from their homes.

In addition to property damages and human suffering, lake and riverine flooding compound erosion and sedimentation problems.

Again, despite the vast amount of data compiled, continued development of Lake Erie's flood plains occurs, endangering the public health, safety and welfare. A firm local and state effort toward improving regulation and providing for information dissemination is necessary.

OBJECTIVES

Based on the preceding findings, the following objectives shall guide the management of coastal hazard areas:

Minimize the dangers and impacts of erosion and flooding upon the health, safety and welfare of the occupants of Ohio's coastal area;

Promote effective hazard area protection; and

Eliminate public investment for non-compatible development in coastal hazard areas.

CZM POLICIES AND RECOMMENDATIONS

POLICY (1) ODNR, through its Lake Erie erosion assistance program, will assist local governments and shoreline residents in establishing erosion protection districts and will continue to provide grants for approved erosion control projects.

Implementation - ODNR will utilize existing authority under the Ohio Conservancy District laws (R.C. 6101.25) to implement the erosion protection district program. A conservancy district is an organization formed by local residents and landowners to handle a common soil, water and/or erosion problem. It may include an area or areas in one or more counties, but may not be included wholly within the limits of one municipality. The district need not be contiguous if the public health, safety, convenience or welfare would be promoted by establishing a noncontiguous district. Once formed a conservancy district is a political subdivision of the state; however, affected lands remain under private ownership unless actually purchased by the district for project development or maintenance purposes.

Establishment of a conservancy district involves filing a petition before the clerk of the court of common pleas in one of the counties containing territory in the proposed district. Such petitions must be signed by 500 landowners, or by a majority of landowners or by owners of the majority of land by value or acreage. Notice of the petition is given to the Directors of ODNR and Ohio EPA, who may appear at any hearings. Notice of hearings shall be given by publication. Owners of real property within the proposed district who have not signed the petition may file objections to the district's establishment. A court, composed of the judge of the court of common pleas of each county, rules on the establishment of the district. Once a conservancy district is formed and an official plan prepared, an appraisal of benefits to real property and to political entities is made. The CZM Program will cooperate with the established conservancy district and the board of appraisers to ensure that secondary benefits to the communities are considered. This is to ensure that the local communities bear a fair share of the cost of the project to be carried out by the district. Pertinent Revised Code sections detailing the organization and powers of conservancy districts are included in Appendix B.

Several financial benefits to communities and residents would result from establishment of such districts. First, increased funding opportunities would be available. Conservancy districts, as public agencies, can obtain low interest loans through private lending institutions. Second, a conservancy district has authority to levy taxes and issue bonds to carry out the projects and improvements it undertakes. Third, districts have available to them an organizational fund to pay in part the initial expenses of organization, surveys and plans, appraisals, cost estimates and land options. Finally, conservancy districts, as well as any other public entity, can enter into agreements with the Department of Natural Resources to construct and maintain projects to prevent, correct and arrest erosion on Lake Erie.

ODNR will continue to administer the special revenue account derived from the granting of permits and leases for the removal of minerals and other materials from Lake Erie (R.C. 1507.04) for the purposes of funding erosion control projects. Two-thirds of the cost of such projects is borne by the state if the project is to protect public property, one-third if to protect private property (R.C. 1507.05).

The CZM Section will conduct an active program to assist communities and individuals in joining together to form erosion protection districts. Information on procedures for establishment and the benefits and responsibilities will be presented through CZM publications and through local meetings. Through this process, CZM will assure that these districts are established for areas where the erosion problems can be approached by a unified and comprehensive project effort.

Project plans originating through erosion protection districts will be prepared through consultation with the CZM local assistance office to be established on the shoreline by the Coastal Zone Management Section. This is to assure that such plans are consistent with erosion management assistance guidelines and based upon the most recent and pertinent information available. It would also assure consistency with CZM policies regarding such matters as environmentally sensitive areas and public access. The CZM Program would determine priorities for project development based upon recession rates, immediacy of the hazard and extent of property threatened.

Finally, the CZM Section will assist local communities, state and local agencies, consultants and research institutions in obtaining CZM Section 306 implementation funds for the purpose of developing erosion control plans and projects. Such studies may include but will not be limited to feasibility studies for alternative methods of control, research for overcoming economic and technical impediments to beach nourishment, and incorporation of vegetation into protection projects.

POLICY (2) Local shoreline governments will establish and enforce a building setback regulation for new construction and redevelopment within the designated 30-year Lake Erie erosion hazard area.

Implementation - The State of Ohio under proposed legislation will require local governments to establish a building setback on new construction and redevelopment within the ODNR established 30 year recession area. The setback requirement may allow development in areas protected by ODNR approved protection measures. Such measures must be designed in accordance with standards which provide

substantial, long-term protection. Local governments along the shoreline will adopt and implement this setback requirement through their existing authorities (building codes and zoning regulations). Maps and/or recession rate data necessary to administer the setback requirement will be supplied to the local government by the CZM Program in cooperation with the ODNR Division of Geological Survey.

POLICY (3) Local shoreline governments with designated flood hazard areas will participate in the National Flood Insurance Program or adopt equivalent flood plain regulations.

Implementation - The State of Ohio, under proposed legislation, will require all coastal communities in the coastal area with lake and riverine flood hazard areas to participate in the National Flood Insurance Program (NFIP) or adopt equivalent local flood plain regulations. If a local government chooses not to participate in the NFIP, its local flood plain regulations must be consistent with the minimum regulation criteria of the NFIP. Regulations would be required in each local jurisdiction as their Flood Insurance Study is completed by the U.S. Department of Housing and Urban Development.

POLICY (4) ODNR, by centralizing Lake Erie permitting authorities within one office, will expedite and simplify permit application procedures for erosion control and coastal activities.

Implementation - ODNR will continue to administer the state's permit system for erosion protection structures (R.C. 1507.03). The U.S. Army Corps of Engineers permit application (Section 10 and Section 404) will be utilized to satisfy the state's permit requirement. (In those cases where a federal permit is not required, a permit would be obtained directly from ODNR). The applicant will submit a permit application to the U.S. Army Corps of Engineers and a copy to ODNR. The Corps will then distribute the application to all interested reviewers in accordance with their public notice procedure. ODNR's review will include a determination of consistency with the CZM Program. A finding of inconsistency will result in denial of the permit by the Corps.

In addition, the CZM Program will work with the U. S. Army Corps of Engineers to expedite new General Permits for shore protection devices in order to further streamline the permitting process.

POLICY (5) ODNR will develop a shoreline erosion assistance manual for public and governmental agency use in addressing erosion problems.

Implementation - The CZM Section, in cooperation with ODNR's Division of Geological Survey, ODNR's Office of Chief Engineer, the Ohio State University and the U.S. Army Corps of Engineers will compile all available information on historic bluff lines, recession rates, bluff composition and location and effects of physical structures. From this information, the Section will prepare a practical manual which can be utilized by the local assistance office in assisting citizens and local governments with their efforts toward controlling erosion. The manual will include recommended alternative methods for erosion control, sources of technical and financial assistance, erosion protection structure permitting requirements and application procedures, and other appropriate information and guidance.

POLICY (6) The State of Ohio will participate in the International Joint Commission's investigations to determine the feasibility of reducing extreme high water levels in Lake Erie.

Implementation - The State's lead agency representative to the International Joint Commission will continue to provide input into the Commission's Great Lakes Levels Board. ODNR representation should support continued investigation of several initially promising plans which could lower Lake Erie's maximum levels by up to one foot. Benefits to U. S. Lake Erie shoreline property under one plan have been estimated at \$3.1 million annually.

Chapter 6



Air and Water Quality

Air Quality

Ohio's shoreline counties contain many of the state's largest industrial complexes, 25 percent of its coal-fired electric generating facilities and 25 percent of its registered motor vehicles. More than 950 major air pollution facilities emitted over 350,000 tons of particulates and more than 600,000 tons of sulfur dioxide during 1975. As a result, air quality along the shoreline was unacceptable in many areas.

Because similar conditions of poor air quality existed nationwide, and because of increased awareness of the hazards of air pollutants, Congress passed the Clean Air Act (CAA) in 1967, strengthening it considerably in 1970 and again in 1977. The amendments broadened the federal role in setting standards for air quality, directing state efforts to meet the standards and providing for enforcement of plans when a state fails to do so.

The U.S. Environmental Protection Agency (U.S. EPA) has established primary National Ambient Air Quality Standards (NAAQS) sufficient to protect public health and secondary NAAQS sufficient to protect against damage to property, vegetation, crops and animals. The CAA required states to develop State Implementation Plans (SIP) which would result in attainment of the standards by 1975; attainment success was only partial.

Initial CAA requirements generally dealt with major, stationary sources of air pollution. Partially because of the 1977 CAA Amendments, Ohio EPA is revising the state's SIP to deal with stationary, area and mobile sources. Such revisions will be devised

to bring nonattainment areas into compliance with revised NAAQSs by December 31, 1982.

The CAA provides for extension of this deadline for certain pollutants. Attainment of primary standards for carbon monoxide and photochemical oxidants may be extended if evidence shows that earlier attainment is impossible. During the period of extension an inspection and maintenance program for motor vehicles must be conducted. Secondary standards for particulates may also be extended. If U.S. EPA rules that Ohio's SIP, with scheduled extensions, is unacceptable, the CAA requires that sanctions be applied in nonattainment areas after July 1, 1979. Sanctions include: no new industrial emissions of pollutants not attaining NAAQS, no federal highway funding in areas not attaining carbon monoxide and photochemical oxidants NAAQS, no federal funding of air pollution control measures and no federal funding of sewage treatment control facilities.

Table 3 indicates attainment status designations as approved by the U.S. EPA pursuant to Section 107 of the Clean Air Act Amendments of 1977. It is clear from these designations that many areas are not meeting the NAAQS.

Why should these matters be of concern to Ohio's CZM Program? Primarily because they are major impacts upon the health and property of coastal residents. Also, directly, and indirectly through precipitation, air pollutants may adversely affect water quality and wildlife. For example, high sulfur dioxide levels from coal combustion contribute to formation of sulfuric acid in the atmosphere, which enters the Lake with precipitation.

Water Quality

One of the most serious problems affecting the coastal area is pollution of Lake Erie and its tributary streams. Hardly any of man's activities escape the adverse impact of water pollution. In slightly over 100 years man has caused greatly accelerated changes in one of the world's largest bodies of fresh water. Lake Erie has changed from a generally clear, low-plankton, low-nutrient lake supporting a valuable coldwater fishery, to one which is eutrophic (high in plant nutrients) with high turbidity, overabundant plankton, extensive areas of low dissolved oxygen, toxic chemicals and lower populations of fish favored by commercial fishermen.

By the 1960's and early 1970's water quality had become so poor that nearly the entire hypolimnion (lowermost layer of colder water in a thermally stratified lake) of the central basin was devoid of oxygen during summer months, massive algal blooms were common in the

TABLE 3
 NATIONAL AMBIENT AIR QUALITY STANDARDS ATTAINMENT STATUS DESIGNATIONS
 (Federal Register, Vol. 43, No. 43, March 3, 1978)

	TSP		SO ₂		CO		P.O.		NO ₂	
	NA	A	NA	A	NA	A	NA	A	NA	A
Ashtabula County				4						3
Ashtabula, Ashtabula Twp, Plymouth Twp, n. of I-90	1									
Remainder of county		4								
Cuyahoga County			1		1		1			3
Brooklyn Hts., Cuyahoga Hts., Newburgh Hts., Bratenahl, Cleveland e. of West 117th St. and Highland Ave.	1									
Cleveland suburbs		4								
Remainder of county	2									
Erie County	1		1		3		1			3
Lake County			1		3		1			3
Area bounded by w. co. lines no. of I-90 and w. of S.R. 306 plus Painesville, Grand River, Fairport Harbor, Painesville Twp	1									
Remainder of county		4								
Lorain County			1		3		1			3
Lorain n. of S.R. 611	1									
Lorain e. of S.R. 58 & Sheffield Twp ex. primary nonattainment areas	2									
Remainder of county		4								
Lucas County			1		1		1			3
Toledo, Maumee, Ottawa Hills	1									
Waterville, Monclova, and Washington Twp's and Oregon	2									
Remainder of county		4								
Ottawa County		4		4		3		1		1
Sandusky County	1			4		3		1		3
Wood County	2		1		3		1			3

NA	Nonattainment	TSP	Total suspended particulates
A	Attainment	SO ₂	Sulfur dioxide
1	Not meeting primary NAAQS	CO	Carbon monoxide
2	Not meeting secondary NAAQS	P.O.	Photochemical oxidants
3	Attainment/unclassified for CO, O _x , NO ₂	NO ₂	Nitrogen dioxide
4	Attainment		

western basin and oil on the Cuyahoga River had caught fire. Data collected over the past few years reveal that trends toward lower water quality during this century have stabilized. In some areas improvements have been sufficient to reopen beaches and reestablish fish populations. However, present conditions indicate the need for continued large scale efforts to solve persisting water quality problems.

The present eutrophic status of Lake Erie is caused by nutrient enrichment, principally phosphorus. More than 50 percent of this nutrient derives from nonpoint sources such as agriculture, urban runoff, construction, eroding shorelines and the atmosphere. Sewage treatment plants are the second major source of phosphorus, contributing 32 percent. High nutrient levels have far-reaching direct and indirect consequences, including foul tasting drinking water and reduced populations of high value fish. Inadequate sewage treatment creates the additional problem of high bacteria levels, which threaten public beaches and other recreational areas. Ohio EPA currently regulates only point source dischargers of phosphorus. Sewage treatment facilities are being improved with expenditures of hundreds of millions of dollars; however, inadequacies in the collection system remain an expensive and largely unanswered problem, especially where combined sewers exist.

Heavy loads of sediment reach Lake Erie from tributary rivers and shoreline erosion. ODNR estimates (1977) of sediment loads for Ohio's portion of Lake Erie indicate 1.8 million tons are derived annually from tributaries and 1.6 million tons from the shoreline. These sediments clog shipping channels, may destroy fish habitat, complicate water supply treatment, contribute to nutrient enrichment and adversely affect recreational use of the Lake. In Ohio alone, the U.S. Army Corps of Engineers spends over seven million dollars annually to maintain shipping channels in Ohio's Lake Erie ports.

Toxic chemicals reaching the Lake, primarily from industrial processes and agricultural practices, have an impact on fish and other biota in the Lake and thus on man's use of the Lake's resources. Significant progress has been made in controlling discharges of such effluent; however, monitoring of its dispersion and uptake is limited.

The serious nature of these problems was recognized as early as 1893 when the Ohio Department of Health began regulating the disposal of municipal and industrial wastes. Unfortunately the problems grew faster than our ability and commitment to cope with them. Finally in 1972 Congress amended the Federal Water Pollution Control Act (in P.L. 92-500), establishing as a national goal the elimination of pollutant discharges into U. S. waters by 1985. It further

established an interim goal that by 1983 safe water quality levels would be achieved for recreation, fish and wildlife.

P.L. 92-500 established several programs which are implemented by the states under U.S. EPA approval. Section 201 requires planning and construction of municipal sewage treatment facilities. Section 208 requires Areawide Water Quality Management Plans which integrate both technical needs for pollution control and management arrangements capable of implementing the controls. Section 401 requires certification that any proposed discharge into navigable waters will meet effluent and water quality standards. Section 402 established the National Pollutant Discharge Elimination System (NPDES) as the enforcement mechanism for achieving water quality standards. An NPDES permit, issued by the Ohio EPA, authorizes certain levels of pollutant discharge and requires the source owner to monitor and routinely report actual effluent quality. Section 404 directs the U.S. Army Corps of Engineers to regulate the discharge of dredged or fill materials into U.S. waters; this is discussed in Chapter 8.

In 1974 the Governor of Ohio identified those urban and industrial areas within the state having substantial water quality problems. In the coastal area the Toledo Metropolitan Area Council of Governments (TMACOG) was designated to develop Section 208 plans for Lucas, Wood, Ottawa, Sandusky and Erie Counties. The Northeast Ohio Areawide Coordinating Agency (NOACA) was designated for Lorain, Cuyahoga and Lake Counties (plus Medina, Geauga, Summit and Portage Counties outside the coastal area). Ohio EPA is developing 208 plans for areas outside designated planning areas. In the coastal area the only nondesignated area is Ashtabula County.

Pursuant to a legislative mandate (R.C. Chapter 6111), Ohio EPA has promulgated water quality standards in Chapter 3745-1 of the Administrative Code. These are designed to protect public health and welfare and also to provide for the enhancement, improvement and maintenance of water quality to serve the purposes of P.L. 92-500. These regulations establish eleven Water Use Designations plus a category of State and National Resource Waters in which areas of exceptional recreational or ecological value are protected. All surface waters of the state are classified into one or more of these use designations, each with a specified standard of use.

The mere adoption of water quality standards will not solve the problems of water pollution; no single government entity in Ohio has the authority to plan, develop and implement the requirements of P.L. 92-500. Therefore, both continued construction of municipal sewage

collection and treatment facilities and issuance of NPDES permits are important. The Section 208 plans are designed to deal with these point sources as well as nonpoint sources such as urban and agricultural runoff. These plans propose comprehensive solutions to the numerous causes of poor water quality. Increased appropriations under P.L. 92-500 could improve progress toward attaining water quality goals; Ohio has matched every federal dollar available to it, and will continue to do so.

The CZM Program realizes that many impacts on water quality in Lake Erie and its estuaries are generated outside the Program's official boundary; therefore general program concerns will extend beyond the boundary. In some cases interstate cooperation may be necessary, as for example in phosphorus control. As much as 60 percent of the phosphorus loadings to Lake Erie are a part of the Detroit River discharge into the Lake; as long as this continues, maximum efforts elsewhere in the Lake's drainage basin cannot solve the Lake's nutrient problems.

In summary, the CZM Program finds that poor air and water quality are widespread, and that although recent efforts are having a beneficial impact, conditions are still not acceptable to Ohio citizens. The program also finds that it is of utmost importance to maintain adequate funding and continue implementation of ongoing air and water pollution control programs.

OBJECTIVE

Based on the preceding findings, the following objective shall guide CZM Program activities:

Enhance the quality and management of air and water in the coastal area.

CZM POLICIES AND RECOMMENDATIONS

POLICY (7) Ohio EPA and the Ohio Air Quality Development Authority will continue to develop means to control air pollution, enforce state air quality regulations and provide financial and technical assistance for planning and implementing air pollution control strategies in the coastal area.

Implementation - National Ambient Air Quality Standards, Ohio Ambient Air Quality Standards, and the Ohio EPA Air Quality Implementation Plan are incorporated into Ohio's CZM Program. As the

principal state agency dealing with air pollution in Ohio, Ohio EPA will enforce all rules, regulations and permits and take any other appropriate measures to attain these standards which will protect public health and property in the coastal area (R.C. Chapter 3704). Ohio EPA will provide financial and technical assistance in the coastal area for planning and implementation of air pollution control strategies.

The Ohio Air Quality Development Authority (R.C. Chapter 3704) will continue tax exempt low interest financing of air pollution control facilities for private industries, subject to Ohio EPA approval.

Other types of CZM Program involvement in air quality management will include:

Careful consideration of potential impacts on air quality of all Program actions;

Assistance to Ohio EPA in evaluation of the impact of air pollutants upon the waters of Lake Erie and associated wildlife;

Periodic review of proposed revisions of the Air Quality Implementation Plan;

Review of progress in the coastal area leading to attainment of air quality standards; and

Encouragement of increased monitoring of ambient conditions to aid siting decisions of new air pollution sources, better determination of the impact of implemented air quality strategies and provision for an accurate basis for subdivision of coastal counties into smaller air quality control regions.

POLICY (8) Ohio EPA and the Ohio Water Development Authority will continue to develop means to control water pollution, enforce state water quality regulations, and provide financial and technical assistance for planning and constructing water pollution control projects in the coastal area.

Implementation - Ohio EPA's water quality standards, rules, regulations and programs (R.C. Chapter 6111), approved by U.S. EPA pursuant to the federal Clean Water Act, are incorporated into the CZM Program. As the principal state agency responsible for water quality management, Ohio EPA will enforce all rules, regulations and

permits and undertake all other measures necessary to ensure that all waters in the coastal area are safe and healthful.

Ohio EPA will provide financial and technical assistance to coastal area communities for planning and construction of water quality management measures. The Ohio Water Development Authority will provide financial assistance to coastal communities and industries for construction of pollution control projects.

CZM Program involvement in water quality management will center on the following additional concerns:

The CZM Program will review all activities which might adversely impact the important use of the Lake for public water supplies.

The CZM Program will encourage improved water quality monitoring of Lake Erie's nearshore waters and estuaries.

The CZM Program will provide local communities with maps through ODNR's Ohio Capability Analysis Program indicating which areas could support on-site septic disposal systems. Such maps could help guide development to minimize future problems. The Program encourages development of an effective surveillance program for existing systems, including issuance of fixed-term operational licenses. Enhanced monitoring of package treatment plants will also be encouraged.

The CZM Program will review siting of solid waste disposal sites in the coastal area to ensure that they are located in impervious soils, above the flood hazard, away from wetlands, away from aquifers used for groundwater supply and away from the immediate shoreline.

All large coastal cities have combined storm and sanitary sewers which overload their treatment plant capacity during periods of heavy rainfall, resulting in diversion of raw sewage to Lake Erie. The CZM Program encourages construction of separate systems and the use of retention basins and other facilities to reduce this significant problem. Implementation of non-structural solutions will also be encouraged.

Enforcement of water quality regulations requires diligent, time-consuming efforts, which can strain agency budgets. The CZM Program will periodically review agencies' enforcement capabilities in the coastal area and support any indicated improvements.

POLICY (9) ODNR and Ohio EPA, through implementation of Ohio's Agricultural Pollution and Urban Sediment Pollution Abatement Program and federal Clean Water Act requirements, will improve efforts to reduce sediment and nutrient loadings reaching Lake Erie.

Implementation - ODNR's Division of Soil and Water Districts currently administers programs to aid and inform farmers, developers and municipalities to ensure that their activities are conducted to minimize sediment runoff and soil loss. Specifically, Division programs are directed toward assisting farmers in complying with established soil and water conservation practices, including proper fertilizer application, and controlling construction site erosion. Such technical assistance is coordinated with the U.S. Department of Agriculture's Soil Conservation Service. Ohio State University's Cooperative Extension Service provides information and educational programs. The Coastal Zone Management Program will support and cooperate with these programs, and will work with the Division of Soil and Water Districts and local governments to implement Ohio's Agricultural Pollution Abatement and Urban Sediment Pollution Abatement Law (R.C. Chapter 1515). This law enhances the Division's authority to implement voluntary sediment pollution abatement programs. The Division will implement provisions of Section 208(j) of the Clean Water Act of 1977 establishing cost sharing programs for agricultural management practices when federal funding becomes available.

The CZM Program will encourage development of economic incentives at the state and federal levels for farmers to adopt soil conservation management practices which would in the short term seem unprofitable to the farmer, but would benefit the general public through improved water quality.

Areawide water quality plans developed in the coastal area pursuant to Section 208 contain many recommendations and proposals which would reduce sediment and nutrient loadings; the CZM Program endorses and will encourage their implementation through appropriate agencies. Implementation of coastal erosion and flood hazard areas policies in Ohio's CZM Program will also help to reduce sediment loads reaching Lake Erie. Coastal and estuarine wetlands, both diked and undiked, trap sediments and nutrients; therefore the Program encourages their protection and restoration.

Reduction of phosphorus loadings to Lake Erie is one key to improved water quality. Ohio EPA regulations stipulate that sewage treatment plants with a flow greater than one million gallons per day must treat their effluent to reduce phosphorus levels to 1 mg/1 if nuisance growths of algae are being caused. The 1978 Water Quality Agreement between the U.S. and Canada calls for reducing the concentration to 0.5 mg/1. Ohio EPA will implement this reduction in Ohio by effluent treatment and by instituting measures which reduce phosphorus reaching sewage treatment plants. Detergents are a principal source of phosphorus reaching such plants. To reduce phosphorus loadings to Lake Erie and to reduce cost of phosphorus removal of treatment plants, the CZM Program encourages adoption of a ban on phosphorus detergents in the Lake Erie drainage basin in Ohio.

POLICY (10) The CZM Program will assist local governments and port authorities in locating acceptable dredged material disposal sites in accordance with standards of the federal Clean Water Act.

Implementation - Following enactment of Public Law 91-611, the River and Harbor Act of 1970, ODNR became deeply involved with federal agencies and local governments in locating sites suitable for the disposal of dredged materials. Disposal alternatives include upland sites, open lake dumping, confined sites adjacent to the shoreline or in nearshore waters and beach nourishment or replenishment.

To prevent dispersal of toxic chemicals and other pollutants into aquatic ecosystems, disposal of polluted dredged materials in the open lake is not permitted under provisions of P.L. 91-611. The CZM Program will support studies to determine the best sites for confined disposal facilities for polluted dredgings. To avoid loss of aquatic habitat the Program advocates siting of such disposal facilities on land when acceptable locations are available in the coastal area. When acceptable on-land sites are not available, confined lake sites become the only other disposal alternative at the present time. Means of implementing this position include review of required state and federal permits and environmental impact statements as well as direct contacts with port officials and the U.S. Army Corps of Engineers.

Although nonpolluted dredged materials are often regarded as a problem, they may also be a resource. The CZM Program does not advocate an order of preference among alternative means for disposal or utilization of nonpolluted materials. The appropriate means depend upon the needs, problems and characteristics of the particular harbor, as well as adjacent shoreline characteristics. The CZM Program will support studies to determine which method of disposal is

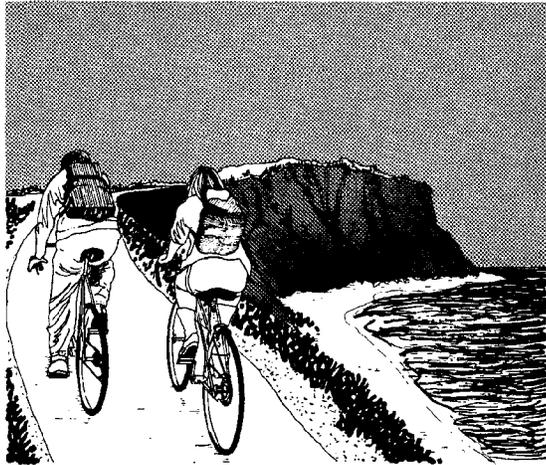
most appropriate and which sites are best, taking into account relevant environmental, economic and social factors.

POLICY (11) ODNR, Ohio EPA and other state and local enforcement officers will improve enforcement of the state dumping and stream litter laws along Lake Erie and its tributary waters.

Implementation - Shoreline landowners and other residents sometimes dump refuse and other materials on the shoreline of Lake Erie, often as a futile attempt to control erosion. Such materials can contaminate the water, create hazards to boaters and create an aesthetically unappealing shoreline. Pursuant to Ohio's Stream Litter Law (R.C. Chapter 1531), Ohio's Nuisance Law (R.C. Chapter 3734) and Ohio's Solid Waste Disposal Law (R.C. Chapter 3767), Ohio EPA, ODNR, peace officers and health officials of local governments will make arrests for such refuse violations. The CZM Program will monitor efforts of these parties to enforce these regulations and recommend remedial action as necessary and appropriate.

POLICY (12) Ohio EPA, through requirements of the federal Clean Water Act, the Toxic Substances Control Act, Resource Conservation and Recovery Act and the Ohio Solid Waste Disposal Law will regulate discharge and disposal of toxic and hazardous materials.

Implementation - Ohio EPA will take all measures necessary to prevent discharge of toxic and hazardous substances into Lake Erie and its tributary waters. Specifically, Ohio EPA will adopt regulations for the generation, transfer and disposal of such substances pursuant to 1978 amendments to Ohio's Solid Waste Disposal Law (R.C. Chapter 3767). OEPA will continue to regulate pollutant discharges through NPDES permits required by the Clean Water Act. The CZM Program will support increased monitoring of the dispersion and uptake of toxic and hazardous substances in the aquatic ecosystem.



Chapter 7

Recreation and Public Access

Recreational Facilities

Over 3,000 square miles of Lake Erie are owned and held in trust as a state resource for the people of Ohio. The Lake offers an almost endless variety of recreational opportunities on a year-round basis. Because these recreational opportunities exist, many different types of recreational facilities have been developed along the Lake.

ODNR, Division of Parks and Recreation, operates six state parks along Lake Erie's shoreline, Geneva, Headlands Beach, Cleveland Lakefront, East Harbor, Crane Creek and Erie Islands, consisting of Kelleys Island, South Bass Island and Catawba Island. Maumee Bay State Park is currently being developed near Toledo. The state parks offer swimming, boating, hunting, fishing, camping, cabins, nature trails and other recreational opportunities. More than 25 percent of ODNR's capital improvement budget for the current biennium (1978, 1979) has been allocated for recreation and access projects in the coastal area.

ODNR, Division of Wildlife, has established several wildlife areas in the coastal area, Metzger Marsh, Magee Marsh, Little Portage and Toussaint Wildlife Areas. Metzger and Magee Marshes are managed primarily for waterfowl habitat, but also provide public hunting, fishing and nature study opportunities like those at Little Portage and Toussaint Wildlife Areas.

ODNR, Division of Natural Areas and Preserves, manages two nature preserves, Mentor Marsh and Headlands Dunes, in the coastal area. Three additional areas, Old Woman Creek estuary, Dupont Marsh

on the Huron River and Wildlife Realty Marshes, are in various stages of being acquired or dedicated as state nature preserves.

Almost every township, village and city has a park along the shoreline (see Coastal Resource Maps, Appendix H). These facilities also offer various swimming, boating, fishing, picnicking and playground facilities. They are designed to fulfill community needs for intensive recreation. Some of these parks are restricted to resident use only.

The U.S. Department of the Interior maintains several areas along Lake Erie. Ottawa National Wildlife Refuge, which encompasses five units in the western basin, is managed for waterfowl. Perry's Monument, commemorating Commodore Perry's victory in Lake Erie during the War of 1812, is a major tourist attraction on South Bass Island.

Additionally, many privately owned recreational facilities have been developed along Lake Erie. Some of the better waterfowl hunting areas in the state are owned by private hunting clubs. Many of the Lake's boating facilities are provided by private yacht clubs. Commercial marinas provide most of the mooring spaces for boats along Lake Erie. Small and large boats can be rented or chartered for fishing. In addition, many beach associations provide residents with access to swimming beaches.

Several amusement parks exist along Lake Erie. Cedar Point, the largest of these, draws crowds from a 200 mile radius. In Toledo and Cleveland, excursion boats provide tours of the Maumee and Cuyahoga Rivers.

Despite the extensive development of recreational facilities, Ohio continues to experience a shortage of access and facilities necessary for the full recreational enjoyment of Lake Erie. The demand for these facilities is increasing more rapidly than new facilities can be provided. The high cost of land and the loss of potential recreational areas to other uses make it increasingly difficult to provide new facilities. The shoreline is one of the more intensively developed areas of the state and less and less shorefront land has been available for recreational development, especially parcels large enough for extensive recreation.

Another deterrent to new recreational development is the high cost of maintenance. Communities have limited resources and rely increasingly on federal funding for general municipal operations. As other costs of city government increase, park maintenance is often given a lower priority. In some cases parks were built without provisions for continuing park maintenance. In the past decade many local governments have neglected the maintenance of shoreline parks

because poor water quality, high lake levels and erosion have lessened their value as public recreational areas. Taxpayers have been reluctant to support recreational facilities which are no longer useable.

Beaches

Swimming and other beach activities have always been popular along the Lake Erie shoreline. The special shoreline qualities of lake breezes, waves, large stretches of sand and other aesthetics provide an experience not available on inland lakes. Cities, villages and townships along the shoreline maintain 25 public beaches. Crane Creek, East Harbor and Headlands Beach State Parks offer some of the best beaches along the Lake. During the summer season these state parks collectively attracted over 639,000 beach users.

Poor water quality has affected the utilization of Lake Erie beaches. Several beaches near larger cities and municipal/industrial facilities have been closed for swimming during the summer months because of water pollution. These closings deny beach recreation and swimming opportunities to inner city dwellers who may lack means of transportation to other, more distant beaches.

Shoreline erosion has also had a detrimental effect on beaches. Recent high lake levels have increased erosion, significantly reducing beach areas in many locations and completely eliminating others. In some areas damage has extended to beach houses and shelters. Erosion is costly, not only in terms of the loss of valuable beach resource, but also in terms of construction and maintenance costs for structures installed along the shoreline for beach protection.

Boating

Recreational boating is one of the fastest growing activities in the Great Lakes region, especially on Lake Erie. Approximately 26 percent (70,200) of the 266,000 boats currently registered in Ohio use Lake Erie as the principal water recreation location. In 1972 approximately 27 percent (60,500) of the 222,000 boats registered in Ohio listed Lake Erie as the principal use area. This represents a 16 percent increase in a 5 year period in the number of Ohio boats using Lake Erie.

Inadequate access, shoreline topography and extensive private ownership of the shoreline, however, have limited Lake Erie's recreational potential. The use of Lake Erie by boaters is related directly to the availability of such boating facilities as launching

ramps, marinas and docking space. At present, 18,500 docking spaces exist along Lake Erie. These docking facilities do not fulfill the current demand for docks or the capacity of the Lake for boating. High land values and the need for wave protection make the construction of new docking facilities very expensive.

A related concern is the maintenance of local public boating facilities, currently a local responsibility. User fees and taxes on goods bought in the communities can offset the cost of day-to-day operation and minor repairs. The major concern, however, is that most of the communities are not able to finance the major repairs required to keep boat launching and associated facilities safe and operational on a long term basis. Flooding, winter ice and erosion forces undercut launching lanes and destroy courtesy docks. Communities are reluctant to finance such extensive repairs without outside financial assistance since many users are nonresident. The actual percentage of nonresident users at Lake Erie boating facilities is not known and varies from community to community. Shoreline communities feel that there is a need to redefine the role of state and local governments in financing construction and maintenance of public boating facilities because of the extensive nonresident use of these facilities.

Lake Erie is vulnerable to quickly developing high waves and storms due to its shallow depths and alignment with the prevailing winds. This situation presents a continual safety threat to small watercraft. Lack of shelter from storms along the Lake compounds the risk. Most of the convenient and geographically suitable refuge harbor locations along Lake Erie have been developed already to provide shelter. The extent and degree of effectiveness of these harbor locations, however, varies. There are also several shoreline reaches where the distance between existing refuge harbors exceeds that which is generally accepted as necessary for small watercraft safety.

Construction, maintenance and improvement of boating facilities can conflict with environmental concerns. Marinas and small boat harbors are frequently located at the mouths of streams or in wetland areas. The development of marina facilities and the review of such projects must consider the environmental impacts and the public interest involved.

Fishing

Lake Erie provides a greater variety of fish species than any of the other Great Lakes. The shallow, warmer waters of Lake Erie and the associated habitats have contributed to their high diversity and density. A total of 138 species of fish has been recorded in Lake Erie and its tributaries.

Before 1800 fish were caught primarily for food, not sport. Between 1800 and 1850 both commercial and sport fishing experienced a rapid increase. After 1850 sport fishing increased at a much greater rate than commercial fishing. The popularity of sport fishing has continued to grow and today its economic value far exceeds that of commercial fishing.

Of the nearly one million licensed Ohio anglers, 32 percent indicated that they fish in Lake Erie. These fishermen annually expend an estimated 50 million dollars in pursuit of Lake Erie fish.

In 1977, the total fish harvest in Lake Erie was 10.9 million pounds. Of this, the commercial industry landed 8.5 million pounds and sport anglers took 2.4 million pounds. Yellow perch was the species most often sought. A breakdown of the sport harvest (by percent of the total number of fish caught) is provided below.

<u>Percent</u>	<u>Species</u>
68	Perch
14	White bass
6	Freshwater drum
9	Walleye
1	Channel catfish
2	Other species including smallmouth bass, rock bass and crappie

Recent successes regarding the walleye and sauger fisheries are an important aspect of Lake Erie's sport fisheries. Both walleye and sauger were widely distributed in Lake Erie when the first white man entered Ohio. They were important sources of food for early pioneers, as well as the native Indian.

Some of the initial decline in the number of walleye and sauger in the early 1900's appears to have been caused by dams which prevented these highly migratory fish from ascending streams to spawn. The decline continued through the mid-1900's due mostly to environmental degradation and deterioration of rivers and nearshore waters, and loss of valuable habitat. In the late 1960's, sauger were virtually nonexistent in Lake Erie and were removed from the legal commercial species fishing list. By the early 1970's, walleye populations were extremely depressed in numbers throughout western Lake Erie and a ban on commercial fishing was established in 1972.

Commercial regulation and improved water quality have effectively increased walleye populations, while these same factors along with a fingerling stocking program by ODNR have increased sauger populations. The sport catch of walleye has increased from its lowest point in 1974, to 47,394 pounds in 1975, to 2,100,000 pounds in 1977. Sauger are now distributed over most of their original range in Lake Erie. Successful natural reproduction was recorded in 1977. Both sport and commercial fishermen have been reporting occurrences of sauger, with the 1977 sport harvest in Lake Erie tributaries estimated at 1,900 fish.

During recent summers, Lake Erie shoreline angler hours have exceeded boat angler hours by a slight margin. Of the shore angler time, approximately one-half was spent in the Cleveland to Lorain area. The Cleveland Edgewater Park breakwall had greater angling pressure than any other shore location. Sport fishing from boats was greatest in the Catawba-Marblehead area. The Gem Beach channel on Catawba Island Peninsula was the most frequently used boat launching point on the Lake for sport fishing.

Lake Erie and its tributaries provide year-round angling opportunities. Different fishes are sought during the various seasons. River spawning migrations provide best angling success for walleye in March and April, and white bass in May and June. Lake fishing for freshwater drum, channel catfish and smallmouth bass occurs mainly from May through July, with open lake angling for walleye and white bass best in July and August. The yellow perch fishery peaks in September and October and is the mainstay of the winter fishery.

More fishing licenses are issued in Cuyahoga County than in any other county. This fact coupled with intensive shore fishing pressure along the eastern half of the shoreline indicate that existing shoreline fishing access points need improvement and expansion. Loss of any of these existing fishing access points would be critical to those who already have only limited access to Lake Erie in this urbanized area. The extreme fishing pressure in this area also indicates the need for additional shoreline fishing opportunities. In the same light, extensive use of the western half of the shoreline for boat-oriented fishing supports the need for protected boat launching and associated marina facilities.

Hunting

Although the Great Lakes basin cannot be compared in importance to the prairie-pothole country of the Dakotas and the western provinces of Canada for waterfowl production, the basin may be of greater importance than is generally acknowledged. It is an

important link between Canada and the southern United States. Divers and some dabblers migrate from the northwest to the southeast across the Great Lakes region, while the rest of the dabblers and the majority of the geese move in a north-south pattern across the basin.

The marshes in the western basin are well known as a significant migration resting area as well as for their excellent waterfowl hunting. This marsh area extends from Sandusky to Toledo and contains approximately 22,700 acres of waterfowl habitat (only half being actual wetlands). Most of the waterfowl habitat is owned by the state and federal government or private hunting clubs. The five units of the Ottawa National Wildlife Refuge encompass approximately 8,100 acres of waterfowl habitat. The State of Ohio maintains approximately 3,000 acres of waterfowl habitat in the western basin of Lake Erie, most of which are included in the Metzger and Magee Marshes. Private hunting clubs manage an additional 8,000 acres of habitat.

Mallards, black ducks, wood ducks and blue-winged teal make up approximately 70 percent of Ohio's annual harvest of more than 100,000 ducks. Mallards and black ducks are late migrants into Ohio and make up over half of the waterfowl reported on the hunter bag checks in the Lake Erie marsh region. Wood ducks and blue-winged teals are early migrants and are less important to hunters along Lake Erie.

The greater waterfowl hunting opportunity in northern Ohio is reflected in the greater hunting pressure and harvest in this area. About 63 percent of the statewide hunting pressure and 72 percent of the waterfowl harvest occur in the northern part of Ohio. About 22 percent of the total statewide harvest occurs within the Lake Erie marsh areas of Lucas, Ottawa, Sandusky and Erie Counties, excluding the high quality private duck clubs in this area.

Trapping for sport and harvest is particularly important in the Lake Erie marshes. Ohio's consistent second place rating in muskrat production is due principally to trapping along Lake Erie. Both sport and harvest trapping reduce the damage to the dikes in the marsh areas and the resultant maintenance required to maintain optimum water levels in many marshes.

The extent of waterfowl habitat in the coastal area has decreased greatly due to urban, recreational and agricultural development. Most of the original wetland areas along Lake Erie have been developed, drained or filled for various developmental activities. In addition to man's alteration of waterfowl habitat, recent high water and erosion have caused a loss of shoreline wetlands. Protective barrier beaches and dikes have eroded in

places, leaving wetlands exposed to open lake wave action. Protection to control erosion has greatly increased the cost of maintaining wetland areas for waterfowl habitat.

OBJECTIVE

Based on the preceding findings, the following objective will guide management of shorefront recreation and public access:

Improve existing and develop new public shoreline recreation and access opportunities;

CZM POLICIES AND RECOMMENDATIONS

POLICY (13) ODNR, through the State Parks Program, Community Parks and Recreation Program, and Urban Rivers and Waterfront Development Program, will continue to increase public recreation activities and access in the coastal area.

Implementation - ODNR, Division of Parks and Recreation, develops and maintains Ohio's state parks (R.C. 1541.01). Development of additional state park facilities and expansion of existing park facilities is currently a priority program within ODNR. This development is financed primarily through ODNR's annual capital improvements program. ODNR has recently initiated an intensive effort to develop new and expanded state park facilities along the Lake Erie shoreline.

The Community Parks and Recreation Program is an ODNR priority program to intensify aid to local governments in the acquisition and development of community parks and recreation areas. The program, administered by the Office of Outdoor Recreation Services, seeks to maximize the use of the Land and Water Conservation Fund (LWCF) by local governments. The program's goal of keeping the majority of these funds available to local governments and increasing technical assistance in project development will result in higher quality recreational projects. Land and Water Conservation Fund grants, up to 50 percent on a matching basis, are available to local governments for acquisition and development of recreation areas. All projects must be consistent with the needs and recommendations identified in the State Comprehensive Outdoor Recreation Plan (SCORP).

The Urban Rivers and Waterfront Development Program is another ODNR priority program which has been established to give greater

emphasis to revitalizing valuable urban water resources for recreation and open space. This program is also administered by the Office of Outdoor Recreation Services and assistance is primarily oriented toward providing information and expertise to local governments in such areas as plan review, applicable state and local programs and sources of financial aid. Projects are funded primarily through the LWCF.

To stimulate coastal communities to conduct shoreline recreation and access planning, the CZM Program will offer local assistance grants for local planning of recreation and access. These funds will come from the federal CZM Program funds and will be coordinated with ODNR's Community Parks and Recreation Program. Congressional funding of Section 315(2) of the federal CZM Act will provide monies for acquiring lands for access to public beaches and other public shoreline areas and for the preservation of islands.

The CZM Program encourages incorporating public access and recreational opportunities into the planning of major developments and public institutions that locate on the shoreline or rivers in the coastal area. Through the A-95 review process, the CZM Program will evaluate such projects for their potential to provide lake access. Efforts will be made to encourage project developers and planners to recognize multiple use advantages of providing access areas in their plans where feasible.

POLICY (14) ODNR, through its fish and wildlife management programs, will continue to increase public fishing access and hunting opportunities in the coastal area.

Implementation - ODNR, Division of Wildlife administers the state fishing and hunting programs and is the law enforcement agency for fish and wildlife management in Ohio. Administration of these programs includes authority to acquire lands necessary to meet public fishing and hunting needs (R.C. Chapter 1531).

It is ODNR policy to increase fishing opportunities by expanding stocking efforts and providing greater public fisherman access. It is also ODNR policy to increase hunting opportunities by expanding use of state-owned lands and arranging cooperative agreements with farmers and other private landowners to permit public hunting. Under this latter effort, landowners would maintain control and use of their land without government restriction and be provided with technical assistance as well as all necessary signs and permits. Acceptance of this program has been widespread.

The CZM Program will continue to encourage provision of greater fisherman access and hunting opportunities especially regarding efforts on privately owned lands. Financial assistance to local

governments for planning fishing and hunting access is eligible for consideration under the CZM local recreation and access planning grants described under Policy 13.

Law enforcement is an integral and important part of fish and wildlife management. Fish and game regulations are developed to ensure that fish and wildlife are effectively managed and protected to provide greater fishing and hunting opportunities. Increased enforcement efforts and monitoring costs are eligible for funding consideration under the CZM Program.

POLICY (15) ODNR, through the Division of Watercraft community assistance program and the Lake Erie refuge harbors program, will continue to increase opportunities for public recreational boating in the coastal area.

Implementation - ODNR, Division of Watercraft, is the state's recreational boating and watercraft safety agency (R.C. Chapter 1547). It is ODNR policy to address local and regional public boating needs through the Division of Watercraft's community assistance program. Statewide public boating needs are addressed through the development of state park facilities and other state and locally operated launching areas and refuge harbors.

The Division of Watercraft administers a community boating assistance program to assist local governments in the development and construction of boat launching areas and other associated facilities. This program is financed from the Waterways Safety Fund maintained through watercraft license fees and marine fuel taxes. Eligible projects are funded on a matching basis with the local government assuming responsibility for continuing operation and maintenance.

The Division of Watercraft also administers Ohio's Lake Erie refuge harbor program. It is the policy of ODNR to complete development of the Lake Erie refuge harbor system, identifying and considering existing harbor and marina facilities where feasible. This program is carried out jointly with the U.S. Army Corps of Engineers under Congressional authorization for federal financial and technical assistance. The state share for refuge harbors is provided by the Division of Watercraft using Waterways Safety Fund monies; the local share is provided by the respective local government involved in the proposed harbor area. ODNR and the Corps have recently initiated a detailed investigation to analyze the needs and determine priorities for completing the refuge harbor system. Development of any new refuge harbors will be based on the findings and recommendations of this in-depth study.

To stimulate increased development of public boating facilities in the coastal area, CZM planning and feasibility study grants will

be available. These grants will be made available to state agencies and local governments from federal CZM funds and will be coordinated with the Division of Watercraft.

Watercraft safety and enforcement of boating and waterway regulations is an important aspect in providing public boating opportunities. Enforcement efforts are eligible for funding consideration under the CZM Program.

POLICY (16) ODNR, through the Statewide Trails Program, will encourage development of hiking and biking trails along the Lake Erie shoreline.

Implementation - The CZM Program will work within ODNR, with federal, state and local agencies, and with public interest groups to promote and coordinate efforts to develop recreational walkways and trails along the shoreline.

ODNR currently manages a Statewide Trails System (R.C. Chapter 1519). The purpose of this program is to expand outdoor recreational opportunities by developing a network of hiking, biking and riding trails throughout Ohio. This program is implemented in several ways. ODNR develops trails within its own state parks, forests, nature preserves and wildlife areas. Financial assistance through LWCF is provided to local communities and park districts to develop trails. Technical assistance is also available to interest groups, local communities and park districts interested in developing trails in Ohio. In addition, financial assistance will be available from the CZM Program for planning and development of recreational walkways and trails in the coastal area.

POLICY (17) The CZM Program will encourage the retention of surplus public property along the shoreline in public ownership.

Implementation - As state or federally owned land along the shoreline is declared surplus, the CZM Program recommends that the surplus property remain in public ownership and be redeveloped for public access to the shoreline as compatible with adjacent uses. The CZM Program encourages local governments to retain their surplus shoreline property. The CZM Program will assist local communities to plan and redevelop their shoreline properties through funding programs described in Policy 13.

Chapter 8



Environmentally Sensitive Areas

Natural Areas

Early explorers of the Lake Erie region described vast areas of wetlands, upland hardwood forests and miles of sandy beaches. A near total elimination of undisturbed areas has resulted in the years since exploration. Development proceeded early and quickly; not a single mile of shoreline has escaped human impact. Efforts to protect the remnants started late and have met with only limited success in recent years due to high land costs and conflicting ideas on appropriate land use. Presently Ohio's coastal area has within its boundary only two dedicated state nature preserves, Mentor Marsh and Headlands Dunes. Three additional areas (Old Woman Creek estuary, Dupont Marsh on the Huron River and Wildlife Realty Marshes) are in various stages of acquisition. These five areas collectively total about 1,486 acres and will be managed by ODNR's Division of Natural Areas and Preserves. The Nature Conservancy and the Cleveland Museum of Natural History are also involved in acquisition and/or management of several natural areas in the coastal area.

A natural area survey conducted during the second year of CZM Program development identified about 49 sites which could be considered as natural areas. Several of these have been recommended for Special Management Area designation (see Chapter 13). Among these are undiked estuarine marshes, islands and dune-bordered beaches.

In addition to protecting large, undisturbed sites, it is important to protect the diversity of the landscapes--the plants, animals and physical features which make up the coastal ecosystem. The loss of even a few species due to habitat alteration and other

environmental disturbances can impair the ecosystem's function to the detriment of recreation, water supply, commercial fish production and overall ecosystem stability. Loss of predator fish species in Lake Erie with subsequent overabundance of other species is a good example. Ohio's Natural Heritage Program, a section of the Division of Natural Areas and Preserves, has identified the occurrence in the coastal area of many threatened or endangered species. These species range from the familiar American bald eagle and the muskellunge, to more obscure, but no less important, species of plants and animals.

Continued protection of remaining natural areas and elements of diversity in Ohio's coastal area necessitates an increase in knowledge of intricate ecosystem relationships and the susceptibility of the system to disturbance. A firm public commitment is needed for protection of remaining natural areas in the coastal area.

Wetlands

Ohio's fifteen thousand acres of coastal wetlands are extremely sensitive to development in both the immediate wetland area and in the surrounding watershed. These wetlands, totalling less than one-half of those existing in 1955, are being lost to agricultural expansion and general development. Their existence depends upon expanded land use management efforts. Currently over 10,000 acres are managed as wildlife refuges by the State of Ohio, the U.S. Department of the Interior and private hunting clubs. Several thousand additional acres of wetlands exist in nonprotected status throughout the coastal area. Also, several thousand acres of former wetlands exist in a marginally productive agricultural status. With proper management these areas could become wetlands once again.

Wetlands perform several functions of great value and importance to the coastal environment in Ohio. They serve as spawning and nursery areas for fish species important to both sport and commercial fishermen; they provide habitat for a large variety of waterfowl and other wildlife, including rare and endangered species; they protect Lake Erie water quality by trapping nutrients and contaminants before they reach the open lake; they provide solitude and natural beauty for shoreline residents and serve as outdoor classrooms for environmental education; and they provide a valuable buffer against damaging floods.

Diking of many coastal wetlands is essential to their continued existence because it is usually the only means of protecting wetlands whose landward advance during periods of high lake levels is restricted by inland development. Maintenance and reconstruction of dikes is a continual, expensive and necessary task, especially during periods of high water. Regulation of water levels in diked wetlands should create as natural conditions as possible.

Fish Habitat and Management

Part of the history of Lake Erie fisheries is one of man induced changes in lake habitats affecting the diversity of species and population sizes. Generally the extent and variety of fish habitats has declined considerably since 1850, as have sport and commercial catches. Habitats greatly reduced in size include deep, oxygenated coldwater areas, vegetated areas, clean bottom sand and gravel areas, estuaries and wetlands. The loss and degradation of these habitats for spawning, nursing, feeding, migration, overwintering, resting and refuge have resulted in this change of fish species and populations levels; establishment of nonnative species has also caused many changes. Lake herring, cisco, whitefish, lake trout and burbot have given way to less desirable and less marketable species. These species include gizzard shad, freshwater drum and carp. These species have remained stable or increased in recent years.

Causes of population decline in species associated with cleaner, less polluted waters are evident. Increased sedimentation from past and present land use, higher nutrient levels in Lake Erie from point and nonpoint pollution sources, destruction of habitat from dredging and filling activities, and thermal pollution have all had their impacts. Some adverse impacts may have been reduced in recent years; however, much remains to be done before the fisheries can substantially recover.

Important fish habitat areas of Lake Erie include all nearshore waters out to a depth of 20 feet, bays and estuaries, and offshore shoal areas. Specifically there are five habitat areas of critical concern: Maumee Bay, the Toussaint-Locust Point reef complex, the Islands area, the Ruggles reef complex and Sandusky Bay (including Muddy Creek Bay). Protection of these habitat areas is an important objective of Ohio's CZM Program.

The Huron River and the few remaining coastal coldwater streams provide an important habitat for salmonoids. These species are adapted to the cooler water temperatures provided by these streams. Once eliminated or warmed, these streams will no longer provide the necessary habitat for these remaining coldwater species which as a result will be eliminated from local areas and possibly the coastal region.

Lake Erie fisheries are managed by Ohio, Michigan, Pennsylvania, New York and the province of Ontario. Management methods include stocking of hatchery-reared fish (coho and chinook salmon, steelhead and rainbow trout and sauger), regulation of commercial and sport fishing, and habitat maintenance and improvement. Ohio and Michigan

are attempting to increase the protection of the broodstock and to maximize use of fisheries resources. Limitations on the number of commercial fishermen and the quantity of fish taken will improve the economic viability of the commercial fishery. In Ohio, commercial fishing for walleye is currently restricted to provide greater protection for this species. Sport fishing in Ohio is less regulated, with annual landings of about 1.9 million pounds, principally yellow perch and white bass.

Past fisheries management efforts by the four states and Canadian province have been inconsistent in both philosophy and techniques. However, three international committees, the Walleye Protocol Committee, the Perch Ad Hoc Committee and the Standing Technical Committee, have recently arrived at a consensus of scientific need and management approach. Such improved coordination and unified management practices will improve these valuable fisheries.

OBJECTIVE

Based on the preceding findings the following objective shall guide the management of environmentally sensitive areas:

Protect, conserve and restore environmentally sensitive areas including wetlands, natural areas, wildlife habitat and endangered species habitat.

CZM POLICIES AND RECOMMENDATIONS

POLICY (18) ODNR, through the State Nature Preserve Program, Natural Heritage Program, Natural Landmark Program and permit and project review, will preserve endangered species, significant natural areas and other natural features.

Implementation - The CZM Program will work with ODNR's Division of Natural Areas and Preserves to identify coastal natural features, areas and endangered species habitat for preservation, and utilize all possible funding sources and other means to acquire or dedicate sites of statewide significance as state nature preserves or provide other appropriate protective measures.

ODNR's Division of Natural Areas and Preserves operates the State Nature Preserves Program (R.C. 1517.09). The intent of the program is to set aside a portion of land or wetland that has been undisturbed for some time and maintains an element of diversity in its natural state. Private owners of such areas are encouraged to dedicate their lands as natural areas through tax advantages provided

by various sections of the Ohio Revised Code and the U.S. Internal Revenue Code. In addition, the Division of Natural Areas and Preserves administers the Ohio Natural Landmark Program, a nonbinding notification and recognition program, for owners of significant areas not scheduled for acquisition. Management advice is provided by the Division.

Protection of endangered elements of natural diversity, primarily plants and animals, is also encouraged by the Division. ODNR restricts the taking or possession of native species of wild animals which are threatened with statewide extinction (R.C. 1531.25). All native Ohio species on the federal list of endangered fish and wildlife are also protected by this section. Destruction and collection on state property of plant species designated by the Division of Natural Areas and Preserves as endangered or threatened is prohibited (R.C. Chapters 1501, 1517, 1518, 1531). The habitats of such endangered species may also be designated as Natural Landmarks to assist landowners in their protection.

The CZM Program will assist the Division of Natural Areas and Preserves in compiling lists of natural areas and occurrences of significant elements of natural diversity for the coastal area of each shoreline county. These lists will be made available to state agencies and local units of government through the Division of Natural Areas and Preserves' Natural Heritage Program. Mitigative measures should be considered before any development activities are permitted to impact natural areas or locations of rare or endangered species. The Division of Natural Areas and Preserves shall assist these agencies and governments in implementing protective measures whenever possible.

Sites may be proposed for designation as Areas of Preservation and Restoration through the process detailed in Chapter 12. Management of such sites is eligible for funding through the CZM Program.

POLICY (19) ODNR, through state review of permits pursuant to Section 404 of the Clean Water Act and through CZM Act federal consistency provisions, will protect coastal wetlands.

Implementation - The importance of wetlands has been recognized in federal legislation which the CZM Program will utilize to prevent alteration and destruction of Ohio's coastal wetlands. Section 404 of the federal Clean Water Act established a permit program administered by the U.S. Army Corps of Engineers which regulates discharge of dredge or fill materials into all waters of the United States, including adjacent wetlands. The U.S. Army Corps of

Engineers' regulations (33 CFR 325.2 (b)), which tie Corps' permit authorities to approved state coastal zone management programs, specify that nonfederal 404 permit applications shall not be approved unless the appropriate state agency agrees, or the Secretary of Commerce makes a determination of consistency or national security. This regulation is pursuant to Section 307 of the CZM Act of 1972. Additional guidelines for coordination regarding protection of wetlands have resulted from federal Presidential Executive Order 11990, "Protection of Wetlands". The ODNR as recommended lead agency for Ohio's CZM Program shall review all Section 404 permit applications with emphasis on protecting the natural and beneficial functions of wetlands. The Program recognizes that under certain circumstances alterations of a wetland may be necessary in the overall public interest and for the protection of the wetland environment. Also, the Program recognizes that construction and maintenance of dikes is sometimes necessary for continued existence of shallow marsh habitat in the coastal area.

POLICY (20) ODNR, by financial and technical assistance, will encourage local governments to preserve environmentally sensitive areas through local planning, regulation and management.

Implementation - ODNR's Division of Natural Areas and Preserves and critical areas program, in cooperation with the Coastal Zone Management Section, will assist local governments in preserving sensitive areas, especially wetlands, through local plans, ordinances, resolutions and projects. The program encourages public acquisition of coastal wetlands and environmentally sensitive areas of local concern where other management efforts may be less effective in preserving and protecting their natural state.

POLICY (21) ODNR, through landowner education and promotion of the federal Water Bank Program, will encourage restoration of wetlands which have been altered or destroyed.

Implementation - Many acres of land in the coastal area, especially in Lucas, Ottawa, Sandusky and Erie Counties, were formerly wetlands, but were drained for agricultural purposes. In many cases these efforts have met with only partial success. Modification of current management practices, principally changes in water levels and dike maintenance, could return such areas to a status of productive wetlands. The CZM Program will encourage identification and restoration of such areas. The Program will also explore the feasibility of providing tax advantages to participating landowners similar to those available to forest landowners (R.C. Chapter 5713).

The Water Bank Program sponsored by the U.S. Agricultural Stabilization and Conservation Service, but not yet established in Ohio, is another program encouraging the conservation of wetlands. This program provides grants to conserve wetlands, preserve and improve migratory waterfowl habitat and wildlife resources, and serve other environmental benefits. The CZM Program supports and will work towards establishment of eligibility of Ohio's coastal areas within the Water Bank Program.

POLICY (22) ODNR, through state wildlife areas and fish and wildlife management programs, will preserve and protect important fish and wildlife habitats and will review all activities affecting these areas.

Implementation - The CZM Program, through inventory and public nomination of shoreline areas, will continue to maintain information on potential wildlife areas. This information will be given to the Division of Wildlife for consideration in establishing additional wildlife areas. State wildlife areas already established along the shores of Lake Erie and its tributaries are Metzger Marsh, Toussaint Creek, Little Portage River and Magee Marsh Wildlife Areas.

The U.S. Army Corps of Engineers, Ohio EPA and ODNR currently review all activities which may adversely affect prime fish habitat areas. Specific programs reviewed include:

Section 10, River and Harbor Act of 1899 permits;

Section 404, federal Clean Water Act;

Section 402, federal Clean Water Act, National Pollutant Discharge Elimination System permits;

Diked dredge spoil disposal sites;

All water quality regulations; and

Erosion control structure permits (R.C. 1507.03).

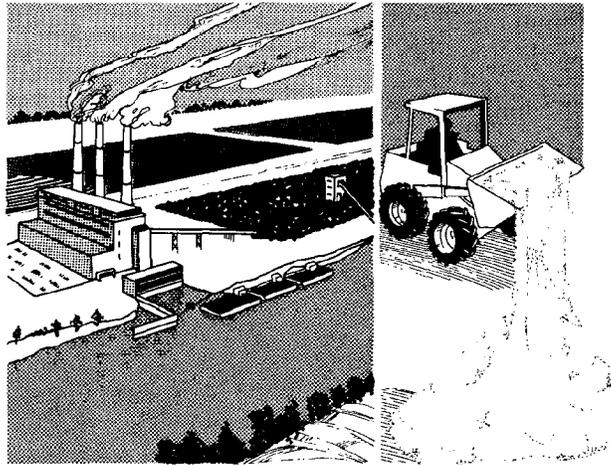
POLICY (23) ODNR, through continued research, cooperation and coordination with adjacent states and Canada, will encourage improved management of Lake Erie fisheries.

Implementation - Management of Lake Erie fisheries depends upon thorough and current knowledge of forage, commercial and sport fish, including population parameters, habitat preferences and life cycles. Demand imposed upon species populations by commercial and sport fishermen is also important to fish management decisions. The CZM

Program will encourage ODNR's Division of Wildlife, Ohio State University's Center for Lake Erie Area Research, and other appropriate organizations to continue to expand their management and research efforts in generating this important information. Generation and interpretation of information related to the impact of various development activities on fisheries and their habitats will be encouraged.

The CZM Program will encourage and support the Ohio Sea Grant Program established to increase public knowledge of Lake Erie resources and undertake necessary research. An example of their research efforts is the development of means to better utilize fish species which are plentiful, but for which commercial markets are limited or nonexistent.

Lake Erie fisheries are a resource shared by Michigan, Ohio, Pennsylvania, New York and Ontario. Management and research should be coordinated and information shared so that fisheries may be enhanced for all concerned. The CZM Program will support the Great Lakes Fisheries Commission, the International Joint Commission and the Great Lakes Basin Commission in development of coordinated fishery rehabilitation programs and management practices including a process for consolidating and bringing issues before the Commission. Water quality of streams entering Lake Erie should be improved to the greatest extent possible to maintain and develop the diversity and productivity of species for the natural environment as well as man's health, safety and welfare. Financial assistance will be available through the CZM Program to fund these management efforts.



Chapter 9

Energy and Mineral Resources

Energy

The Lake Erie shoreline continues to be one of Ohio's major energy facility siting areas. Numerous major coal-fired and nuclear generating facilities are located in the coastal area; four new nuclear units are being constructed and two more are planned. These units will be located at three different sites.

Three principal factors causing greater demand on coastal locations for energy facility siting are proximity to large coastal urban areas, competitive shipping advantages of Lake Erie and the nearly unlimited supply of water for cooling. Some of these facilities are inherently lake dependent, that is their successful functioning in some way requires that they be sited on the coast. For others, inland locations may be possible but may entail increased costs to the industry and consumers.

The siting of energy production facilities and related energy problems are major concerns addressed by Ohio's CZM Program. Coastal energy facility siting is necessary to maintain the economy and standard of living in the coastal and inland region. However, it raises many questions regarding impacts on fish and wildlife, loss of valuable shorefront access, unsightliness and potential dangers.

Growth in energy demand is a dominant factor in determining the number of facilities to be constructed. Energy conservation may reduce the need to construct additional facilities. Methods by which energy can be conserved and used more efficiently include the establishment of lighting and heating standards, use of energy conserving building and insulating materials, establishment of energy

sensitive building codes, implementation of rate structures which encourage energy conservation, and the promotion of statewide energy conservation measures. Many of these have been incorporated into the Ohio Department of Energy's conservation recommendations.

In developing its energy policies the Ohio CZM Program has recognized the need for increased energy output and new facilities to meet this need. CZM has also recognized that siting of energy facilities is of state and sometimes national concern. CZM policies have been designed to allow adequate electrical service to Ohio customers to be maintained. In sum, the CZM Program recognizes the need for a rational allocation of coastal land for the accommodation of energy needs in a manner which minimizes impacts on the environment and is economically feasible.

Mineral Resources

The commercial mineral resources of Ohio's coastal area are essential to the well-being of the region and the state. Coastal commercial minerals, sand and gravel, limestone, dolomite, gypsum, sandstone, salt, shale, peat and land reserves of oil and gas, all provide benefits to Ohio's citizens (Table 4). Possible sublake deposits of oil and gas have been estimated preliminarily at 18 million barrels and 750 billion cubic feet, respectively. The potential of oil and gas extraction raises many questions concerning coastal resources.

Mineral deposits are nonrenewable resources, fixed in location and expensive to extract and transport. Keen competition for utilization of land over these reserves threatens their future availability. Unwise extraction of these minerals can adversely affect the area's other resources.

The Ohio CZM Program views commercial mineral resources as an important aspect of the coastal region. Proper planning and management are necessary to insure adequate future supply and avoidance of irreversible loss or damage to other valuable coastal resources. The CZM Program therefore supports actions directed toward preservation of lands for future mineral recovery, environmentally sound development, stricter enforcement of permits and monitoring, and ultimate rehabilitation of the land for future appropriate uses.

TABLE 4
 COMMERCIAL MINERALS EXTRACTED
 IN THE LAKE ERIE REGION*

<u>Mineral</u>	<u>Quantity</u>
Sand and Gravel	
Coastal Counties	750,000 Tons
Lake Erie and Maumee River	821,000 Tons
Shale	165,000 Tons
Salt	2,800,000 Tons
Gypsum	400,000 Tons
Peat	235 Tons
Sandstone	
Dimensional	47,000 Tons
Crushed and Broken	106,000 Tons
Limestone and Dolomite	15,700,000 Tons
Oil	159,000 Barrels
Gas	1,942,000 Thousand Cubic Feet

* Data from Ohio Department of Industrial Relations, Division of Mines, and ODNR's Division of Geological Survey for Lake Erie and Maumee River sand and gravel, Division of Oil and Gas for oil and gas. All figures are for 1977 except oil and gas which are for 1976. Land based extraction was from the nine shore-line counties.

POLICY (26) ODOE, through the Coastal Energy Impact Program, will provide for assessment and analysis of anticipated energy facility impacts in the coastal area.

Implementation - The CZM Program will cooperate with the Ohio Department of Energy in carrying out the Coastal Energy Impact Program (CEIP) to provide assistance for governmental efforts to plan for energy project related impacts. The Program will, in addition, work with the local communities and encourage them to obtain funding for such projects.

The Coastal Zone Management Act Amendments of 1976 established the CEIP to provide state, regional and local governments financial assistance to assess and/or mitigate the impacts caused by new or expanding energy facilities. The Ohio CEIP is administered by the Ohio Department of Energy consistent with the objectives and policies of the CZM Program.

The CEIP provides 80 percent federal funding for planning grants to defray costs of studying and planning for economic, environmental or social impacts occurring or likely to occur in the coastal area as a result of siting, construction, expansion or operation of energy facilities. Also provided are 100 percent federal grants to remedy unavoidable environmental or recreational losses resulting from general coastal energy activity. A third type of assistance available through CEIP is credit or repayment assistance in the form of direct loans or loan guarantees. Such loans are to be used to finance public services (e.g. transportation, health care or educational facilities) made necessary by new or expanding energy activities. The Ohio Department of Energy, using criteria and procedures established in its Intrastate Allocation Process and in consultation with the CZM Program, will determine priorities for the allotment of such funding on a case-by-case basis.

POLICY (27) ODNR will continue to regulate extraction of coastal mineral resources, including oil and gas, and reclamation and sequential use of affected land.

Implementation - ODNR regulates through permit or lease requirements extraction of mineral resources including but not limited to sand, gravel, stone, gas and oil from and under the bed of Lake Erie. Applications for such permits require concurrent approval from ODNR, OEPA, the Attorney General and the Governor and are granted by ODNR on a royalty or rental basis (R.C. 1505.07).

ODNR, Division of Reclamation, regulates all coastal surface mining operations through permit requirements. Permits are granted by the Chief of the Division of Reclamation once application, charges

and fee requirements have been met (R.C. 1514.02). The Division of Reclamation will continue to provide technical assistance and encouragement to local communities regarding appropriate development of such resources and rehabilitation of the land for future uses. ODNR's critical areas program will continue to identify techniques available to local governments for managing extraction operations. ODNR will improve monitoring capabilities to assure that mining and offshore dredging activities conform to permit conditions and to address other coastal mineral extraction concerns.

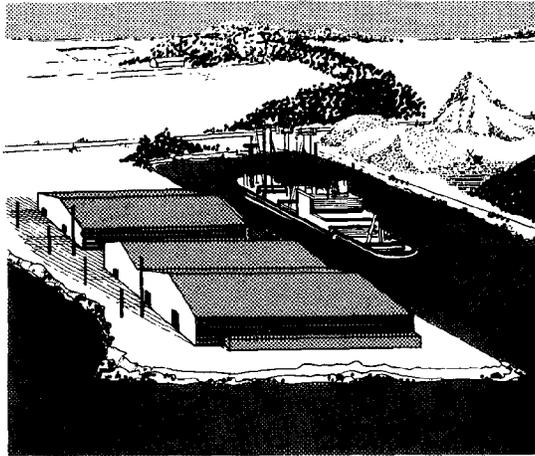
POLICY (28) ODNR will continue to regulate drilling of oil and gas in the coastal area.

Implementation - ODNR, Division of Oil and Gas, regulates oil and gas drilling operations through permit requirements. Permits are approved by the Chief of the Division of Oil and Gas once application and fee requirements have been met (R.C. 1509.05, 1509.06).

The state's offshore gas drilling policy maintains that technological, economic, environmental and enforcement questions associated with offshore drilling are significant. Until these questions are researched offshore drilling should not be encouraged. Development of on-land gas deposits will continue to be given top priority.

The state's offshore oil drilling policy will continue to prohibit Lake Erie drilling in conformance with the informal agreement between Canada and the United States regarding such oil drilling.

Chapter 10



General Development

Ports

The availability of an inexpensive water-based transportation system has greatly influenced development of cities and industry along the Lake. Commercial ports along Ohio's Lake Erie shoreline provide a vital link in the state's transportation system. The major commercial ports are Ashtabula, Cleveland, Conneaut, Fairport Harbor, Huron, Lorain, Sandusky and Toledo. In 1975 over 90 million tons of cargo passed through these ports. Four bulk commodity groups, coal, metallic minerals, nonmetallic minerals and farm products, account for more than 95 percent of this tonnage. Most general cargo is handled at Cleveland and Toledo, although some is shipped through Ashtabula.

Rocky River, Port Clinton and Vermilion Harbors are small, serving mostly recreational craft. Port Clinton Harbor handles some sand and gravel; one commercial fish company uses the dock facilities and over 45,000 passengers annually pass through the port to reach South Bass and Kelleys Islands. A commercial fish company's facilities provide the only nonrecreational activity in the Vermilion Harbor.

The movement of bulk and general cargoes into and out of Ohio's Lake Erie ports will continue to grow. Various technological innovations and conditions have influenced goods and their movements at Lake Erie ports. Such changes include extended shipping seasons, increased size of vessels, fluctuating water levels, unit trains, containerization and processing of raw materials. These factors will continue to influence the flow of goods in the coastal area.

Navigation

Commercial navigation on the Great Lakes-St. Lawrence Seaway System normally ceases during the winter season because of adverse weather conditions and extensive ice formation. The U.S. Army Corps of Engineers, under Section 107 of the River and Harbor Act of 1970, has been authorized to investigate the feasibility of extending the Seaway navigation season beyond the usual eight and one-half months. Extending the navigation season could have a number of potential economic benefits including reductions in the costs of stockpiling, increased efficiency in the use of vessels and shore facilities, reduction of unit transportation costs for existing and projected commerce and development of new lake traffic. Extending the navigation season could, however, cause several problems in the connecting channels and shallow lake areas. The prop wash, surge and speed of ships affect the surrounding benthos, wetlands and fish habitat, and increase the erosion of the shoreline. Such effects need to be studied before any extended season decision is made.

Residential Development

Access, expansive views and other aesthetic considerations make the shoreline a desirable place to live. Residential development, primarily single family housing, occupies nearly 45 percent of the 262 miles of Lake Erie shoreline in Ohio. In some areas near Cleveland, high-rise apartment buildings have been built on the bluffs overlooking the Lake. Neighboring communities face pressure from developers to rezone their shorelines to allow for more high-rise apartments. A local decision to redevelop the shoreline to provide high density housing must be considered carefully. High density housing along the shoreline drastically changes the shoreline's character and limits the options for its future use.

Beginning in the early 1900's many summer cottages were built in nonurban coastal areas. Many are now used as year-round homes with little or no improvement or maintenance. Not designed for year-round habitation, the dwellings have become an eyesore and have created considerable sanitation, fire protection and other service-related problems to their respective communities. A major reason for this deteriorated condition and lack of proper maintenance is the erosion problem. Most residents cannot afford adequate erosion protection and therefore refuse to invest in property and dwelling maintenance. As a result, these people are not able to sell their property and often must absorb the entire loss. Homeowners in such circumstances look to the government to purchase their land or protect it against further erosion.

The problems discussed above occur along the entire shoreline. Although the Lake Erie shoreline is largely developed, it is not completely so and new residential housing and redevelopment is expected to continue. Proper plans should be developed and implemented by local governments to minimize the impacts of continued residential development on the Lake Erie shoreline.

Industrial and Commercial Development

A sound, viable and progressive economy is an essential element of the Lake Erie region. The commercial and industrial advantages provided by the Lake's economic resources are important to the region as well as to the state. A shoreline location advantageously satisfies the following two basic industrial location criteria:

Economic shipping distance for major raw material needs including iron ore, coal and limestone; and

Availability of a large volume water supply for processing needs.

Approximately 10 percent of the shoreline is developed by industrial or commercial interests. Many of the Lake's tributaries are also heavily developed and their harbors have almost exclusively become areas of commercial and industrial development.

Some developments along the shoreline are lake-dependent. Lake-dependent developments and activities require actual lakefront access to operate. These include commercial fishing, port facilities, certain mineral extraction industries, boatworks, shipyards and marinas.

Other developments along the Lake are water-dependent. Water-dependent development requires water as an integral part of its operations but does not necessarily require immediate lakefront location. Electrical generating facilities and steel plants are examples of water-dependent facilities.

Agriculture

Interesting contrasts can be seen in the lake region's agricultural areas. While most shoreland counties reflect some degree of an agricultural economy, the western counties (Lucas, Wood, Ottawa, Sandusky and Erie) play a vital role in statewide agricultural production. They are important producers of typical Ohio field crops including corn, soybeans, wheat and oats.

The coastal counties are also important for specialty crop production. The prolonged growing season along the Lake and nearby urban market needs combine to create an ideal area for growing produce. A variety of fruits, vegetables and berries grows throughout the region. Viticulture (grape cultivation) has been a traditional specialty of the islands and shorelands of Ottawa, Sandusky and Erie Counties. Truck farming is most prevalent in the urban counties. In Lake County the urban-oriented nursery and greenhouse business ranks as the most important form of agriculture. Dairy farming prevails on Ashtabula County's less productive soils and is supported by the nearby urban markets of Cleveland, Akron and Youngstown.

Urban growth has had a serious effect upon agriculture along the shoreline. Very few producing fields can be found along the shoreline and development continues to consume more agricultural land each year.

Local Government Responsibility

Local zoning laws, subdivision regulations and building codes are the major tools used by a community to guide its development. Through these tools local governments can control the type, extent, density, location and quality of development.

Another key factor influencing development and growth patterns is the availability of public service facilities, e.g. sewers, highways, water and fire protection. The availability of these services can have a profound effect on the type and density of development and can be utilized as effectively as zoning to guide and control development. Communities should include public service extension planning as an integral part of their land use control process. The responsibility for such planning should remain with local government.

OBJECTIVE

Based on the preceding findings, the following objective shall guide CZM Program activities:

Encourage wise shoreline development in coastal communities.

CZM POLICIES AND RECOMMENDATIONS

POLICY (29) Local governments, through the CZM community assistance program, will be encouraged to develop and implement comprehensive shoreline development plans consistent with CZM Program objectives.

Implementation - The CZM Program will provide planning grants to local governments for the development of shoreline master plans and implementation ordinances. These shoreline development plans should:

Reflect the need to prevent further reduction in coastal air and water quality,

Give high priority to lake-dependent and public-oriented uses over other shoreline development,

Guide new development and redevelopment in or adjacent to areas of compatible development,

Prohibit structural development in erosion and flood hazard areas,

Utilize land capability analyses,

Preserve natural fish and wildlife habitat areas,

Maintain prime and specialty agricultural areas,

Provide for anticipated port needs and increased recreation and public access in existing harbor areas,

Preserve historic and archeological sites and other areas of cultural significance, and

Reflect other CZM Program objectives and policies.

As a result of these grants, local governments will be able to plan and set priorities for the types of land and water activities occurring in the coastal area.

ODNR will continue to conduct investigations and collect data on the natural resources of the coastal area to assure their wise use and development. These efforts include information about soils, groundwater, geology, forests, wetlands, flood plains and other

resources. Such investigations provide valuable information for local decision makers.

The Ohio Capability Analysis Program (OCAP) provides one method of publishing and distributing this resource information. The program consists of a computer information system containing natural and physical data necessary to analyze and present information on the land's ability to support or sustain various land uses. These analyses, currently available for all shoreline communities, are valuable for local decisions on wise land use and development.

POLICY (30) ODNR will establish a CZM Local Assistance Office in the coastal area to facilitate implementation of the CZM Program and to achieve greater coordination among shoreline residents, coastal communities and state government.

Implementation - ODNR will establish a CZM Local Assistance Office in the coastal area with the following functions:

Coordinate CZM Program implementation activities of coastal communities including local assistance grants, policy implementation and management of Special Management Areas;

Provide information to coastal communities and residents concerning erosion processes, recession rates, protection measures, financial assistance and shoreline permit requirements;

Assist coastal communities and residents in establishment of erosion protection districts;

Answer questions from coastal communities and residents concerning implementation activities, shoreline resources and shoreline problems;

Provide general ODNR resource information to coastal communities and residents; and

Conduct an extensive public education program dealing with coastal resources and issues.

POLICY (31) ODNR, in cooperation with the Department of Administrative Services, will investigate and recommend legislation for the determination of a static boundary line between the state-held trust lands (the bed of Lake Erie) and other shoreline property.

Implementation - The CZM Program recommends that a new definition be developed to clarify the ownership of the bed of Lake Erie. Currently, Ohio's shoreline of Lake Erie, the line where land and water meet, is normally used to determine where the state's rights over the bed of Lake Erie begin. Due to continuous fluctuations in the lake level, the landowner's property line is always changing. During high lake levels, the Lake encroaches onto shoreline property and the property owner loses land to the Lake and thus to the state. Conversely, during low lake levels the property owner's land extends farther into the lake bed. This fluctuating definition causes problems to both the landowner and the state in use and development of the coastal area.

The new definition should be expressed as an elevation in feet with respect to the mean water level at Father Point, Quebec, the 1955 International Great Lakes Datum (I.G.L.D.) reference point. This would assure a fixed, easily determined reference line between state and private or other public lake bed ownership. The three alternative definitions which currently appear to be most practicable are:

1. Low water datum (568.6 feet I.G.L.D.),
2. Ordinary high water level (averages 572.6 feet I.G.L.D.), and
3. Mean water level over period of record (570.5 feet I.G.L.D.).

POLICY (32) Ohio's Lake Erie ports, through a CZM port assistance program, will be encouraged to develop comprehensive port facility and development plans.

Implementation - ODNR will initiate a port planning assistance program for Ohio's Lake Erie ports. Planning grants will be available to assist port authorities in port planning and improvement projects. These grants will be coordinated with the Ohio Department of Transportation to avoid duplication of effort with their statewide port planning program. These port studies also must be coordinated with the affected local communities and must reflect local comprehensive planning and zoning regulations where applicable. Coordination with regional and state transportation agencies is also necessary to reflect current transportation policies and priorities. Port planning should consider and provide for public access points or recreation areas within the harbors wherever feasible. This consideration increases awareness and public support for the ports and the important role they play in the local, state and regional economy.

To complement this planning, ODNR will work with the port authorities in seeking cooperative funding arrangements for port development projects from federal agencies including the Maritime Administration, Economic Development Administration, Office of Coastal Zone Management and the U.S. Army Corps of Engineers. ODNR will also assist the ports in locating acceptable disposal sites for dredged harbor materials.

POLICY (33) ODNR and the regional transportation agencies in the coastal area, through coordination with the Ohio Department of Transportation and specific plan and project review, will encourage consideration of coastal concerns and resource protection in coastal transportation planning and development.

Implementation - The ODNR and regional transportation agencies shall coordinate and review transportation plans to ensure that objectives and policies of the CZM Program are considered. Such coordination and review include air, water and land transportation projects. Principal concerns include:

Water Transportation - It is important to the lake region to maintain and develop commercial water transportation along Lake Erie. Such development should be limited, however, to those areas already developed as commercial harbors. The CZM Program will provide financial and technical assistance to port authorities to develop comprehensive plans for the ports and work with them to seek actual development funds through the Economic Development Administration and other appropriate federal agencies.

Land Transportation - The transportation of goods and people to and from the shoreline is important to all communities. The CZM Program encourages development and maintenance of transportation facilities and improvement of highway and railroad access to Lake Erie ports and other major coastal facilities. However, the CZM Program discourages development of new, major land transportation facilities that impede physical access to the Lake, adversely alter or destroy wetlands and other natural areas, or would be in Lake Erie itself.

Air Transportation - The CZM Program discourages development of new airports in the coastal area.

Considering land requirements of airports, the scarcity of coastal sites, and the nondependency of airports and airstrips upon the Lake, a strong justification exists for locating airports away from the shoreline in favor of lake-dependent or related uses.

Parking Facilities - The CZM Program discourages the utilization of scarce coastal lands for parking lots, except for those providing public access or serving lake-dependent facilities. Where parking lots are developed, they should be built in a manner which minimizes adverse impacts upon shoreline resources and adjacent uses. This would involve locating them inland as far as possible to avoid unwise use of the immediate shoreland.

POLICY (34) ODNR, through participation on the International Great Lakes Levels Board, will support investigations of the impacts and feasibility of extending the navigation season on the Great Lakes.

Implementation - Several potential problems and questions exist concerning the extension of the navigation season. Although the State of Ohio would receive many potential benefits from season extension, these problems and questions need to be researched thoroughly. The CZM Program encourages continued investigation into the impacts and feasibility of extending the navigation season on the Great Lakes-St. Lawrence Seaway System beyond the usual eight and one-half months.

POLICY (35) ODNR, through acquisition of shoreline access areas and coordination with local governments, will provide visual access and encourage protection of the visual quality of the shoreline.

Implementation - The CZM Program will encourage municipalities, townships and counties to protect the visual qualities of and to provide visual access to the Lake Erie shoreline through their planning processes and local actions. These concerns can be addressed through site plan review, architectural boards of review, special protection districts, development standards (such as requiring landscaping, screening, setback and height limitations) and additional subdivision requirements.

The State of Ohio plays a direct role in protecting visual quality and providing visual access to shoreline resources through

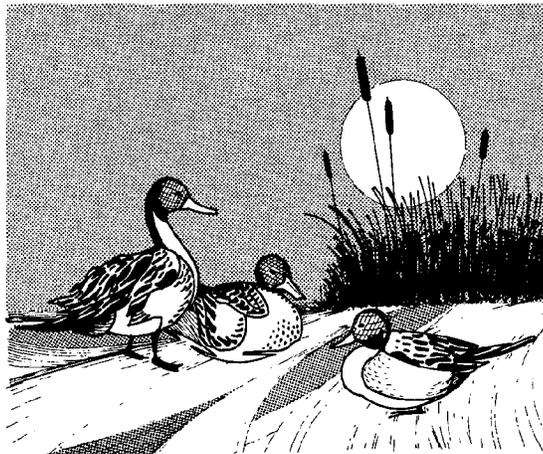
acquisition and development of public access areas and state parks, or by dedication of areas as state nature preserves or wildlife areas. These protected areas include islands, wetlands, estuaries, bluffs, sand dunes and beaches.

The CZM Program will also consider the aesthetic values of visual access to the shoreline during the review of projects for which the CZM Program will have review authority.



Special Management Areas

Chapter 11



Special Management Areas

The Coastal Zone Management Program has proposed a comprehensive set of policies and objectives to improve management of a wide range of coastal problems and issues. However a number of coastal areas are experiencing special problems that must be addressed in the short term by specific and direct actions beyond the scope of general program policies. These areas are either unique for their inherent natural values or they may be undergoing intense development pressures and competition for use. In many cases the two conditions exist together, i.e. areas possessing the most desirable natural qualities are those experiencing the most critical development pressures. Such areas, therefore, need specific and direct attention. In response, the CZM Program is proposing the establishment of Special Management Areas (SMAs).

A number of land and water areas are identified in Chapter 13 for initial Special Management Area designation. Designation of these areas as SMAs is intended to focus local, state and federal government attention toward their management needs. Each designation statement includes a description of the concern or reason for the area's designation, including the recommended management guidelines and use priorities.

CZM Program implementation funding will be available for studies or research regarding SMAs and their management requirements. Special Management Area designation, therefore, can be an important tool for state and local governments in managing their most pressing coastal areas and resource concerns.

Eight types of coastal areas are eligible for consideration as Special Management Areas:

- Natural areas,
- Historic or cultural areas,
- Unique wildlife or vegetation habitats,
- Areas of recreational value or opportunity,
- Hazard areas,
- Locations necessary for commerce or industry,
- Areas of high competition for use, and
- Areas necessary for the protection or replenishment of coastal lands or resources.

Special Management Areas are divided into two classifications -- Areas of Particular Concern (APCs) and Areas for Preservation and Restoration (APRs).

APCs are those Special Management Areas which are experiencing critical pressures or problems and are in need of management attention. APC designation would facilitate necessary improvements or changes in current management approaches. The description of each initial designation (Chapter 13) identifies the proposed management guidelines and recommendations.

Areas for Preservation and Restoration are those SMAs specifically requiring preservation or restoration of natural, recreational or aesthetic resource values. These areas need immediate management attention and may require substantial capital outlays from state and local governments for acquisition or construction. Financial and technical constraints upon local governments make it necessary that the CZM Program provide assistance in preserving and restoring unique coastal resources. Therefore, areas designated as Areas for Preservation and Restoration will receive high priority for program financial and technical assistance.

APRs and APCs can be either generic or site-specific. Generic APCs or APRs refer to a group or type of areas experiencing similar conflicts or problems in the coastal area. For example, the Lake Erie wetlands are all experiencing urban and agricultural development pressures, degraded water quality and water level fluctuations. They require similar management techniques and approaches. Wetlands

associated with the Lake and its tributaries are, therefore, a generic APR designation.

A site-specific APC or APR designation identifies a single site defined by one continuous boundary. Cullen Island, the dredge disposal site in Maumee Bay, is an example of a site-specific APC designation.

Designation of a generic SMA does not exclude the possibility that one or several specific areas within a generic category may be designated a site specific APC or APR. In cases where a particular site of a generic category is unique among the others or undergoing increased pressures or conflicts, it may then be singled out as a site-specific APC or APR. For example, although coastal historic areas are a generic APR designation, the historic Lorain Lighthouse is designated a site-specific APR because of the interest generated by local citizens and agencies regarding the need for its restoration.



Chapter 12

The Designation Process

Procedure for Initial SMA Designations

The process for designating Special Management Areas began during the inventory phase of the first year of program development. At that time detailed inventories of coastal resources were completed and mapped. Results of this analysis led to in-depth studies of the following coastal resource areas during the second year of program development: ports and harbors, sand and gravel resources, fisheries resources, historic resources, flood hazard areas, erosion hazard areas, air and water quality, island resources and environmental areas. These studies and analyses were conducted by CZM Program staff as well as by other Divisions within the Ohio Department of Natural Resources, the Ohio Environmental Protection Agency and the Ohio State University. The studies identified existing conflicts requiring improved management approaches. Specific resource areas requiring special attention were also identified. General recommendations were made for improved utilization and/or management.

Most of these studies were published in report format and made available to the county advisory groups throughout the second and third year of program development. The publication of these documents was announced in the CZM quarterly newsletter, "The Beacon", and in coastal area newspapers to provide opportunities for additional public distribution upon request.

A public nomination process was initiated in Spring 1977 to gain input from local citizens, agencies and organizations regarding specific areas of concern. Nomination forms (Figure 3) and accompanying explanations were distributed through local newspapers and the newsletter. The form clearly defined the types of areas to

be considered (Side 1) and requested information regarding the nominated area and recommendations for its improved management (Side 2). The eight types of areas were consistent with those identified in the federal guidelines with some modifications necessary to better reflect Ohio's coastal situation.

Two hundred and twenty-five completed forms were returned. Greatest public concern was voiced regarding critical erosion areas, public access and recreational opportunities, lake and riverine islands, historic sites and wetlands. The information provided by these nominations was an invaluable tool in the selection of recommended Special Management Areas. Suggestions concerning improved management techniques assisted the CZM staff in their evaluations and prompted further discussion of the issues with potential managing bodies.

The selection process was therefore based upon the agency studies and recommendations, public nominations, and advisory group, local agency, and public interest group responses. An initial list of more than 100 areas (see Appendix D) was derived for consideration and screening by CZM Program staff and later reviewed by the county advisory groups.

Initial screening involved immediate elimination of certain areas with respect to two issues--federal jurisdiction and conformance to Ohio's coastal boundary. All nominated areas owned by or under jurisdiction of the federal government were immediately eliminated from further consideration. Provisions of the federal CZM Act exclude from the coastal area those lands subject by law to federal ownership, management or trust. All areas outside the proposed coastal area were also eliminated from the list of proposed Special Management Areas because the CZM Program would have no authority to recommend actions and management procedures for such areas.

Following initial screening the remaining suggested Special Management Areas were subjected to the following designation criteria:

1. Is the area one of the eight types described in the federal guidelines (modified for use in Ohio)?
2. Is existing management of the proposed SMA inadequate?
3. Are specific and realistic management policies achievable?

GEOGRAPHIC AREAS OF PARTICULAR CONCERN

"Geographic areas of particular concern are those land and water areas in which there is special interest, particularly those areas facing pressures which demand the attention of or exceed the capabilities of, the state's existing planning and regulatory powers."

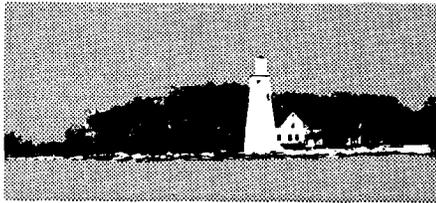
CATEGORIES



1. *Natural areas* - Areas which are unique because of the existence of a vulnerable or scarce natural, scenic or physical feature. Examples: A wood containing a stand of mature Red Cedar or an unusual stream bed outcropping.



5. *Hazard areas* - Areas which would suffer significant hazards from storms, flooding, erosion, settlement or slides if developed.



2. *Historic or cultural areas* - Areas of significance to the historical or cultural development of the citizens of Ohio. Example: A building or area which was important in our early settlement. Archeologic site.



6. *Locations necessary for commerce or industry* - Areas where water location or some geological or land resource is important to industry or commerce. Example: Salt, sand and gravel, or stone deposits.



3. *Unique wildlife or vegetation habitat* - Areas which are known to be important for breeding, overwintering, migrating or feeding for wildlife; areas which support a vegetation type which is becoming limited in its distribution. Example: Known nesting site of bald eagles.



7. *Area of high competition for use* - Area where many types of land uses demand the same lake resources and overdevelopment is therefore threatening. Example: Harbors.



4. *Areas of recreational value or opportunity* - Areas which could be made available to the public for recreation. Example: A beach which lacks access roads or trails to it.



8. *Area necessary for the protection or replenishment of coastal lands or resources.* Examples: Coastal flood plains, sand dunes, groundwater supplies, beaches and offshore sand deposits.

FIGURE 3/Side 1

**GEOGRAPHIC AREAS OF PARTICULAR CONCERN
Nomination Form**

Send forms to: Department of Natural Resources Shoreland Management Unit
Fountain Square, Building E Columbus, Ohio 43224

Nominator: _____

Address: _____

Phone: _____

GAPC Location: _____

County _____

Twp., City or Village _____

Boundary Features _____

Category (place an x for appropriate category):

- | | | | |
|--------------------------|--|--------------------------|--|
| <input type="checkbox"/> | 1. natural area | <input type="checkbox"/> | 6. importance to commerce or industry for water location or geographic or topographic features |
| <input type="checkbox"/> | 2. historic or cultural area | <input type="checkbox"/> | 7. area of high competition for use |
| <input type="checkbox"/> | 2. unique wildlife or vegetation habitat | <input type="checkbox"/> | 8. area necessary for replenishment of coastal lands or resources |
| <input type="checkbox"/> | 4. recreational value or opportunity | | |
| <input type="checkbox"/> | 5. hazard areas; floods, erosion, storms, etc. | | |

Brief Description of the Area: _____

Owner (if known): _____

Why is the area of special concern? _____

How is the area managed now? _____

What are the problems involved? _____

What would you like to see done differently with this area? _____

Do you think the area is of concern to the local community? _____

Do you think the area is of concern on a larger scale (regional or statewide)? _____

4. Is there an appropriate and willing managing agency or body to implement needed policies or address concerns?
5. Does the SMA recommendation have support from the general public, interest groups and local government?

Advisory group review of the list was conducted concurrently with the CZM Program staff screening process. This resulted in a list of 28 recommended areas published as a working paper in winter 1978. Further refinement by the staff and the advisory groups resulted in a revised list of 17 recommended Special Management Areas classified as either Areas of Particular Concern (13), or Areas for Preservation and Restoration (4). This list and a description of each area and priorities for its use are included in the following chapter.

Procedure for Future SMA Designations

Although initial designations are presented in this document, the Special Management Area nomination and designation process is not a one-time exercise--it is continual. The CZM Program recognizes the need to accommodate an evolving management program as additional areas become a focus for future concern.

Nomination of an area for consideration as an SMA may originate from a private individual, an organization or institution, or a federal, state or local unit of government. To be considered, the area must be within the defined coastal area boundary, be outside federal jurisdiction and have a direct relationship to Lake Erie and its coastal resources.

Nominations must be submitted on the official CZM Special Management Areas nomination form available through ODNR's CZM Section and all county and regional planning agencies in the coastal area. The nomination must include a description of the area, reasons for consideration and suggested management policies. Particular attention should be given by the nominator to addressing management concerns and potential managing bodies capable of and committed to dealing with the area's problems. The nomination should include documentation of such interest and commitment on the part of a potential managing body. Nominations would be submitted directly to the Coastal Zone Management Section, ODNR.

SMA nominations, upon assurance that the preceding issues have been addressed, will then be forwarded to the coastal county planning commissions, regional planning agencies and the coastal advisory

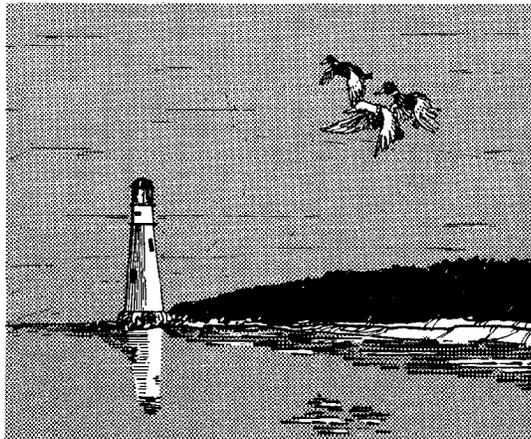
groups. Consultation between these groups and the Coastal Zone Management Program staff will then proceed. Review at this time will involve consideration of the five designation criteria (see page 108).

The Coastal Zone Management Program will take one of three actions as a result of this review. The CZM Program may reject the Special Management Area nomination. In this case, a discussion between CZM staff and the nominator will take place. A written explanation will also be provided to the nominator. The written documentation of rejection will include opinions from the county planning commissions, regional planning commissions and coastal advisory groups.

A second possible CZM action may be referral to an agency with adequate existing authorities to manage the area in question. The nomination process thus serves as an information tool to bring to light concerns not currently addressed but potentially solvable within the existing governmental framework. Again, documentation of this action will be provided to the nominator. This will include the agency's name and a description of its pertinent management authorities. The nominator may then proceed to coordinate with the designated agency. The CZM Program will also follow up to assure proper consideration by the affected agency.

The third action which may be taken by the CZM Program is to recommend formal SMA designation of the nominated area. At that time the CZM staff will prepare a written statement outlining the proposed management guidelines and the responsible managing body or authority. The document will include a statement of justification for designation, a statement of general purpose and philosophy regarding the area and a listing of the priorities for use of the area. Low priority uses will be specified as well. The newly nominated area and accompanying guidelines will be made a matter of public record and will be announced in CZM published materials. If the nomination is found to be acceptable and in the public interest the proposed designation will be submitted to OCZM for approval as an addition or modification to the SMAs in Ohio's CZM Program.

Chapter 13



Designations and Descriptions

The detailed inventories and studies and nomination and screening process conducted throughout the first three years of CZM Program development have led to the proposed designation of 17 areas as Special Management Areas (Table 5). There are five generic and eight site-specific Areas of Particular Concern (APC), and two generic and two site-specific Areas for Preservation and Restoration (APR). The following is a description of each with a statement of its importance, the concerns and the CZM management recommendations for the area.

APCs - GENERIC

Prime Fish Habitats - Prime fish habitats are areas of Lake Erie and its embayments which are particularly important to the Lake's freshwater fisheries. They are important for spawning, nursing, migration, overwintering, feeding and/or refuge. These fish habitat areas include the nearshore, shallow, protected areas and extensively vegetated, clear water areas of Lake Erie and its embayments. Those of particular importance are Maumee Bay, Toussaint-Locust Point reef complex, the Islands area, the Ruggles reef complex and Sandusky Bay (including Muddy Creek Bay).

The CZM Program recommends generic APC status for these prime fish habitat areas. Management needs for these areas include increased monitoring, inventorying and avoidance of disruption. Preservation of these habitats is of highest priority. Local governments may assist in preservation efforts through acquisition or through the regulation of contiguous land uses to lessen impacts on these areas. Activities of lowest priority within these areas are mineral extraction, dredging and filling, and commercial fishing.

TABLE 5

CLASSIFICATION OF PROPOSED SPECIAL MANAGEMENT AREAS

I. Areas of Particular Concern

A. Generic

1. Prime fish habitats
2. Ports and harbors
3. State nature preserves and wildlife areas
4. Coastal erosion and flood hazard areas
5. Public parks and access areas

B. Site-Specific

1. Cullen Island
2. Maumee Bay State Park
3. Battery Park
4. Huron Harbor dredge disposal site
5. Old Woman Creek Estuarine Sanctuary
6. Lorain Harbor dredge disposal site
7. Cleveland Lakefront State Park
8. Geneva State Park

II. Areas for Preservation and Restoration

A. Generic

1. Wetlands
2. Historic and archeological sites

B. Site-Specific

1. Wildlife Realty marshes
2. Lorain Lighthouse

Mineral extraction in Lake Erie is regulated by the Division of Geological Survey (R.C. Chapter 1505).

Commercial, net and trotline fishing is regulated in such areas by the Division of Wildlife (R.C. Chapter 1533).

The CZM Program will review U.S. Army Corps of Engineers Section 404 permit applications to prevent adverse impacts from dredging or filling in prime fish habitat areas.

Ports and Harbors - Ohio's Lake Erie communities have flourished primarily because of their location at naturally protected river harbors along the Lake. Several of the ports which developed at these harbors have grown to immense commercial significance both to these cities and to Ohio's statewide economy as well. They continue to be the greatest single factor in maintaining the economic well-being of the urban areas. In addition, the smaller coastal river mouths have promoted the development of heavily utilized small boat harbors. The larger ports also support, to a varying extent, recreational boating facilities. Both small boat harbors and large port complexes are increasingly subject to intense pressures for modern commercial-industrial uses and for public access.

Because of their vital importance to Ohio's economy and to the recreational enjoyment of its people, the CZM Program recommends generic APC designation for Ohio's Lake Erie ports and harbors. Designation will provide increased funding for needed port facility planning. Proper planning is necessary to assure that port related needs and other coastal uses such as recreation and public access are considered. Port authorities have authority to carry out such planning efforts. Local zoning regulations can be used to ensure compatible land uses in the harbor areas, especially to provide for necessary expansion of harbor-dependent development and storage.

The CZM Program recommends that commercial transportation, recreation and public access activities are the most appropriate for port and harbor management. All other uses, especially non water-dependent uses, would be of low priority.

State Nature Preserves and Wildlife Areas - Ohio's Lake Erie region possesses a diverse system of natural areas and wildlife habitats. The viability of numerous plant communities and wildlife populations and endangered species depends upon their proper management. Scientific research and public education is greatly enhanced through interpretive uses of these areas. The wildlife areas additionally provide the state's greatest recreational opportunities for fishing and hunting.

APC designation for state nature preserves and wildlife areas (see Coastal Resource Maps, Appendix H) would place a high priority on maintaining these refuges. Uses of highest priority would be those which promote or do not adversely affect preservation, recreation, restoration, scientific research and public education.

The Department of Natural Resources, Division of Natural Areas and Preserves, is authorized to acquire, dedicate and accept dedication of public and privately owned lands as nature preserves (R.C. Chapter 1517). The Division has authority to manage and protect such lands for educational and scientific use and visitation and protection of natural features, including endangered species. The Division may inventory, plan, study and regulate the use of such areas. Currently dedicated nature preserves in the coastal area are Mentor Marsh and Headlands Dunes. Three additional areas (Old Woman Creek, Dupont Marshes and Wildlife Realty Marshes) are in various stages of acquisition.

The Department of Natural Resources, Division of Wildlife, is authorized to acquire land and water areas as wildlife areas and to manage them utilizing sound wildlife management techniques (R.C. Chapter 1531). Currently established state wildlife areas in the coastal area are Metzger Marsh, Toussaint Creek, Little Portage River and Magee Marsh.

APC designation will promote increased cooperation and assistance to assure that the natural integrity and the educational and recreational values of state nature preserves and wildlife areas are not threatened.

Coastal Erosion and Flood Hazard Areas - The serious nature of hazards resulting from flooding and erosion dictates the need for joint efforts by state agencies and local communities regarding hazard area management. More than 55 miles of Ohio's Lake Erie shoreline have been identified as critical erosion areas (areas receding at a relatively high rate or where existing development is threatened). Flooding may occur along the entire shoreline, but is particularly severe at stream mouths and in the low relief areas of the western basin.

Both flooding and erosion are the results of natural and, for the most part, unpredictable forces. Therefore, management guidelines which support passive use of lands subject to these forces are recommended. Uses of highest priority are recreation and open space. Structures for human occupation are of lowest priority, except where adequately protected, so as to avoid threats to public health, safety and welfare. Low priority uses in flood plains are those which do not conform to flood insurance program regulations.

Low priority uses on critically eroding shorelands are those which do not conform to proposed setback requirements.

At present the Ohio Department of Natural Resources is authorized to review state and federally funded projects for their compliance with flood plain management criteria. Proposed Coastal Zone Management legislation would require all local governments with designated lake and riverine flood hazard areas to establish and enforce flood plain regulation programs consistent with the National Flood Insurance Program of the Department of Housing and Urban Development or maintain participation in that program.

The proposed Coastal Zone Management legislation will also require local governments to establish a building setback on all new construction and redevelopment for human occupation within the 30-year recession area. Local units of government will utilize zoning or building regulations to enforce the setback requirement.

Public Parks and Access Areas - Of all shoreline uses, recreational areas (parks, as well as fishing and boating access sites) have the widest constituency of users. Providing adequate public access is the only way to make the recreational opportunities of Lake Erie available to the public. Public lakeshore parks are, however, experiencing increasing problems. Budget constraints have impeded planning and maintenance of local parks. In some locations abuse and destruction have resulted from overuse or from lack of supervision.

Recognizing the need and value of providing recreational opportunities in the region and the frequent conflicts which arise, the CZM Program proposes generic APC designation for all state, county, municipal, metropolitan and township waterfront parks within the coastal area. (see Appendix E and Coastal Resource Maps, Appendix H). It also proposes generic APC designation for public boating and fishing access sites. Optimum utilization without abuse is of highest priority; all uses conflicting with this intent would be of low priority.

The CZM Program will cooperate with ODNR's Division of Parks and Recreation, which is authorized to create, supervise, operate, protect and maintain a system of state parks and promote their use by the public (R.C. Chapter 1541).

The Program will also advise and assist park districts (county, township and municipal) created for the purposes of acquiring, planning, developing, protecting and maintaining or improving lands for parks (R.C. 1545.07).

APCs - SITE-SPECIFIC

Cullen Island (Island 18) - Located adjacent to the navigation channel at the mouth of the Maumee River. It is a 150-acre confined disposal site used between 1961 and 1978. The newly filled site is presently owned and managed by the U.S. Army Corps of Engineers. Upon completion of current protection efforts the Corps will transfer ownership to ODNR. The CZM Program recommends that the highest priority of use for this area be as a wildlife reserve with provision for limited public recreational access for fishing and waterfowl hunting. Any other uses would be of low priority.

Maumee Bay State Park - Located adjacent to the Cedar Point unit of the Ottawa National Wildlife Refuge along Maumee Bay. The proposed park is in planning and early development phase and the CZM Program recommends timely development of these park facilities. Uses of highest priority would be those compatible with the recommended development plan providing natural areas, hiking trails, lake-oriented recreation and other recreational and overnight facilities. Uses of lowest priority would be those which conflict with the plan.

Battery Park - Located in the City of Sandusky. Several phases of master plan development for recreational and shorefront access needs have already been initiated. The CZM Program has funded one phase of the Meigs Street pier rehabilitation element. Effective implementation of the Battery Park plan requires the resolution of a number of problems. The CZM Program recommends that the uses of highest priority be those consistent with the master plan. Uses of lowest priority would be any uses which would conflict with this plan.

Huron Harbor Dredge Disposal Site - Located on the west side of the City of Huron's breakwater. The 63-acre, semicircular confined disposal site is scheduled for completion in 1986. The CZM Program funded a Huron Joint Port Authority study of recreation and access alternatives for the site. The Program recommends that when filled the site be transferred from the U.S. Army Corps of Engineers to the City of Huron for recreational development. Uses of highest priority would be recreational and other uses consistent with the proposed master plan. All other uses would be of lowest priority.

Old Woman Creek Estuarine Sanctuary - Located two miles east of the City of Huron. It has been designated as the Great Lakes' first estuarine sanctuary under the Coastal Zone Management Act of 1972. Once acquired the area will be managed by the Division of Natural Areas and Preserves as a state nature preserve. Highest priorities for the area include public education and scientific research activities. Other uses would be of lowest priority.

Lorain Harbor Dredge Disposal Site - Located by Lorain Harbor's east breakwater. This 58-acre, semicircular confined disposal site is scheduled for completion in 1987. The CZM Program recommends that when filled the site be transferred from the U.S. Army Corps of Engineers to the City of Lorain for recreational development. The uses of highest priority would be recreational and other uses consistent with the proposed master plan; other uses would be of low priority.

Cleveland Lakefront State Park - Located in various segments along Cleveland's shoreline. The state park is in the planning and development phase and is managed by the Ohio Department of Natural Resources, Division of Parks and Recreation. The CZM Program recommends timely development of park facilities to enhance the lakefront and allow for optimum enjoyment of an urban recreational setting. Uses of highest priority would be urban, water-oriented recreation. Uses of lowest priority would be those which conflict with the urban, water-oriented recreation intent.

Geneva State Park - Located one mile west of Geneva-on-the-Lake. The Ohio Department of Natural Resources has budgeted funds for improved facilities at this currently underdeveloped park. The CZM Program recommends expediting new facility construction. Uses of highest priority would be those identified in the master plan and consistent with state park development policy. Lowest priority uses would be those activities conflicting with these objectives.

APRs - GENERIC

Wetlands - More than fifteen thousand acres of coastal and estuarine wetlands in the Lake Erie region form one of the most significant portions of the entire Great Lakes wetland system. As such this valuable state resource assumes a stature of national and even international importance for fish and wildlife production. Tremendous resource benefits result for hunting and fishing. Of local significance is the role wetlands play in lessening the effects of flooding. The wetland complex also provides a water filtering and purification process which improves overall water quality (see Coastal Resource Maps, Appendix H).

Ohio's coastal wetlands have experienced extreme development pressures with wetland losses between 1954 and 1974 exceeding 65 percent. Ohio's CZM Program recognizes the importance of this wetland complex including both large and small components. Recognition of coastal wetlands and their continued vulnerability has therefore led to proposed designation as a generic APR. Highest priorities for these areas are preservation and restoration as nature

preserves, wildlife habitat, scientific research, interpretive study and hunting areas. Any other uses would be of low priority. The CZM Section will review U.S. Army Corps of Engineers Section 404 and Section 10 permit applications for consistency with the Program's wetland policies.

The CZM Program will assist and cooperate with ODNR's Division of Natural Areas and Preserves in its state nature preserve acquisition efforts and the Division of Wildlife in acquisition of wetlands for state wildlife areas. The Program will actively seek additional matching funds for wetland protection efforts and will continue to inventory and survey wetland areas. Information regarding such areas will be referred to the Divisions of Wildlife and Natural Areas and Preserves.

Ohio's CZM Program will also seek participation in the U.S. Agricultural Stabilization and Conservation Service's Water Bank Program to provide incentives to landowners for wetland preservation.

Local units of government should utilize land use control regulations to protect valuable wetland areas. Local authorities may also preserve wetlands by acquisition and maintenance as natural areas and wildlife refuges. Ohio's Department of Natural Resources can provide technical assistance and management guidelines for such efforts through the critical areas program.

Historic and Archeological Sites - Historic and archeological sites are districts, sites, buildings, structures and objects significant to Lake Erie's cultural and historic heritage (see Appendix F for list of coastal historic sites). Such areas provide lake residents with a strong sense of their past and Lake Erie's importance in the development of the Great Lakes region. They are also important tourist attractions. Historic and archeological sites provide a valuable record for scientists in studying the history and culture of the region.

The CZM Program recognizes the great importance of these historic, cultural and archeological resources to the coastal area. APC designation is proposed to assure that coastal activities and developments occur without harm to such reminders of our heritage. Preservation, restoration and protection will be of highest priority for historic and archeological sites. Management guidelines require CZM's cooperation with the Ohio Historical Society in updating coastal historic site records and prohibition of activities which would threaten historic or archeological sites. APR designation will enable the CZM Program to assist local communities and historical societies in funding historical protection and restoration efforts. Local governments may also acquire such sites or utilize zoning laws

and landmark preservation ordinances to assure that development does not detract from a site's historic or cultural significance. Activities which destroy or prevent restoration of historic areas are of lowest priority.

APRs - SITE SPECIFIC

Wildlife Realty Marshes - Located in the easternmost portion of Sandusky Bay (East Bay). This 400-acre area exhibits an outstanding diversity of wetlands, forests and beaches which provide excellent habitat for fish and wildlife. The CZM Program recommends that this area be acquired as a state nature preserve to be managed by the Division of Natural Areas and Preserves. Uses of highest priority would be preservation, scientific research, and public education; any other uses would be of low priority.

Lorain Lighthouse - Located at the lakeward end of the west breakwater in Lorain Harbor. The CZM Program recommends that the Lorain County Historical Society, which has recently purchased the site, restore it and manage it as a historical site. The uses of highest priority would be historic preservation and restoration and provision for public access; any other use would be of low priority.

ACTIVE SMA NOMINATIONS

The inventories, studies, nominations and designation process revealed a number of areas which are known to require additional or special management attention. However, the additional management techniques have not been developed or the necessary authorities have not been established at this time. Further study and discussion is necessary regarding these areas. The CZM Program will continue to address these concerns and, with local cooperation, may designate certain of these areas as APCs or APRs in the future.

The following is a list of the active SMA nominations under consideration for future designation:

<u>Areas</u>	<u>Concerns and Goals</u>
Grassy Island (Maumee River)	valuable natural area
Maumee Bay	important economic and natural resource area needing comprehensive planning and use priorities with intergovernmental coordination

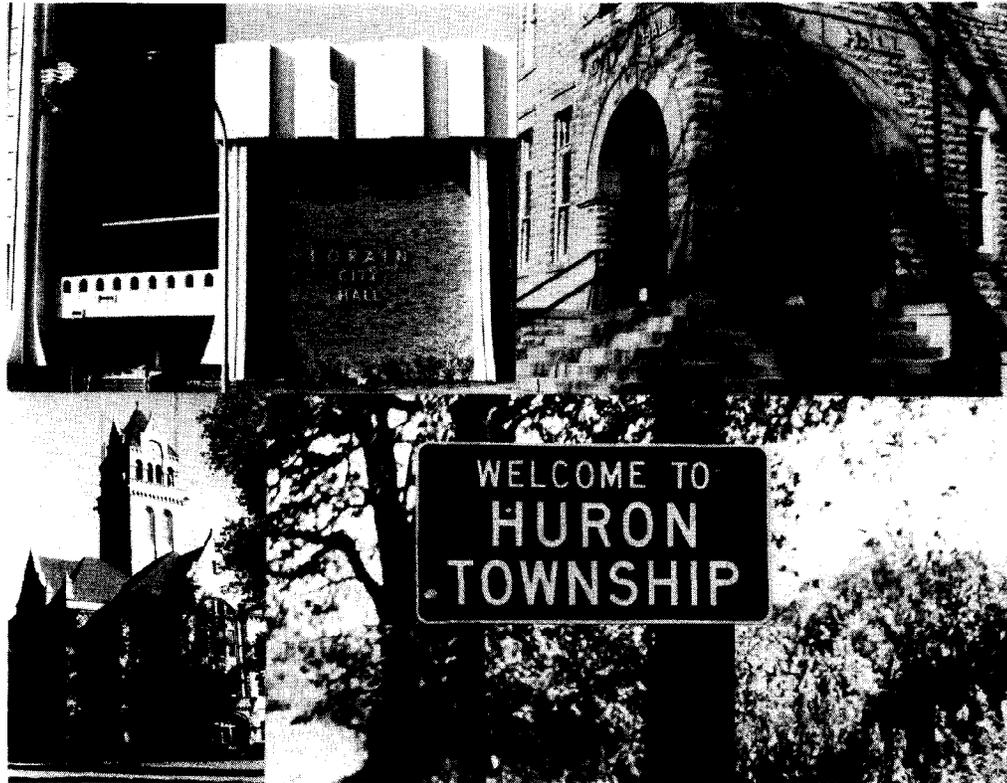
<u>Areas</u>	<u>Concerns and Goals</u>
Sandusky Bay	significant fish, wildlife and recreational resource requiring comprehensive planning and use priorities with intergovernmental coordination
Hole-in-the-Wall Beach (Lorain)	area of high recreation potential requiring improved access
Cleveland Lakefront (E. 9th Street to E. 55th Street)	controversy regarding future uses requires extensive study and intergovernmental cooperation
Lake Erie Islands	unique cultural, biological, historical and recreational resource area requiring a comprehensive master plan for future use
State Route 531 (Ashtabula County)	scenic area requiring visual access point
Cuyahoga Riverfront	economic and recreational resource requiring multiple use management decisions
Mentor Marsh, western end	unique wetland supporting diverse flora and fauna and experiencing development pressures
Chagrin River Islands	delicate coastal environment requiring efforts to preserve and provide passive recreational opportunities
Marblehead Lighthouse	coastal historic site in need of restoration and provision for better public access
Arcola Creek (Lake County)	valuable natural area requiring management for passive recreation and wetland protection.

Areas

Miller Road Park
(Lorain County)

Concerns and Goals

undeveloped recreational
access potential and severe
erosion problems



Organization & Implementation

Chapter 14

Organization and Implementation Authorities



Traditional units of government are not organized to manage complex problems of the coastal area. The State of Ohio has recognized this deficiency in some measure by authorizing the creation of such special government entities as local port authorities. However, numerous agencies and organizations may have interest in a particular segment of the coast, making determination of a desired course of action complex. Citizen frustrations are great because it is difficult to know "who to talk to" concerning coastal actions. Resources are damaged or destroyed because actions are insufficiently coordinated. Ohio's CZM Program will seek to provide the mechanisms and framework to enable citizens and organizations to express their views, especially when more than one level of government is involved. Government activities in the coastal area will be more closely coordinated. Coastal residents have been actively involved in drafting CZM goals, objectives and policies which will guide coastal development and resource utilization. This chapter addresses:

Implementation roles of agencies and citizens,

Land and water activities to be managed,

Land and water uses of regional benefit,

Resolution of conflicts, and

Process for future program modifications.

IMPLEMENTATION ROLES

Constitutionally and legislatively, authorities to manage coastal resources have been delegated to federal, state and local governments in varying degrees. The CZM Program does not propose significant changes in these relationships, nor does it seek to create a "superagency" to provide overall management. It does propose mechanisms to ensure intergovernmental coordination and a framework of objectives and policies. State and federal governmental actions must be consistent with these objectives and policies. The first part of this chapter describes the roles of citizens and various governmental entities in implementing the CZM Program.

CZM Program Lead Agency

It is recommended that the Ohio Department of Natural Resources (ODNR) be the lead agency for implementation of Ohio's CZM Program. ODNR has been the principal state agency responsible for coastal resources since its creation in 1949. Authorities held by ODNR as embodied in the Ohio Revised Code address such coastal-related resources and uses as surface and subsurface water, wildlife, watercraft, harbors of refuge, parks, recreation, surface mining and reclamation, oil and gas, shore erosion and natural areas. Most of the proposed CZM policies relate to existing ODNR authorities. In addition, ODNR was designated by the Governor in 1973 as the lead agency to develop a CZM Program under Section 305 of the Coastal Zone Management Act of 1972. Responsibilities of ODNR as designated lead agency would include the following:

Program Administration - ODNR would provide overall administration of the CZM Program. It would administer federal and state funds allocated to Ohio's CZM Program. Included would be issuance of pass-through money to local units of government and state agencies to fund implementation efforts, contracting for management or resource studies, applying to the federal Office of Coastal Zone Management (OCZM) for grants under various sections of the CZM Act, and monitoring consistency of state agency activities with the Program. ODNR would provide general coordination of local, state and federal coastal resource management.

Performance Reviews - ODNR would periodically review and evaluate program implementation by the various state agencies and local governments involved. Such performance reviews would be based upon adherence of implementation efforts to CZM Program policies. The review process would utilize various evaluation techniques, including written reports, joint meetings and site visits. Remedial

action would be recommended as appropriate. Overall performance review reports would be submitted to OCZM as required.

Regional Benefit - ODNR would review and assure that provisions of the CZM Program designed to prevent the arbitrary exclusion of land and water uses are effective. These provisions are detailed later in this chapter.

Federal Consistency - ODNR would review federal programs, projects and permit applications to determine consistency with Ohio's CZM Program. Details on how ODNR will implement this authority under Section 307 of the CZM Act are discussed in Chapter 15.

Program Modification - ODNR would develop and submit to OCZM for approval any proposed refinements and amendments to the approved CZM Program. In general, changes will be based upon recommendations of citizens or local governments. Any proposed amendments would be developed with public notice and hearings, as well as advisory group review.

Special Management Areas - ODNR would administer the Special Management Area nomination and designation process. Management of such areas, however, may be the responsibility of other state agencies or units of local government (see Chapters 11-13).

Public Education - ODNR would conduct an extensive, ongoing public education program related to coastal issues, resources and management.

Citizens and Interest Groups

A major objective of ODNR has been to develop a CZM Program with involvement of local governments, public interest groups and shoreline residents. It is proposed to maintain this involvement as a key aspect of program implementation. It is important that local concerns be known and addressed. The CZM Program can expect only limited success without the active involvement of these people. Continuation of the county advisory groups organized during the program development process will be the principal mechanism for this involvement.

The CZM Program established shoreline advisory groups in each county during program development to obtain local government and public involvement. These effective groups will be continued during program implementation. The groups provide a local perspective on

coastal issues and concerns; also, they advise state efforts in coastal planning. They represent a full range of local public and private shoreline interests including representation from every unit of government within the coastal area. Membership will be open to all coastal residents and interests desiring to participate.

The groups will continue to be organized by the respective county or regional planning agency. Each group will elect its own chairperson and other officers as necessary. Each group will determine its own meeting agendas and arrangements in cooperation with the county or regional planning agency. Financial assistance will be provided to the county or regional planning agency to cover the costs of maintaining the group.

Although ODNR, the recommended lead agency, will have overall CZM Program administration authority, it will seek county shoreline advisory group input concerning, but not limited to, the following program aspects:

- Program effectiveness,
- Lead agency responsibilities,
- Special Management Area designations,
- Grant requests,
- Specific project proposals and studies,
- Federal consistency review,
- Regional benefit considerations, and
- Program modifications or amendments.

Local Governments

Although state agencies have many authorities in the coastal area, especially in Lake Erie itself, it is clear that coastal resources cannot be managed properly without the involvement and cooperation of local units of government. The Constitution of the State of Ohio and the state legislature have delegated many authorities to local units of government, especially municipalities. Many of the CZM Program policies which encourage specific actions as well as policies regarding management of erosion and flood hazard areas involve direct local government implementation (see Table 6).

TABLE 6

DIRECT ROLES IN CZM POLICY IMPLEMENTATION

COASTAL EROSION AND
FLOOD HAZARD AREAS

<u>Policy</u>	<u>Local</u>	<u>State</u>
1		X
2	X	
3	X	
4		X
5		X
6		X

ENVIRONMENTALLY SENSITIVE
AREAS

<u>Policy</u>	<u>Local</u>	<u>State</u>
18		X
19		X
20	X	X
21	X	X
22		X
23		X

AIR AND WATER QUALITY

<u>Policy</u>	<u>Local</u>	<u>State</u>
7	X	X
8	X	X
9	X	X
10	X	X
11	X	X
12	X	X

ENERGY AND MINERAL
RESOURCES

<u>Policy</u>	<u>Local</u>	<u>State</u>
24		X
25	X	X
26	X	X
27		X
28		X

RECREATION AND PUBLIC
ACCESS

<u>Policy</u>	<u>Local</u>	<u>State</u>
13	X	X
14	X	X
15	X	X
16	X	X
17	X	X

GENERAL DEVELOPMENT

<u>Policy</u>	<u>Local</u>	<u>State</u>
29	X	
30		X
31		X
32	X	
33	X	X
34		X
35	X	X

To protect public safety and welfare from the hazards of erosion and flooding, CZM Program proposed legislation requires local governments to regulate construction in areas where these hazards exist. Failure of local governments to adopt appropriate regulations will make them ineligible for state and federal erosion assistance and may result in legal action by the state Attorney General. In the erosion hazard area identified by ODNR, municipalities, counties or coastal townships will enact appropriate building or zoning regulations to implement the 30-year erosion setback for new construction, redevelopment or substantial improvement. Additionally, local governments will be encouraged to join together with shoreline residents to establish erosion protection districts to address common erosion problems.

Local governments will regulate construction in flood hazard areas designated by the National Flood Insurance Program in accordance with that program's standards and criteria, or will enact their own equivalent flood plain regulations.

Another key role in local CZM Program implementation will be development of comprehensive shoreline plans to address local development and management of coastal resources. Although the Program will not require development of such plans, they will receive a high priority for program financial and technical assistance. The scope and objectives of these plans are described in Policy 29, Chapter 10.

CZM Program financial and technical assistance will be available to local governments for other CZM activities including managing Special Management Areas and developing and administering local coastal regulations.

The coastal regional planning and development organizations (TMACOG, NOACA and EDATA) also have a role in CZM Program implementation. They serve as areawide clearinghouses for local A-95 and environmental impact statement review. As areawide clearinghouses these agencies will help implement the regional benefit provisions of the CZM Program described later in this chapter. TMACOG and NOACA have developed "208" water quality management plans covering most of the coastal area. These roles and others related to regional housing, transportation and environmental planning help achieve CZM Program objectives and will continue to be coordinated with the CZM Program.

The CZM Program requires the lead agency to review implementation efforts by all local units of government and state agencies exercising authorities related to CZM Program policies. Periodic review will identify inadequacies and problems in program implementation. Specific monitoring procedures involving state

agencies, county planning commissions and local governments will be developed prior to program implementation.

State Agencies

Most CZM Program policies will be implemented through existing authorities of state government agencies (see Table 6). Proposed CZM Program legislation assures the exercise of these authorities and expenditure of the state's capital improvement budget in a manner consistent with the objectives and policies of Ohio's CZM Program. Procedures for assuring this consistency will be established in rules for program administration promulgated by the Director of ODNR. Conflicts will be resolved by the procedures described on page 141.

State agencies with coastal management authority have been involved in the development of the CZM Program. These agencies will be eligible for CZM Program funding assistance for their implementation responsibilities. To coordinate state agency implementation, the Program will continue the CZM State Agency Coordination Group. This group includes representatives of the various state agencies participating in program implementation. These agencies and their key responsibilities are described in Appendix G.

Federal Agencies

Several federal agencies play an important role in management of Ohio's coastal resources. Coordination was maintained with appropriate federal agencies during program development and will be continued in program implementation. Specific roles and coordination mechanisms are described in Chapter 15.

The Office of Coastal Zone Management reviews grant applications pursuant to various sections of the Coastal Zone Management Act of 1972; it will review program contracts and provide guidance on project eligibility, and will approve or disapprove proposed program modifications. The Secretary of Commerce considers appeals in cases of inconsistency with approved state programs.

MANAGED COASTAL ACTIVITIES

The CZM Program has studied and compiled information concerning Ohio's coastal land and water activities and, with advisory group input, has determined which of these activities will be subject to management under CZM Program policies (see page 133). Not all activities in the coastal area are managed under the policies of the CZM Program. Only those activities raised as issues of concern over a major portion of the coastal area and considered to have a direct and significant impact on the coastal lands and waters are identified as managed activities. The terminology "direct and significant impact" is defined for program purposes as follows.

Impact: The result of an action which generates a change in some element of the environment.

Direct Impact: An immediate causal relationship between an activity and a resource.

Significant Impact: An impact that affects resources held in trust for the public by the State of Ohio or affects public health, safety or general welfare.

The management approach of Ohio's CZM Program addresses the resultant or potential impacts of coastal activities rather than the general land uses associated with the coastal activities. To help clarify this management approach and the difference between the terms "uses", "activities" and "impacts", consider the following representative examples:

<u>Uses</u>	<u>Activities</u>	<u>Impact</u>
Industry	Effluent discharge	Effect on water quality
	Erosion protection	Effect on adjacent properties
Recreation	Park development	Effect on endangered species
	Marina construction	Alteration of wetlands

In other words, the CZM Program's management or "enforceable" policies support, condition or prohibit a specific coastal activity on the basis of its determined or potential impact. They do not establish land use plans or zoning classifications. Land use planning and zoning will continue to be the responsibility of local governments. The Program, however, through positive, nonregulatory policies and technical and financial assistance does encourage local governments to exercise their responsibility to develop shoreline master plans and adopt them as the basis for local land use decisions and regulatory authority.

Ohio's CZM Program combines or "networks" state agency and local government authorities to manage these coastal activities under lead agency coordination. The Program's policies are discussed in Chapters 5-10 and include the specific authorities and agencies managing respective coastal activities. Activities managed at the state agency level rely upon existing legislated authority. No additional state level regulations are required.

Activities managed at the local level will also rely upon existing or currently proposed legislation. Activities, the authorities upon which they are based and program policies to which they relate are listed below.

Coastal Erosion and Flood Hazard Areas

Activities in shoreline erosion hazard areas involving new construction or redevelopment of buildings. To be enforced by local governments. CZM legislation proposed (Policy 2).

Activities in lake or riverine flood plains. To be enforced by local governments. CZM legislation proposed (Policy 3).

Activities involving construction of shoreline erosion control structures. A permit from ODNR is required before construction. R.C. 1507.03 (Policy 4).

Air and Water Quality

Activities involving any process or system which may be a source of air pollution. OEPA sets air quality standards and issues permits for the operation and installation of point sources of air pollution. R.C. Chapter 3704 (Policy 7).

Activities involving any process or system which may be a source of water pollution. OEPA adopts

and enforces water quality regulations and issues permits for point sources of pollution. R.C. Chapter 6111 (Policies 8,9).

Activities involving solid waste disposal sites. OEPA adopts regulations concerning solid waste sites and facilities, sets criteria for licensing by health districts and approves new sites. R.C. Chapter 3767 (Policies 11,12).

Activities involving water withdrawal from Lake Erie or rivers. OEPA approves plans for water withdrawal systems for human consumption and issues regulations for water standards for drinking water. R.C. Chapter 6111 (Policy 7).

Activities involving development of sewage treatment plants. Public Utilities Commission issues certificates of public convenience and necessity. R.C. 4933.25. OEPA approves plans for sewage treatment plants. R.C. 6111.44. OEPA approves private sewage disposal systems. R.C. 6112.02 (Policies 8,9).

Activities involving unsanitary or unsightly dumping in Lake Erie or tributaries or on their banks. Prohibition of dumping unless a permit issued under R.C. 6111.04, R.C. 3767.32 and R.C. 1531.29. Enforced by OEPA, ODNR and local officials (Policy 11).

Activities involving disposal of liquid wastes into wells. OEPA issues a permit. R.C. 6111.043 (Policy 12).

Recreation and Public Access

Activities involving state parks. ODNR, Division of Parks and Recreation, can purchase areas for state parks. ODNR manages and operates state parks. R.C. Chapter 1541 (Policy 13).

Activities involving enforcement of fish and wildlife laws. ODNR, Division of Wildlife, issues and enforces all laws pertaining to fish and wildlife management in Ohio. R.C. Chapters 1531 and 1533 (Policy 14).

Activities involving state wildlife areas and public hunting and fishing areas. ODNR, Division of Wildlife, can acquire and manage land for public hunting and fishing, and wildlife refuges. R.C. 1531.06 (Policy 14).

Activities involving recreational boating. ODNR, Division of Watercraft, administers and enforces all laws relative to the identification, numbering, titling, use and operation of watercraft operated on waters of state. R.C. 1547.51 (Policy 15).

Activities involving recreational boating facilities. ODNR, Division of Watercraft, is the refuge and small boat harbor agency of the state for participating with the Corps of Engineers on such project. R.C. 1547.71, or with other entities. R.C. 1547.72 (Policy 15).

Activities involving recreational trails. ODNR, Division of Parks and Recreation, can plan and administer a state system of recreational trails for hiking, bicycling, horseback riding, ski touring, canoeing and other nonmotorized forms of recreational travel. R.C. Chapter 1519 (Policy 16).

Environmentally Sensitive Areas

Activities involving natural areas and nature preserves. ODNR can acquire areas as nature preserves. ODNR, Division of Natural Areas and Preserves, manages nature preserves. R.C. Chapter 1517 (Policy 18).

Activities involving scenic rivers. ODNR, Division of Natural Areas and Preserves, may designate, operate and maintain wild, scenic or recreational river areas. R.C. 1501.16. ODNR reviews all modifications of scenic rivers by public entities. R.C. 1501.17 (Policy 18).

Activities involving wetlands. ODNR will utilize the state's authority under the consistency provision of the C2M Act as the C2M lead agency (contingent upon proposed lead agency legislation and approval of C2M Program). (Policy 19).

Activities involving rare and endangered animal species. ODNR, Division of Wildlife, adopts and enforces rules concerning taking of endangered native species of wild animals. R.C. 1531.25 (Policies 18, 22).

Activities involving endangered species of native Ohio wild plants. ODNR, Division of Natural Areas and Preserves, adopts and enforces rules concerning taking of endangered plant species. R.C. Chapter 1518 (Policy 18).

Activities involving fish management. ODNR, Division of Wildlife, has authority to develop and implement a fish management program. R.C. 1531.07, 1531.08, 1531.15 and 1531.24 (Policies 22,23).

Areas of Historic Significance

Activities involving archeological and historic sites. Ohio Historical Society (OHS) can create, operate and maintain a system of state memorials. OHS sets procedures for excavation of archeological sites on the state registry. All state agencies shall cooperate with OHS in preservation of sites. OHS sets procedures for altering historic sites on the state registry. R.C. Chapter 149 (APR designation).

Energy and Mineral Resources

Activities involving removal of minerals from and under the bed of Lake Erie. ODNR issues a permit to take and remove sand, gravel, stone, gas, oil, halite and other substances. R.C. 1505.07 (Policy 27).

Activities involving drilling of oil and gas well. ODNR, Division of Oil and Gas issues permit to drill wells. R.C. 1509.05-06 (Policy 28).

Activities involving surface mining. ODNR, Division of Reclamation, issues permits for surface mining operations. R.C. 1514.02 (Policy 27).

Activities involving siting of major utility facilities. Ohio Power Siting Commission issues certificates for construction of major utility facilities. R.C. Chapter 4906 (Policy 24).

General Development

Activities involving the waters of Lake Erie. The waters of Lake Erie, extending from the southern shore to the international boundary, and its bed belong to the State of Ohio as proprietor in trust for the people of the state. R.C. 123.03. The Department of Administrative Services issues leases for development and improvements in Lake Erie. R.C. 123.031 (Policy 31).

LAND AND WATER USES OF REGIONAL BENEFIT

The CZM Act requires each state program to:

1. Identify what constitutes its uses of regional benefit; and
2. Identify methods which will assure that local land and water use regulations do not unreasonably restrict or exclude land and water uses of regional benefit.

Uses of regional benefit are those which serve or affect more than a single unit of local government. Proposed uses of regional benefit for Ohio's CZM Program and the program policies related to each use are listed in Table 7. Potential uses of regional benefit were identified by OCZM guidelines, Section 208 water quality management studies, federal agencies and coastal regional planning and development organization studies. The following criteria were used to determine which of the potential uses would be subject to the regional benefit requirements:

1. Does this use affect or serve people in more than one county?
2. Does this use provide a recognized regional or national need or value?

TABLE 7

USES OF REGIONAL BENEFIT

<u>Uses</u>	<u>Applicable Policies</u>	<u>Authority Preventing Arbitrary Exclusion</u>
Energy Production	24,25,26,27,28	Power Siting Commission, Department of Natural Resources, Department of Energy
Recreation	12,14,15,16,17	Department of Natural Resources
Transportation	33,34	Department of Transportation
Unique Historic and Cultural Areas	Special Management Area designation	Ohio Historical Society
Unique Environmental Areas	18,19,20,22	Department of Natural Resources
Wastewater Treatment and Public Water Supply	8,9,12	Water Development Authority, Environmental Protection Agency

3. Does the use have a direct or significant impact on the land or waters in Ohio's identified coastal area?

A use of regional benefit must satisfy all three criteria.

Although it is obvious that the proposed uses of regional benefit are essential or of importance to all Ohioans, their siting, location and associated impacts sometimes result in conflicts between use or project proponents and local and state governments.

The coordination and A-95 review processes established by Ohio's coastal regional planning and development organizations (TMACOG, NOACA and EDATA) assure adequate governmental consideration of regional uses. With membership of nearly all local units of government in the coastal area, these agencies and their numerous committees address all uses listed in Table 7 in their regional planning and review functions.

Uses of regional benefit identified in Ohio's recommended CZM Program also represent uses of statewide concern. Each use is administered by a state agency under existing statutory authority (see column 3 of Table 7). Existence of these authorities at the state level, therefore, precludes the unreasonable restriction or exclusion of the use of regional benefit by local regulation. This does not mean, however, that local concerns are not sought and addressed. Each state agency administers a review process or other mechanism to assure consideration of all interests in the exercise of its authorities related to the regional use.

Energy Production - Siting of electrical generating and transmission facilities is regulated by the Ohio Power Siting Commission (R.C. Chapter 4906, see Appendix C). Although its detailed review process provides for substantial local input, siting decisions ultimately rest with the Commission. Commission analyses of demand for electricity require consideration of regional, state and national benefits. ODNR's Division of Geological Survey regulates extraction of oil and gas from land and from the bed of Lake Erie (R.C. 1505.07). The Division of Oil and Gas regulates both onshore and offshore oil and gas drilling operations (R.C. 1509.05-06). The Department of Energy formulates state energy policy which considers needs of more than local concern (R.C. Chapter 1551).

Recreation - ODNR is charged with providing outdoor recreation facilities for all Ohioans. State park development and public recreation projects utilizing federal Land and Water Conservation Fund monies are guided by Ohio's State Comprehensive Outdoor Recreation Plan. The siting of state facilities is coordinated with

local governments, but is not subject to local regulations. Purchase of recreation land is accomplished by negotiation and agreement with landowners; if these efforts fail ODNR may exercise its power of eminent domain. The Ohio Parks and Recreation Council reviews and advises ODNR on park acquisition and management policies (R.C. Chapters 1541, 1547, 1571).

Transportation - The Ohio Department of Transportation (ODOT) is responsible for planning, constructing and maintaining a balanced system of transportation throughout Ohio. Although planning of state facilities is accompanied by substantial local coordination and review, final siting decisions are under the authority of ODOT. ODOT may also exercise its power of eminent domain when necessary to acquire lands for transportation purposes (R.C. Chapter 5501).

Unique Historic and Cultural Areas - Designated historic and archeological sites in Ohio are studied and protected by the legislatively created Ohio Historical Society (OHS). Publicly funded projects on or near designated sites are subject to approval of the OHS. The Historic Site Preservation Advisory Board guides OHS efforts, which may include purchase, lease and excavation of significant sites (R.C. Chapter 149).

Unique Environmental Areas - ODNR's Division of Natural Areas and Preserves is authorized to establish state nature preserves to protect Ohio's unique natural areas, rare plants and animals, and valuable scenic resources. Their power of eminent domain may be used to acquire unique environmental areas if necessary (R.C. Chapter 1517). These preservation efforts are guided by the Natural Areas Council. ODNR's Division of Wildlife manages and acquires lands to protect wildlife habitat. The Wildlife Council advises the Division in these efforts (R. C. Chapter 1571).

Wastewater Treatment and Public Water Supply - The Ohio Environmental Protection Agency (Ohio EPA) administers several programs to ensure that regional wastewater and public water supply facilities are not arbitrarily excluded. These programs include effluent discharge permits for public and private dischargers, stream use designations and water quality standards, and Section 208 water quality management planning. Planning, design and construction of wastewater treatment facilities in Ohio under Section 201 of the Clean Water Act satisfies regional treatment needs. Federal funds (\$300-500 million annually) are matched with state and local monies for treatment facilities construction (R.C. Chapters 3701, 6111).

The Ohio Water Development Authority (OWDA) also finances construction of wastewater facilities and water management facilities cooperatively with public and private interests. The Authority's

eight-member board has broad powers to make loans or grants to governmental agencies, construct water development projects, issue water development revenue bonds and acquire public or private lands through negotiated purchase or condemnation (R.C. Chapter 6121).

RESOLUTION OF CONFLICTS

The Coastal Zone Management Program will create mechanisms for improved management of Lake Erie's resources. However, conflicts between parties with various rights and authorities in the coastal area are inevitable. The CZM Program utilizes existing institutional arrangements for conflict resolution.

ODNR, as proposed designated lead agency, would make initial attempts to resolve conflicts which arise during implementation of CZM Program policies. Informal discussions with involved parties will resolve most conflicts. If such initial efforts fail, other appropriate bodies, such as the Environmental Board of Review or the State-Local Government Commission of Ohio will be used when appropriate. All such conflict resolution measures will be taken in a timely manner, generally within 60 days of the contested action.

If informal discussions regarding implementation of air and water quality policies involving Ohio EPA fail, any party involved may appeal to the Environmental Board of Review. The Environmental Board of Review is a 3-person board legislatively created to consider appeals regarding the exercise of Ohio Environmental Protection Agency authorities. The person appealing may seek to overturn, modify or initiate any ruling or action of the Director of Ohio EPA or local board of health. *De novo* hearings are held to consider appeals. Board decisions are subject to judicial appeal. If the air and water quality conflict involves only state agencies, the matter will be taken to the Office of the Governor for resolution. Judicial action would resolve any remaining conflicts.

Conflicts related to CZM policies other than air and water quality will be initially addressed by ODNR, as lead agency, and involved parties. Unresolved conflicts between state agencies will be addressed by the Office of the Governor.

Unresolved conflicts between state and local agencies, or between local agencies may be appealed to the State-Local Government Commission of Ohio for its consideration. The State-Local Government Commission of Ohio, established by the state legislature in 1978 and chaired by the Lieutenant Governor, serves as a conflict resolution forum for any disagreement associated with local, regional or state governments. It consists of eleven state and local government

representatives and two public representatives (R.C. 105.46, see Appendix G). Commission findings are not binding; however, they are given serious consideration in any subsequent action.

If consideration by the State-Local Government Commission of Ohio fails to resolve the conflict, judicial proceedings may follow.

PROGRAM MODIFICATIONS

To address changes in coastal resources concerns or public needs during CZM Program implementation, procedures are needed to modify the initially adopted Program. The procedures described below for program amendments and refinements will provide for such modifications and also meet Office of Coastal Zone Management regulations pursuant to Section 306(g) of the CZM Act.

Substantive changes in policies or authorities related to the following aspects of the program will require amendments:

Boundaries,

Managed activities,

Criteria or procedures for designating Special Management Areas, and

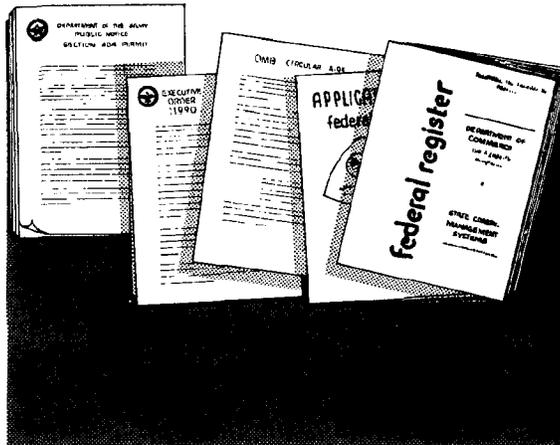
Policies or procedures for considering the national interest in planning or siting of facilities.

ODNR, as designated lead agency, may propose amendments (including those suggested by any local or state agency or citizen participating in the Program) to OCZM for approval subsequent to state, local agency and public review, including hearings. The Director of ODNR is responsible for submitting program amendments to the Office of Coastal Zone Management for federal approval. Depending upon the scope of the proposed amendment, OCZM may require an Environmental Impact Statement or may solicit comments from federal agencies and the public through the Federal Register.

Changes in the CZM Program other than those described above will be considered refinements. ODNR may adopt refinements subsequent to review by state and local agencies and the public. Although refinements may be adopted without OCZM approval, ODNR will notify OCZM and all affected parties of adopted program refinements.

Chapter 15

National Interest and Federal Consistency



COORDINATION WITH FEDERAL AGENCIES

During Program Development

Many federal and state agencies have cooperated in the past to manage resources and construct facilities in Ohio's coastal area. CZM Act requirements will strengthen such cooperative arrangements during implementation of Ohio's CZM Program. To create a mutually agreeable basis for joint implementation efforts, the Program has actively involved appropriate federal agencies in program development. Principal means of securing input from such agencies included direct contact with 34 agencies (see Table 8) and active participation on the Great Lakes Basin Commission Standing Committee on Coastal Zone Management.

The CZM Program has provided all agencies with reports from many elements of its work program, e.g. Resources of the Lake Erie Island Region and Coastal Hazards. They have also received for review and comment the initial working papers which preceded the preparation of this draft document. Many of the agencies sent their designated CZM contacts to Columbus for discussion of agency concerns and program policies. They all receive the quarterly CZM newsletter, "The Beacon", which summarizes program development and progress. Agencies with landholdings in the coastal area were provided maps for updating. Nominations of Special Management Areas were solicited from all agencies.

The CZM Program has incorporated federal agency concerns into this draft program document to the extent that they do not conflict with state and local concerns.

TABLE 8

FEDERAL AGENCIES INVOLVED DURING PROGRAM DEVELOPMENT

Department of Agriculture
Farmers Home Administration
Forest Service
Soil Conservation Service

Department of Commerce
Coast Guard
Economic Development Administration
Maritime Administration
National Marine Fisheries Service
Office of Coastal Zone Management
Small Business Administration

Department of Defense
Department of the Air Force, Central Region
Department of the Army, Corps of Engineers,
North Central Division, Buffalo District
Department of the Navy, Fourth Naval District

Department of Energy
Federal Energy Administration
Nuclear Regulatory Commission

Environmental Protection Agency
Region V Office

General Services Administration

Department of Health, Education and Welfare

Department of Housing and Urban Development
Federal Insurance Administration

Department of the Interior
Bureau of Land Management
Bureau of Mines
Fish and Wildlife Service
Geological Survey
Heritage Conservation and Recreation Service
National Park Service
Regional Office

Interstate Commerce Commission

Department of Transportation
Federal Aviation Administration
Federal Highway Administration
Federal Railroad Administration
Regional Office
Urban Mass Transportation Administration

During Program Implementation

Coordination of federal agency activities in the coastal area during program implementation will be provided through the following existing mechanisms as well as direct contact among local, state and federal agencies as appropriate.

Joint State-Federal Programs - Currently many state agencies administer programs encouraged or mandated by the federal government, often with accompanying financial assistance. Generally, such state-administered programs are reviewed and approved by the sponsoring federal agency. These programs provide for substantial coordination as well as for meeting the goals of both state and federal agencies. Some of these programs serve as important means of CZM Program implementation.

Great Lakes Basin Commission - Ohio actively participates in Great Lakes Basin Commission efforts to deal with Great Lakes issues. Affected federal agencies are also members of the Commission and represent the federal interest in Great Lakes regional issues. The Commission's Standing Committee on Coastal Zone Management is concerned specifically with coastal resources and problems, and provides a regional forum for recommending solutions and sharing experiences. Federal agencies also participate in Standing Committee meetings.

Review of Environmental Impact Statements - The National Environmental Policy Act of 1969 requires development of an Environmental Impact Statement (EIS) for any "major federal action significantly affecting the quality of the human environment". The CZM Program will closely review EIS's describing coastal impacts to determine if program objectives and policies have been adequately considered.

A-95 Review - The A-95 review process was established in 1969 following enactment of several intergovernmental coordination laws. The process is designed to include state and local governments in the review of federal and federally assisted programs and projects. Procedures are described in the U. S. Office of Management and Budget Circular A-95.

Basically, applicants for federal assistance and agencies sponsoring federal development projects must notify areawide or state clearinghouses of intent to apply for such assistance. The Toledo Metropolitan Area Council of Governments, the Northeast Ohio Areawide Coordinating Agency and the Eastgate Development and Transportation Agency serve as areawide clearinghouses in the coastal area. The

State Clearinghouse in Ohio is in the Office of Budget and Management. Its procedures for A-95 review are summarized in Figure 4.

CONSIDERATION OF THE NATIONAL INTEREST

Many facilities and resources in which there is a national interest are found in Ohio's coastal area. Section 306 of the Coastal Zone Management Act requires adequate consideration of such national interests, defined as those related to the planning for and siting of facilities and resources which are necessary to meet other than local needs. Coordination with federal agencies during development of Ohio's CZM Program, described above, has helped ensure that adequate consideration of such interests is incorporated into Ohio's Program. Other valuable sources of information utilized during both program development and implementation include:

Federal laws and regulations,

Policy statements and executive orders from the President of the United States,

Reports and studies from federal and state agencies and commissions,

Testimony received at public hearings and meetings,

Statements of national interest issued by federal agencies, and

Discussions with CZM Program advisory groups.

Input from these sources led to development of a list of facilities and resources in which there is a current or potential national interest in Ohio's coastal area (see Table 9). For each category the nature of the national interest and procedures the Program will utilize to assure continued consideration are described.

National interests in the listed facilities and resources may conflict with other national interests. Because the CZM Program does not create a site-specific land use plan it is impossible to prevent or resolve all such potential conflicts. The CZM Program policies listed and the authorities upon which they are based, regulate impacts of many land use activities and thereby prevent many

TABLE 9

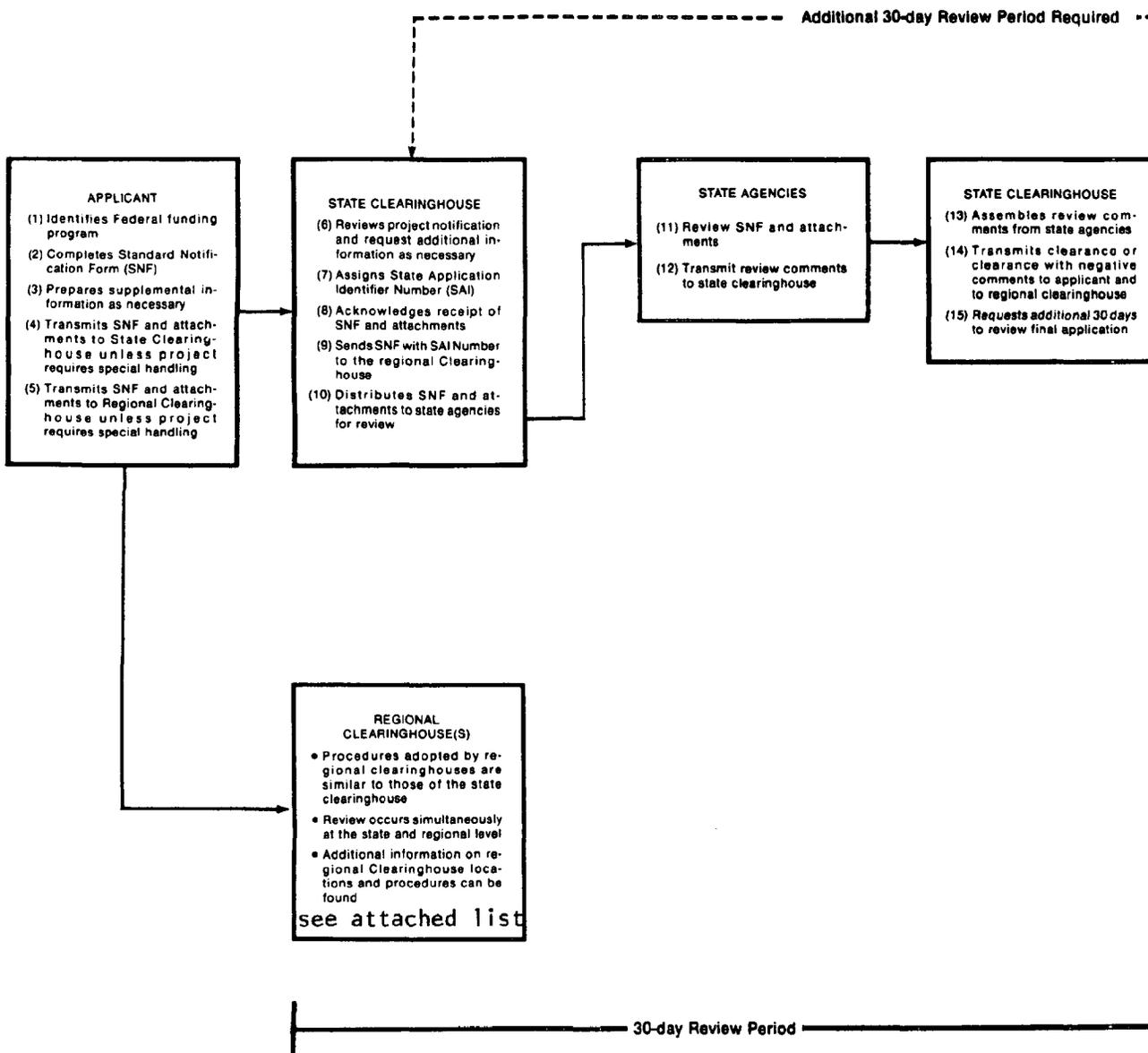
COASTAL FACILITIES AND RESOURCES IN WHICH THERE IS A
NATIONAL INTEREST

<u>Category</u>	<u>Applicable CZM Program Policies</u>
Energy	24,25,27,28
Historic and archeological sites	Designated as Special Management Areas
Hazard areas	1,2,3,4,5,6
Wetlands	19,20,21
Transportation	32,33,34
Recreation	13,14,15,16
National defense	CZM Program coordination mechanisms; federal lands exempt from state programs
Air and water quality	7,8,9,10,12
Endangered species	18,20,22

A-95 REVIEW PROCEDURE

PHASE I
Notification

PHASE II
Review and Comment



PHASE III
Grant Notification

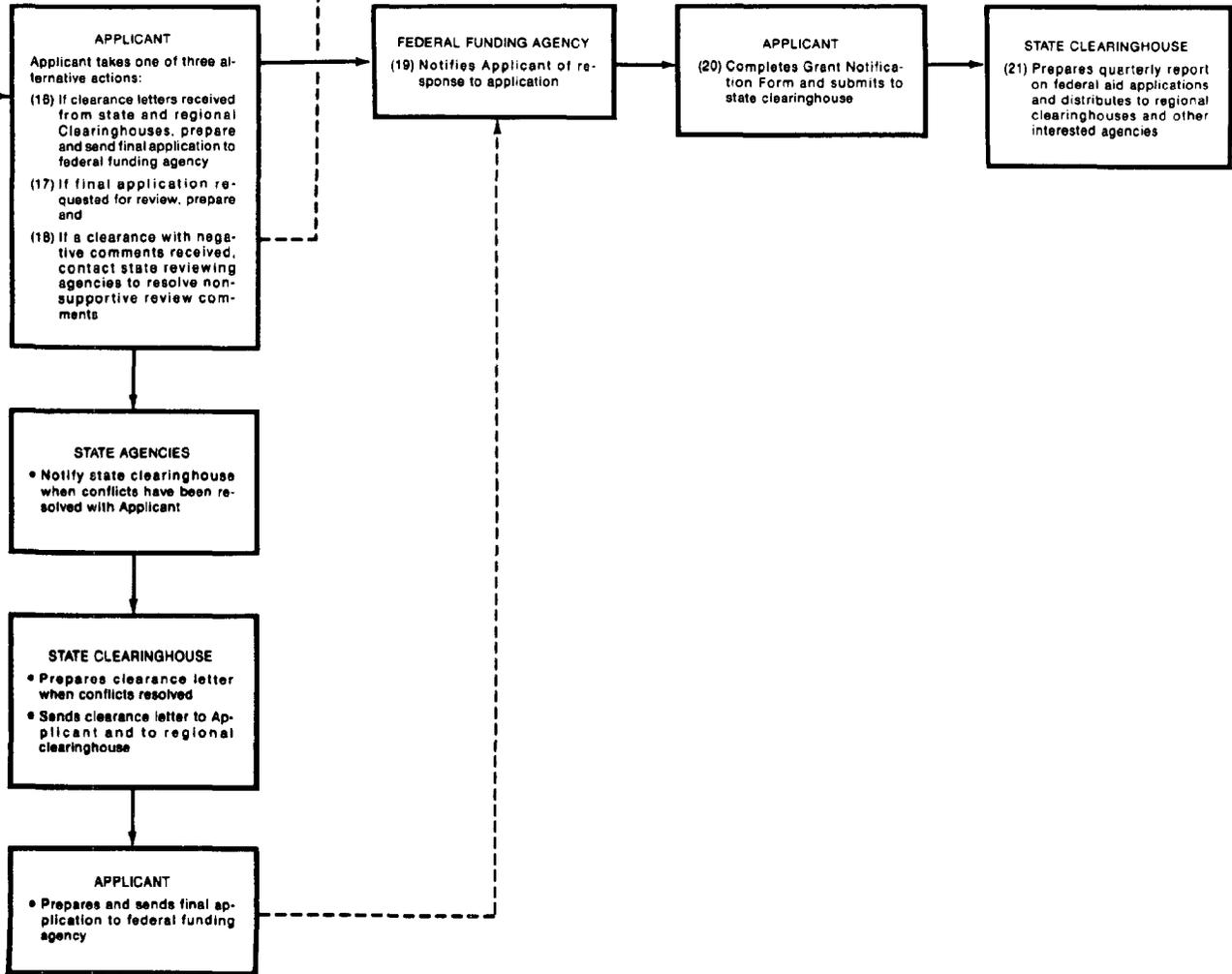


FIGURE 4

potential conflicts; these policies also utilize or establish review procedures within which the national interest is considered.

ODNR, as designated lead agency for the CZM Program, will help assure adequate consideration of the national interest through its coordinating role and through its role in monitoring policy implementation. Proposed legislation gives the Director of ODNR the authority to ensure adequate consideration of national interests in the CZM Program, balancing such needs with local, state and regional needs.

ODNR will make initial informal attempts to resolve national interest conflicts which arise during program implementation. If a federal agency or other party determines that national interest mechanisms have been exercised in a manner contrary to national interests, the consultation and mediation procedures outlined in the federal consistency section of this chapter will be utilized.

Energy

Ohio's coastal area provides many sites for electric generating and transmission facilities due to availability of large quantities of cooling water, proximity to coal reserves and presence of a large market. The electricity generated serves a large regional area. Transshipment and processing of basic energy resources, mainly coal and oil, is an important activity in Lake Erie ports. Existing statutory authority as well as CZM Program policies ensure that adequate consideration of the national interest in these energy facilities will occur.

Specifically, Ohio's Power Siting Commission regulates siting of electric generating facilities (Policy 24). The Commission's review procedures prior to licensing, including public hearings and local, state and federal agency review, provide extensive opportunities for consideration of the national interest. See Appendix C for details.

Exploration and recovery of offshore oil and gas is regulated by ODNR; prior approval of these activities is required by ODNR, OEPA, the Attorney General and the Governor (Policy 27). Formulation of state energy policy, consideration of bills in the legislature and processing of drilling permits are points at which the national interest in these resources is considered.

Transshipment, storage and processing of energy resources is not regulated at the state level except when impacts on air and water quality occur. The CZM Program recognizes the importance of these activities and encourages planning for them in port and electrical generating sites (Policy 25).

Historic and Archeological Sites

The coastal area is rich with the history of prehistoric and modern man. The programs and regulations of the Ohio Historical Society preserve and interpret this record which is of value to all Americans (R.C. Chapter 149). The Society assists in implementation of the National Historic Preservation Act of 1974. Specifically, its Historic Site Preservation Advisory Board receives nominations of historic and archeological sites, solicits local comments and may recommend national designation by the Heritage Conservation and Recreation Service (HCRS). HCRS publishes proposed designations in the Federal Register, soliciting comments from agencies and citizens. After 30 days HCRS may add the site to the National Register of Historic Places. The CZM Program will support preservation and restoration of historic and archeological sites in the coastal area by local and state agencies through their designation as Special Management Areas (see page 120).

Hazard Areas

Loss of life and property in the coastal area through erosion and flooding is a serious problem. Average annual dollar losses reach into the millions. Sediments reaching the Lake through erosion degrade water quality in Lakes Erie and Ontario. Management of these hazards is therefore in the national interest. The CZM Program will utilize and establish many means to accomplish this management (see Chapter 5).

The program will encourage establishment of Conservancy Districts (Policy 1) to control erosion; judicial hearings prior to district establishment may consider the national interest in the proposed district. ODNR will continue to provide financial assistance to local governments and citizens for erosion control. The proposed CZM legislation creates a 30-year erosion hazard construction setback (Policy 2).

The proposed CZM legislation also requires local flood plain regulations; the federal Flood Insurance Administration will review and approve the vast majority of these local regulations.

All flood and erosion hazard areas are designated as Special Management Areas (see page 116). Coordination of programs will continue with the Flood Insurance Administration and the U.S. Army Corps of Engineers, both in proposed Corps projects and in Section 10 and Section 404 permit reviews.

Wetlands

The extensive wetlands in Ohio along Lake Erie provide important habitat for many kinds of animals and plants, support migratory waterfowl populations and help protect lake water quality. Protection of remaining wetlands, therefore, is in the national interest. The CZM Program will review implementation of Section 404 of the federal Clean Water Act regulating filling of wetlands and the President's Executive Order of May 24, 1977, directing federal agency activities to avoid impacts on wetlands. The Program will work with the Corps of Engineers to adopt comprehensive but streamlined permit review criteria. Adoption of these criteria (with public review) and hearings held on permit applications are points at which the national interest in wetlands is considered. The Program will assist local governments in preserving environmentally sensitive areas of all kinds, including wetlands (Policy 20). This effort is important for projects which may impact wetlands, but do not actually require a Section 404 permit.

Transportation

Ohio's Department of Transportation works with local governments and federal agencies to develop a safe, efficient, multimode transportation system to meet local, regional and national needs. For large projects which meet national needs hearings are held at various preconstruction phases to assure that plans meet citizens' needs and that environmental and social impacts are addressed. Such large projects are subject to federal Department of Transportation approval and also undergo A-95 review within the state. The CZM Program will encourage consideration of coastal concerns and resource protection in transportation planning (Policy 33).

Lake Erie's ports are a major link in the region's freight and cargo transportation network. State law authorizes creation of port authorities to plan and develop port facilities. Policy 32 encourages port authorities and local governments to coordinate port and commercial navigation needs with those of environmental protection. The ports are also designated as Special Management Areas (see page 115). Review procedures for the various permits required for typical port projects (Section 10 and Section 404) are the major points at which national interest in ports is considered.

Recreation

Lake Erie provides extensive recreational opportunities for residents of Ohio and surrounding states. ODNR has established many recreation facilities along the shoreline, and will continue to expand them to meet increasing demand (Policies 13, 14, 15, 16). Every five years ODNR develops and then implements a State Comprehensive Outdoor Recreation Plan (SCORP). The SCORP must be approved by the Department of the Interior's Heritage Conservation and Recreation Service (HCRS) to receive continued funding from the Land and Water Conservation Fund (LWCF). State SCORPs are submitted to other federal agencies for review prior to HCRS approval (principally the National Park Service, Fish and Wildlife Service, Bureau of Land Management and the Forest Service). The proposed SCORP also undergoes A-95 review. Projects utilizing LWCF monies must get HCRS approval and also undergo A-95 review. These procedures identify principal points at which the national interest in recreation is considered.

All state and local parks in the coastal area are designated as Special Management Areas (see page 117). Also, ODNR's Office of Outdoor Recreation Services maintains an urban waterfront program to encourage recreational use of urban river- and lakefronts.

National Defense

Ohio's CZM Program could not prevent siting of facilities related to national defense in the coastal area. The program recognizes the importance of such facilities to Ohio and the nation. Also, federally controlled lands are exempt from the authority of state programs by the CZM Act. Through coordination with federal agencies, especially the Department of Defense, Ohio's Program will seek to ensure that any proposed facilities are developed with minimal environmental impact, and that those locating on the immediate shoreline, in fact, require lake frontage.

Air and Water Quality

Sources of pollution generated in one location may have adverse impacts on air and water many miles away; these resources are vital to all Americans. Therefore, their management is in the national interest. By incorporating Ohio EPA's federally approved air and water quality standards, criteria, rules and regulations into the CZM Program as well as its planning processes, the Program will actively protect coastal air and water resources (see Chapter 6). Review of Ohio EPA proposed programs, regulations and projects by U. S. EPA and

other federal agencies is the principal point for consideration of the national interest. These activities also undergo A-95 review. Additionally, hearings are conducted prior to adoption of new air and water quality regulations. The Environmental Board of Review considers appeals from citizens and agencies when their concerns are felt to have been inadequately or improperly addressed by Ohio EPA (see page 141).

Endangered Species

A variety of rare or endangered plant and animal species is found in the coastal area. Several state and federal laws have been enacted to protect such species, primarily to ensure the continued natural functioning of the ecosystems of which they are a part. ODNR's Division of Natural Areas and Preserves conducts a Natural Heritage Program to monitor public and private activities which might impact these species and to assist preservation efforts at all levels. The Division also acquires habitats as state nature preserves and establishes natural landmarks to protect such significant natural features as rare or endangered species (Policies 18 and 20). All of these efforts are initiated because of state and national interest in these species. A principal point of recognition of the national interest occurs when the Division recommends additions to federal Department of the Interior lists of rare or endangered species.

CONSISTENCY OF FEDERAL ACTIONS

Section 307 of the Coastal Zone Management Act requires that actions of the federal government be consistent with approved state CZM Programs. Pursuant to Section 307, the following activities must be consistent with Ohio's CZM Program:

Direct federal activities and development projects must be consistent to the maximum extent practicable;

Federal licenses and permits must be consistent;
and

Federal assistance must be consistent.

Administrative procedures for implementing federal consistency requirements are described below for each category. Table 10 summarizes these procedures.

TABLE 10

CZM FEDERAL CONSISTENCY PROCESS

Federal Action	Direct federal activities including development projects	Federally licensed and permitted activities	Federal assistance to state and local governments
CZM Act citation	307(c)(1) & (2) (Subpart C)	307(c)(3)(A) (Subpart D)	307(d) (Subpart F)
Responsibility to notify ODNR	Federal agency proposing the action	Applicant for federal license or permit	A-95 Clearinghouse receiving state or local government application for federal assistance
Notification procedure	Alternatives chosen by Federal agency (subject to NOAA regulations)	Consistency certification	OMB A-95 notification procedure
Consistency requirement	Consistent to the maximum extent practicable with CZM Program	Consistent with the CZM Program	Consistent with CZM Program
Consistency determination	Made by federal agency (Review of ODNR)	Made by ODNR	Made by ODNR
Federal agency responsibility following a disagreement	Federal agency not required to disapprove action following ODNR disagreement (unless judicially impelled to do so)	Federal agency may not approve license or permit following ODNR objection	Federal agency may not grant assistance following ODNR objection
Administrative conflict resolution	Mediation by Secretary of Commerce	Appeal to Secretary of Commerce by applicant or independent Secretarial review	Appeal to Secretary of Commerce by applicant agency or independent Secretarial review

For all three categories ODNR, the designated lead agency, will be responsible for Ohio CZM Program consistency review determinations. Consistency review determinations will be coordinated with state and local agencies as appropriate.

Direct Federal Activities and Development Projects

Activities in this category include any federal activity involving the planning, construction, modification or removal of public works, facilities or other structures; the acquisition, use and disposal of property; and assistance to entities other than state and local governments. Federal agencies must make a "maximum extent practicable" consistency determination for these activities. Federal agencies must direct their consistency determinations to the Ohio Department of Natural Resources. ODNR will respond for the CZM Program within 45 days or within 60 days if an extension has been requested. ODNR will either concur with the agency's consistency determination, allow the review period to lapse enabling the federal agency to presume concurrence, or disagree with the determination. In the latter case ODNR will negotiate with the federal agency to resolve the conflict. If this fails, mediation by the Secretary of Commerce may be requested. Judicial appeal may also be sought if other means of conflict resolution fail.

Federal Licenses and Permits

Activities in this consistency category include any authorization, certification, approval or other form of permission which any federal agency is empowered to issue to an applicant and which is likely to significantly affect coastal resources. A list of those permits which ODNR will review for consistency appears in Table 11. Others may be added later if the Program determines that they have a significant effect upon coastal resources. The applicant must furnish to the permitting agency a statement (certification) that the proposed activity complies with Ohio's CZM Program. This certification must also be submitted to the CZM Section, ODNR. ODNR will work with federal agencies to ensure that their applications require sufficient information for state and federal agencies to ascertain whether the proposed activity is or is not consistent with Ohio's CZM Program. Public notices of the proposed activity, when required, will be issued jointly by the state and federal agencies, and any public hearings deemed necessary by either agency will be of a joint nature.

Within six months of receipt of the applicant's consistency certification, ODNR will notify the applicant and federal agency whether it concurs with or objects to the applicant's certification. If no decision has been made within three months, ODNR will notify

TABLE 11

FEDERAL LICENSES AND PERMITS
 SUBJECT TO CONSISTENCY REQUIREMENTS

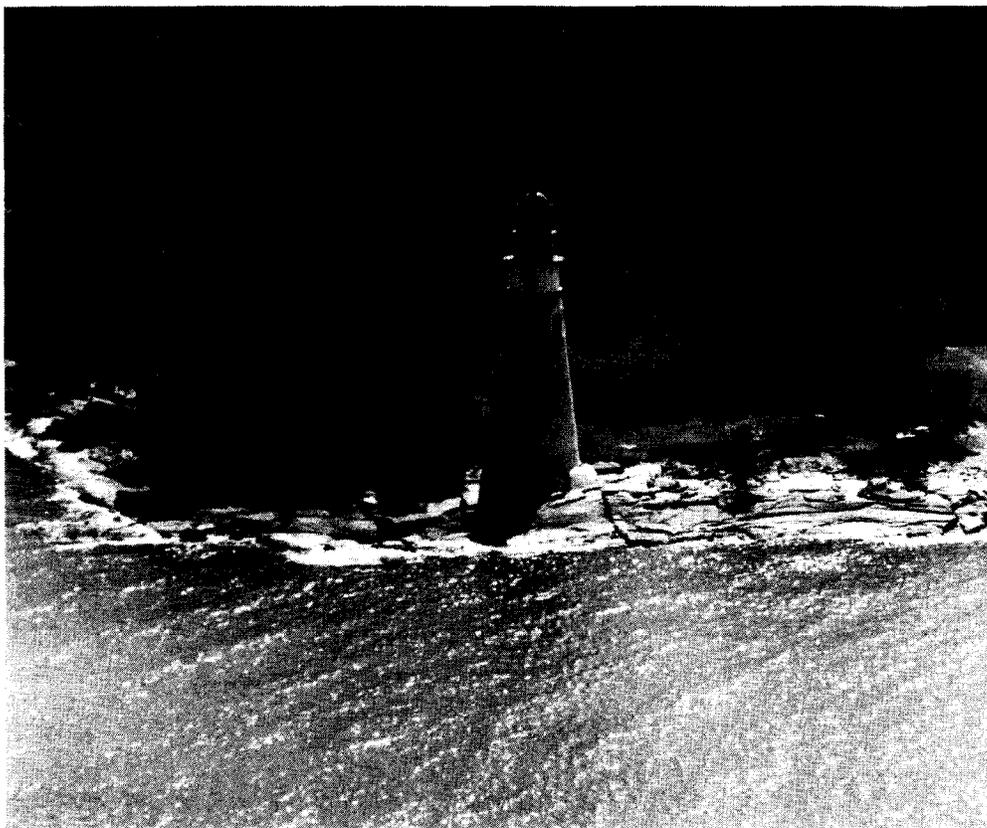
Department of the Interior 17 USC 661-667	Fish and wildlife coordination
Environmental Protection Agency 33 USC 1251 33 USC 1857	Clean water Clean air
Department of Housing and Urban Development ---	Flood insurance and community eligibility certification
Nuclear Regulatory Commission ---	Licenses for nuclear generating stations, fuel storage and processing centers
---	Siting and operation of nuclear power plants
Federal Energy Regulatory Commission 15 USC 717(f)(c)	Certificates required for the con- struction 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 Engineer 33 USC 401-403	Excavation and fill permits, con- struction in navigable waters
33 USC 1344	Discharge of dredged and fill material
33 USC 419	Hazardous substances and materials
Department of Transportation 33 USC 401	Construction and modification of bridges, causeways in navigable waters (U.S. Coast Guard)
---	Construction of airports (state permits may be required)
33 USC 419	Hazardous substances and materials (U.S. Coast Guard)

the applicant and federal agency of the status of the matter and the basis for further delay. The federal agency may not approve the activity if Ohio's CZM Program objects to the certification. Any objection by Ohio's CZM Program to an applicant's certification will contain the Program's reasons and supporting information as well as a statement informing the applicant of a right of appeal to the Secretary of Commerce within 30 days of receipt of program objections. Initially, the CZM Program will utilize informal discussions to resolve conflicts which arise. Subsequently, only if the Secretary finds that the activity is consistent with the objectives or purposes of the Coastal Zone Management Act or is necessary in the interest of national security may the federal agency approve the activity.

Federal Assistance

All applications by state and local agencies for federal financial assistance likely to significantly affect coastal resources must be reviewed for consistency by ODNR. The CZM Program must receive project notification through the State Clearinghouse as part of the A-95 review process in Ohio. Any CZM Program objections to the project must be sent with reasons and supporting information to the State Clearinghouse within 30 days or 45 days if the program requests an extension. The State Clearinghouse shall then notify the applicant and federal agency of CZM Program objections. The federal agency must not grant the financial assistance if judged to be inconsistent with Ohio's CZM Program.

Conflicts which arise during this procedure may be resolved through informal discussions by the involved parties. If the conflict is not thus resolved the applicant may appeal to the Secretary of Commerce within 30 days of receipt of program objections. The federal agency may grant the assistance only if the Secretary finds that the proposal is consistent with the objectives or purposes of the Coastal Zone Management Act or is necessary in the interest of national security.



Appendices

APPENDIX A

COASTAL PROPERTY OWNED, LEASED OR MANAGED
BY THE U.S. GOVERNMENT

<u>Agency</u>	<u>Property</u>	<u>Location</u>	<u>Acreage If Known</u>
U.S. Air Force	National Guard Facility (leased from State of Ohio)	Camp Perry, Port Clinton	40
U.S. Army Corps of Engineers	Projects Office	Toledo	
	Breakwater Maintenance Access	Port Clinton	
	Breakwater Maintenance Access	Cleveland	
	Breakwater Maintenance Access	Lorain	
	East Ninth Street (warehouses, mooring slip, pier, wharf, dock)	Cleveland	2.04
	Disposal Site #14	Cleveland	88
	Disposal Site #12	Cleveland	60
	Disposal Site #13	Cleveland	10
	Disposal Site #9	Cleveland	60
	Disposal Site	Lorain	58
Disposal Site	Huron	63	
Disposal Site (Island 18)	Toledo	150	
Disposal Site (Facility 3)	Toledo	242	

<u>Agency</u>	<u>Property</u>	<u>Location</u>	<u>Acreage If Known</u>
U.S. Coast Guard	Ashtabula CG Station	Ashtabula	.3
	Ashtabula Harbor Light	Ashtabula	Offshore
	Ashtabula LS Switch House	Ashtabula	1.6
	Ballast Island Light	Put-in-Bay	.1
	Cleveland Flag Quarters	Lakewood	.4
	Cleveland West Pier- head Lt.	Cleveland	Offshore
	Cleveland CG District Office Dwellings	Cleveland	.3
	Cleveland Sta. & MSO Office	Cleveland	1.3
	Cleveland Harbor CG Station	Cleveland	.3
	Fairport CG Station	Fairport	4.8
	Fairport Lifeboat Station	Fairport Harbor	.2
	Green Island Lt.		1.3
	Huron Harbor Light	Huron	Offshore
	Huron Island Station	Huron	.8
	Lorain Coast Guard Station	Lorain	1.0
	Lorain Dwelling	Lorain	.3
	Manhattan Front Range Lt.	Maumee Bay, Lake Erie	.9
	Manhattan Rear Range Lt.	North Toledo	.2
	Marblehead CG Station	Marblehead	1.9
Marblehead Housing	Port Clinton	1.8	

<u>Agency</u>	<u>Property</u>	<u>Location</u>	<u>Acreage If Known</u>
U.S. Coast Guard	Marblehead Light Station	Marblehead	.2
	Marblehead Lifeboat Station	Marblehead	1.1
	Sandusky Bay Light Station	Sandusky	1.5
	Sandusky Bay Light Station (Range Lights)	Sandusky	11.9
	Sandusky Inner Range Lights	Sandusky	11.9
	South Bass Island Light	Put-in-Bay	.4
	Toledo Coast Guard Station	Toledo	.9
	Toledo Harbor Light Station	Toledo	1.6
	West Sister Island Lt.		3.0
	Light (under license from Norfolk and Western Railroad)	Huron	
U.S. Fish and Wild- life Serv- ice	Antenna Tower (under license from Chemstone Corporation)	Marblehead	
	Light (under license from Vermilion Yacht Club)	Vermilion	
	Ottawa National Wild- life Refuge	Lucas and Ottawa Counties	8116
	- Ottawa Unit		4683
	- Darby Marsh Unit		520

<u>Agency</u>	<u>Property</u>	<u>Location</u>	<u>Acreage If Known</u>
U.S. Fish and Wild- life Ser- vice	- Navarre Marsh Unit (owned by Cleveland Electric Illuminating and Toledo Edison, managed by U.S. Fish and Wildlife Service)		591
	- Cedar Point Unit		2245
	- West Sister Island Unit		77
National Park Service	International Peace Memorial	Put-in-Bay, South Bass Island	10

APPENDIX B

OHIO REVISED CODE SECTIONS
REGARDING CONSERVANCY DISTRICTS

ORGANIZATION OF CONSERVANCY
DISTRICT

6101.04 Organization and purposes of conservancy districts

Any area or areas situated in one or more counties may be organized as a conservancy district, in the manner and subject to the conditions provided by sections 6101.01 to 6101.84, inclusive, of the Revised Code, for any of the following purposes:

- (A) Preventing floods;
- (B) Regulating stream channels by changing, widening, and deepening the same;
- (C) Reclaiming or filling wet and overflowed lands;
- (D) Providing for irrigation where it may be needed;
- (E) Regulating the flow of streams and conserving the waters thereof;
- (F) Diverting or in whole or in part eliminating watercourses;
- (G) Providing a water supply for domestic, industrial, and public use;
- (H) Providing for the collection and disposal of sewage and other liquid wastes produced within the district;
- (I) Arresting erosion along the Ohio shore line of Lake Erie.

This section does not terminate the existence of any district organized prior to July 19, 1937, entirely within a single county.

The purposes of a district may be altered by the same procedure as provided for the establishment of such a district.

6101.05 Petition to establish conservancy district

Proceedings for the establishment of a conservancy district shall be initiated only by the filing of a petition in the office of the clerk of the court of common pleas of one of the counties containing territory within the proposed district, which petition shall be signed either by five hundred freeholders, or by a majority of the freeholders, or by the owners of more than half of the property, in either acreage or value, within the limits of the territory proposed to be organized into a district. Such petition may be signed by the governing body of any public corporation or watershed district created under section 6105.02 of the Revised Code lying wholly or partly within the proposed district, in such manner as it prescribes, and when so signed by such governing body such a petition on the part of the said governing body shall fill all the requirements of representation upon such petition of the freeholders of such public corporation or watershed district, as they appear upon the tax duplicate; and thereafter it is not necessary for individuals within said public corporation or watershed district to sign such a petition. Such a petition may also be signed by railroads and other corporations owning lands.

Such petition may be filed by any city interested in some degree in the improvement, upon proper action by its governing body.

The petition shall set forth the proposed name of said district, the necessity for the proposed work and that it will be conducive to the public health, safety, convenience, or welfare, and a general description of the purpose of the contemplated improvement, and of the territory to be included in the proposed district. Said description need not be given by metes and bounds or by legal subdivisions, but it is sufficient if a generally accurate description is given of the territory to be organized as a district. Said territory need not be contiguous, provided it is so situated that the public health, safety, convenience, or welfare will be promoted by the organization as a single district of the territory described. Except in the case of a subdistrict organized in pursuance of section 6101.71 of the Revised Code, said territory shall not be included wholly within the limits of a single municipal corporation.

Said petition shall pray for the organization of the district by the name proposed.

Upon the filing of such petition a judge of the court of common pleas of the county wherein the petition was filed shall determine whether it bears the necessary signatures and complies with the requirements of this section as to form and content. No petition with the requisite signatures shall be declared void because of alleged defects, but the judge, or the court in subsequent proceedings, may at any time permit the petition to be amended in form and substance to conform to the facts by correcting any errors in the description of the territory, or in any other particular. Several similar petitions or duplicate copies of the same petition for the organization of the same district may be filed and shall together be regarded as one petition. All such petitions filed prior to the determination of the sufficiency of said petition shall be considered as though they had been filed with the first petition placed on file.

In determining when a majority of landowners has signed the petition, the names as they appear upon the tax duplicate govern and are prima-facie evidence of such ownership.

6101.061 Notice to board, director of natural resources, and director of environmental protection; hearings

Upon determining that a sufficient petition has been filed, the judge making such determination shall cause written notice thereof to be given to the director of the department of natural resources, the director of environmental protection, and to the board of directors of any conservancy district having jurisdiction over all or part of the territory affected by the proceeding or within the same major watershed area as defined by the department of natural resources and the director of environmental protection. The director of natural resources, the director of environmental protection, and the directors of such conservancy districts may appear at any hearing consid-

ering the establishment, dissolution or merger of any conservancy district or subdistrict thereof, and be heard concerning the need for a conservancy district, the area that should be included, desirable improvements, and any other matters which in their opinion should be brought to the attention of the court.

6101.07 Organization of court; powers and jurisdiction

Upon the determination of a judge of the court of common pleas that a sufficient petition has been filed in such court in accordance with section 6101.05 of the Revised Code, he shall give notice thereof to the court of common pleas of each county included in whole or in part within the proposed conservancy district. The judge of the court of common pleas of each such county, or in the case of any county having more than one such judge, one judge assigned by order of the judges of the court of common pleas thereof, shall sit as the court of common pleas of the county wherein the petition was filed to exercise the jurisdiction conferred by sections 6101.01 to 6101.84, inclusive, of the Revised Code. In case of the inability to serve of the judge of any county having only one judge, the chief justice of the supreme court, upon application of any interested person and proper showing of need, may assign a judge from another county to serve as a judge for such county during the disability of its local judge. The court of any county, presided over by the judges provided for in this section, may establish conservancy districts when the conditions stated in section 6101.05 of the Revised Code are found to exist. Except as otherwise provided by sections 6101.08 to 6101.84, inclusive, of the Revised Code, such court has, for all purposes of sections 6101.01 to 6101.84, inclusive, of the Revised Code, original and exclusive jurisdiction coextensive with the boundaries and limits of the district or proposed district and of the lands and other property included in, or proposed to be included in, such district or affected by such district, without regard to the usual limits of its jurisdiction. The judges of the court shall meet in the first instance upon the call of the judge determining the sufficiency of the petition and shall elect one of their number as presiding judge. Each judge when sitting as a member of the court shall receive such compensation and allowance for expenses as provided by law for a judge of the court of common pleas serving by assignment outside the county wherein he resides, which shall be paid as other expenses of the organization or operation of the district are paid.

The court shall adopt rules of practice and procedure not inconsistent with sections 6101.01 to 6101.84, inclusive, of the Revised Code, and the general laws of this state. If the court consists of more than three judges, it may designate three of its members from three different counties to preside over the court, hear matters coming before the court, and make determinations and decisions or findings and recommendations, as the rules of the court provide, with respect to any matters authorized by such rules, the disposition of which is vested in the court, except that it shall not make final decisions and orders as to:

- (A) The establishment, dissolution, or merger of the district or of subdistricts thereof;
- (B) The adoption, rejection, or amendment of the official plan;
- (C) The appointment and removal of directors and

appraisers;

(D) The confirmation of the appraisers' report of benefits, damages, and appraisals of property;

(E) The authorization of maintenance assessments in excess of one percent of benefits;

(F) The authorization of a readjustment of the appraisal of benefits in accordance with section 6101.54 of the Revised Code;

(G) The approval of the method of financing improvements and activities under section 6101.25 of the Revised Code;

(H) The determination of rates of compensation for water under sections 6101.24 and 6101.63 of the Revised Code;

(I) The examination of the annual report of the board of directors of the conservancy district as provided under section 6101.66 of the Revised Code.

The concurrence of two of the three judges so designated shall be necessary for any action or determination thereby and it has, if so provided by the rules of the court, the same effect as though taken or made by the full court. All actions and determinations by the full court require the affirmative vote of a majority of the judges constituting the court. In all cases in which the judges are evenly divided that side with which the presiding judge votes shall prevail. In the event the court consists of two judges and they find themselves unable to agree on any question left to their decision, a judge of the court of common pleas of some other county shall be designated by the chief justice of the supreme court to sit and vote as a third member of the court until such question is decided.

When the court by its order entered of record decrees that a subdistrict be organized, the judge of the court of common pleas of each county included in whole or in part in the subdistrict, or in the case of any such county having more than one such judge, one judge assigned by order of the judges of the court of common pleas thereof shall sit as the court of common pleas, with jurisdiction in all matters relating to the subdistrict, the disposition of which is vested in the court, except those listed in paragraph (A), (C) and (I) of this section, which shall remain the responsibility of the full court.

6101.08 Hearing on petition; effect of order establishing conservancy district

At the preliminary meeting of the court it shall fix the time and place of the hearing on the petition for the establishment of the proposed conservancy district, which hearing shall be held not later than sixty days thereafter, and the clerk of such court shall give notice of such hearing by publication. Any owner of real property in a proposed district who individually has not signed such a petition and who wishes to object to the organization and incorporation of said district shall, on or before the date set for the cause to be heard, file his objections to the organization and incorporation of such district. Similarly, objections may be filed by any public corporation which has not signed such petition. Such objections shall be limited to a denial of the statements in the petition, and shall be heard by the court as an advanced case without unnecessary delay.

Upon the hearing, if it appears that the purposes of section 6101.01 to 6101.84, inclusive, of the Revised Code, would be subserved by the creation of a district,

the court, after disposing of all objections as justice and equity require, shall by its findings, duly entered of record: adjudicate all questions of jurisdiction; determine that the organization of the district for the purposes for which it is being organized, and that the surveys, plans, appraisals of benefits and damages, estimates of cost, land options, and the preparation of an official plan will benefit the area within the territorial boundaries of the district; declare the district organized; give it a corporate name by which in all proceedings it shall thereafter be known. A district so organized shall be a political subdivision of the state and a body corporate with all the powers of a corporation, and shall have perpetual existence, with power to sue and be sued, to incur debts, liabilities, and obligations, to exercise the right of eminent domain and of taxation and assessment as provided in such sections, to issue bonds, and to do all acts necessary and proper for the carrying out of the purposes for which the district was created and for executing the powers with which it is invested.

In such decree, the court shall designate the place where the office or principal place of business of the district shall be located, which shall be within the corporate limits of the district if practicable, and which may be changed by order of court. The regular meetings of the board of directors of the district shall be held at such office or place of business, but for cause may be adjourned to any other convenient place. The official records and files of the district shall be kept at such office except as otherwise approved by the court.

If the court finds that the property set out in said petition should not be incorporated into a district, it shall dismiss said proceeding, and adjudge the costs against the signers of the petition in the proportion of the interest represented by them.

After an order is entered, either dismissing the petition or establishing the district, such order is a final order and may be appealed by any interested party or by the state, within twenty days from the date that the order is entered. The organization of said district shall not be directly or collaterally questioned in any suit, action, or proceeding except as expressly authorized in sections 6101.01 to 6101.84, inclusive, of the Revised Code.

6101.09 Decree of incorporation shall be filed

Within thirty days after the conservancy district has been declared a corporation by the court, the clerk of such court shall transmit to the secretary of state, to the director of the department of natural resources, and to the county recorder in each of the counties having lands in said district, copies of the findings and the decree of the court incorporating said district. The same shall be filed and recorded in the office of the secretary of state in the same manner as articles of incorporation are required to be filed and recorded under the general law concerning corporations. Copies shall also be filed and become permanent records in the office of the recorder of each county in which a part of the district lies. Each recorder shall receive a fee of one dollar for filing and preserving such copies, and the secretary of state shall receive for filing and for recording said copies such fees as are provided by law for like services in similar cases.

6101.13 Official plan for district; hearing; approval

Upon its qualification, or as soon thereafter as practicable, the board of directors of a conservancy district shall prepare a plan for such part or parts of the improvements for which the district was created as the board of directors shall deem advisable. Such plan shall be filed, in accordance with this section, within two years from the date of the order establishing the district. The court may grant extensions of time allowed for the filing of the plan if the board of directors so requests, for good cause shown. No plan or portion of a plan shall be prepared providing a water supply for domestic, industrial, or public use, or providing for the collection and disposal of sewage and other liquid wastes, for any municipal corporation, unless the governing body of such municipal corporation has petitioned the board to provide a water supply or a system for the collection and disposal of sewage and other liquid wastes, or has signed the petition initiating the proceeding by which the district acquired authority to undertake such improvements. Such plan shall include such maps, profiles, plans, and other data and descriptions as are necessary to set forth properly the location and character of the work and of the property benefited or taken or damaged, with estimates of cost for doing the work, including the proportion of the total cost to be assessed within the district, a breakdown of the sources of funds to be used in making the improvements, and the extent of participation, if any, by other political agencies in constructing the work.

If the board finds that any former survey made by any other district or in any other matter is useful for the purposes of the district, the board may take over the data secured by such survey, or such other proceedings as is useful to it, and may pay therefor an amount equal to the value of such data to said district. No construction shall be made under sections 6101.01 to 6101.84 of the Revised Code, which will cause the flooding of any municipal corporation or which will cause the water to back up into any municipal corporation, unless the board has acquired and paid for the right to use the land affected for such purpose, and has paid all damages incident thereto. No railroad shall be required to be constructed with a grade in excess of the maximum ruling grade then existing upon that division of said railroad whereon said change is required.

Upon the completion of such plan, the board shall file a copy thereof with the environmental protection agency which may approve or reject any provisions thereof relating to the supplying of water for domestic, industrial, and public use or to the collection and disposal of sewage and other liquid wastes. In deciding whether to approve or reject such provisions, the agency shall consider, among other factors, the protection of the public health, and compliance with air and water quality standards and regulations and solid waste disposal requirements. If the department rejects such provisions or refers them back for amendment, the board shall prepare other or amended provisions relating thereto. If the agency approves the provisions, it shall certify a copy of its action to the board, which shall file it as a record of the district.

Upon the completion of the plan and the approval by the agency, the board shall cause notice of the completion of such plan to be given by publication in accordance with section 6101.01 of the Revised Code, and shall file a copy of such plan in the office of the clerk of the common pleas court of each county in which works of

improvement are proposed, or in which property would be benefited, damaged, or taken by the execution of such plan. Such copies shall be available for inspection by all persons, public corporations, and agencies of the state government interested. The board shall make copies of the plan available to any interested party, such copies to be supplied only at the cost thereof.

Said notice shall fix the times and places for the hearing of all objections to said plan which shall be not less than twenty nor more than thirty days after the last publication of said notice. The board, or its duly appointed representative under this section, may, upon motion and for good cause shown, or upon its or his own motion, grant continuances to a day certain of the hearing on the plan. Such continuances shall not necessitate additional notice. All objections to said plan shall be in writing and filed with the secretary of the conservancy district at his office not more than twenty days after the last publication of said notice. A hearing on the objections so filed shall be provided for by the board in the county seat of each county in which a copy of the plan has been filed as required by this section, but such hearing may be canceled in any county from which no objections have emanated either from a resident or owner of property located therein. The board may, if it deems necessary, appoint one or more representatives each of whom shall be assigned by the board to conduct one or more of the hearings on the objections as required by this section and to cause a record to be made of each of such hearings and to report such record back to the board. After said hearings, the board shall adopt the plan with or without modifications as the official plan of the district. Within ten days after the adoption of the official plan by the board, the secretary of the conservancy district shall certify a copy thereof and deposit it with the clerk of the court who shall file it in the original case. If any person, public corporation, or agency of the state government objects to said official plan, so adopted, then such person, public corporation, or agency of the state government may, within thirty days from the adoption of said official plan, file their objections in writing, specifying the features of the plan to which they object, in the original case establishing the district in the office of the clerk of the court. The clerk of the court shall fix a day for a hearing upon said official plan before the court which shall not be less than twenty nor more than thirty days after the time fixed for filing objections, at which time the court shall hear any objections so filed and approved, reject, or refer back said plan to the board.

The court may, upon motion and for good cause shown, or upon its own motion, grant continuances to a date certain of the hearing on the plan when it is made to appear to the court that further time is needed for study of the plan by objectors. Such continuances shall not necessitate additional notice. If the court rejects said plan, the board shall proceed as in the first instance under this section to prepare another plan. If the court refers said plan to said board for amendment, then the court shall continue the hearing to a day certain without publication of notice. If the court approves said plan as the official plan of the district, a certified copy of the journal entry of the court shall be filed with the secretary, and by him incorporated into the records of the district. The board, with the approval of the court, may alter or add to the official plan until the appraisal record is filed, and of all such alterations and additions the

board of appraisers of the conservancy district shall take notice; but if in the judgment of the court any such alteration or addition is material in character, the procedure thereon shall be the same as on the adoption of the plan. After the appraisal record has been filed in court, no alterations of the official plan or additions thereto shall be made except as provided in section 6101.39 of the Revised Code.

The board of directors of a conservancy district shall have full power and authority to devise, prepare for, execute, maintain, and operate all works or improvements necessary or desirable to complete, maintain, operate, and protect the official plan. It may secure and use men and equipment under the supervision of the chief engineer or other agents, or it may let contracts for such works, either as a whole or in parts.

6101.23 Co-operation with United States government or other agencies

The board of directors of a conservancy district may enter into contracts or other arrangements with the United States government or any department thereof, with persons, railroads, or other corporations, with public corporations, and with the state government of this or other states, with drainage, conservation, conservancy, sewer, park, or other improvement districts, in this or other states, for co-operation or assistance, not in violation of Article VIII, Ohio Constitution, in constructing, maintaining, using, and operating the works of the district, the waters thereof, or the parks, parkways, forests, and recreational facilities thereof, or in minimizing or preventing damage to the properties, works, and improvements of the district from soil erosion, or for making surveys and investigations or reports thereon. The board may purchase, lease, or acquire land or other property in adjoining states to secure outlets or for other purposes of sections 6101.01 to 6101.84, inclusive, of the Revised Code, and may let contracts or spend money for securing such outlets or other works in adjoining states.

6101.25 Construction and maintenance of recreational facilities; method of financing

The board of directors of a conservancy district may construct, improve, operate, maintain, and protect parks, parkways, forest preserves, bathing beaches, playgrounds, and other recreational facilities upon the lands owned or controlled by the district, or upon lands located within the district owned or controlled by the United States government or any department thereof, by the state of Ohio or any department or division thereof, or by any political subdivision, if authorized by lease, contract, or other arrangements with the appropriate agency of government having such ownership or control, and may acquire by lease, purchase, or appropriation property additional to that required for the purposes for which the district was incorporated, in order to provide for the protection, more adequate development, and fuller public use and enjoyment of such improvements and facilities. The board may impose and collect charges for the use of the properties, improvements, and facilities maintained or operated by the district for recreational purposes.

No person shall enter upon or remain upon any of

the properties, improvements, or facilities maintained or operated by the district for recreational purposes without paying any admission fee, license fee, or other charge imposed by the board.

In case the revenues derived or to be derived from the properties, improvements, and facilities maintained, operated, used, or acquired by the district for recreational purposes are not sufficient for the purposes of this section, the board, with the approval of the court, may provide for the payment of obligations incurred under this section by either or both the following methods, as determined by the court:

(A) The levy of taxes upon all the taxable property of the district;

(B) The levy of special assessments upon public corporations having lands within the district.

In no case shall such obligations be paid from the proceeds of special assessments levied under section 6101.48 or 6101.53 of the Revised Code, or of bonds or notes issued in anticipation thereof. If the first such method is approved by the court, the board may levy in any year taxes of not to exceed one-tenth of one mill upon the taxable real and personal property of the district for the purposes of this section, and in anticipation of the collection thereof, the board may issue bonds and notes for the acquisition and construction of the properties and improvements authorized by this section. Such bonds and notes shall be issued in the manner and subject, so far as applicable, to the conditions provided by sections 6101.50, 6101.51, and 6101.52 of the Revised Code. In case the second method is approved by the court, the board of appraisers of the conservancy district shall appraise the benefits to be conferred on each public corporation containing lands within the district by reason of the acquisition and construction of the properties and improvements authorized by the board of directors under this section, and shall appraise the damages accruing to persons and public corporations therefrom. Sections 6101.01 to 6101.84, inclusive, of the Revised Code, with reference to the determination of benefits and damages, apply to such appraisals made under this section, but they shall be separate from other appraisals of benefits and damages made under such sections and separate records thereof shall be prepared. After the appraisal of benefits has been approved by the court, and within the amount of benefits so determined, the board of directors may levy assessments on the public corporations benefited to pay the cost of the properties and improvements acquired and constructed under this section, and may issue bonds and notes in anticipation of the collection of such assessments. In addition, the board of directors may annually levy a maintenance assessment for the purposes of this section on such public corporations upon the basis of total appraised benefits. Sections 6101.01 to 6101.84, inclusive, of the Revised Code, relating to assessments for district purposes and to bonds and notes issued in anticipation thereof apply to the assessments authorized under this section and the bonds and notes issued in anticipation of such assessments. Improvement, bond retirement, and maintenance funds shall be established for recreational purposes in conformity with section 6101.44 of the Revised Code which shall be separate from one another and from other funds of the district, and no transfers shall be made thereto from the other funds of the district unless the court, prior to June 1, 1965, determines that such transfer will not include proceeds of special assessments levied under sec-

tion 6101.48 or 6101.53 of the Revised Code, or of bonds or notes issued in anticipation of the collection thereof, and approves the transfer as a transfer of surplus moneys as provided in section 6101.44 of the Revised Code. The proceeds of all bonds, notes, taxes, and assessments authorized by this section and all receipts derived from the recreational properties, improvements, and facilities owned, controlled, operated, or maintained by the district shall be paid into such funds and all expenditures in accordance with this section shall be made therefrom.

6101.28 Appraisal of benefits and damages

During the preparation of the official plan, the board of appraisers of a conservancy district shall examine and become acquainted with the nature of plans for the improvement and of the lands and other property affected thereby, in order that it may be better prepared to make appraisals.

When the certified copy of the entry of the court approving the official plan is filed with the secretary of the conservancy district, he shall at once notify the board of appraisers, and it shall thereupon appraise the benefits of every kind to all real property within or without the district, which will result from the organization of said district and the execution of the official plan. The board of appraisers shall appraise the damages sustained and the value of the land and other property necessary to be taken by the district for which settlement has not been made by the board of directors of the conservancy district. In the progress of its work, the board of appraisers shall have the assistance of the attorney, engineers, secretary, and other agents and employees of the board of directors.

The board of appraisers shall also appraise the benefits and damages accruing to municipal corporations, counties, townships, and other public corporations, as political entities, and to this state.

Before appraisals of compensation and damages are made, the board of directors may report to the board of appraisers the parcels of land or other property it wishes to purchase, and for which it wishes appraisals to be made, both for easement and for purchase in fee simple. The board of directors may, if it deems best, specify in case of any property the particular purpose for which and the extent to which an easement in the same is desired, describing definitely such purpose and extent. The board of appraisers shall appraise all damages which may, because of the execution of the official plan, accrue to real or other property either within or without the district, which damages shall also represent easements acquired by the district for all of the purposes of the district, unless otherwise specifically stated. Wherever instructed to do so by the board of directors, the board of appraisers shall appraise lands or other property which it is necessary or desirable for the district to own, and when instructed by the board of directors to do so, the board of appraisers shall appraise both the total value of the land, and also the damages due to an easement for the purposes of the district. When such appraisals are confirmed by the court, the board of directors has the option of paying the entire appraised value of the property and acquiring full title to it in fee simple, or of paying only the cost of such easement for the purposes of the district. The board of appraisers in ap-

praising benefits and damages shall consider only the effect of the execution of the official plan. In making appraisals, the board of appraisers shall give due consideration and credit to any other works or improvements already constructed, or under construction, which form a useful part of the work of the district according to the official plan. Where the board of appraisers returns no appraisal of damages to any property, it shall be deemed a finding by such board of appraisers that no damages will be sustained.

FISCAL PROVISIONS

6101.44 Funds of conservancy district; appropriation by board of directors

The moneys of every conservancy district shall be administered through the following funds:

(A) The "preliminary fund," consisting of the proceeds of the preliminary assessment levied under authority of section 6101.45 of the Revised Code, and any advances of assessments obtained or notes issued in accordance with section 6101.46 of the Revised Code, and any contribution or appropriation by the state of Ohio under authority of section 6101.45 of the Revised Code, which shall be used for the payment of expenses incurred for the purposes for which such preliminary assessments and contributions are authorized;

(B) The "improvement fund," consisting of the proceeds of all special assessments the collection of which has not been anticipated in the issuance of bonds or notes and the proceeds of all bonds and notes, other than bonds to retire notes, issued under section 6101.50 of the Revised Code, which shall be used for defraying expenditures incurred in the execution of the official plan and the acquisition or construction of properties, works, and improvements of the district including the cost of preparing the official plan and the appraisal, the entire cost of construction and superintendence, with all charges incidental thereto, and the cost of administration during the period of construction and may also be used for defraying preliminary expenses in accordance with section 6101.46 of the Revised Code and repayment to the preliminary fund, in the manner and to the extent provided by this section, of expenditures therefrom;

(C) The "bond retirement fund," consisting of the proceeds of all special assessments the collection of which has been anticipated in the issuance of bonds or notes together with all other receipts pledged for the retirement of bonds or notes or the payment of interest thereon, which shall be used only for such purposes;

(D) The "maintenance fund," consisting of the proceeds of maintenance assessments levied annually in accordance with section 6101.53 of the Revised Code, earnings from the operation of the works of the district, and all receipts not otherwise assigned by law or by order of the board of directors of the conservancy district, which shall be used for the payment of operation, maintenance, and other current expenses of the district.

Before levying any assessment to pay the cost of an improvement, the board of directors shall determine the amount expended and to be expended from the preliminary fund for surveys and plans, appraisals, hearings, administration, court costs, and other incidentals that equitably should be repaid to the preliminary fund. Such

amount may be all or any portion of the preliminary expenses for said improvement. When specified by resolution of the board of directors, such amount shall be included in the costs to be paid from the assessments upon benefited property, and shall be transferred from the improvement fund to the preliminary fund.

The board may establish separate or special funds of each class for each or any designated purpose for which the district is incorporated. Any surplus moneys in any fund of the district may be transferred to any other such fund by the board with the approval of the court; but no transfer shall be made from the bond retirement fund prior to the final maturity of the bonds and notes payable therefrom, and no transfer shall thereafter be made which would reduce the balance in such fund below the amount required for the payment of all obligations outstanding against such fund.

No money shall be drawn from the treasury of the district, and no obligation for the expenditure of money shall be incurred, except in pursuance of an appropriation by the board. This prohibition does not apply to funds placed at the place of payment by the treasurer of the conservancy district for the payment of maturing bonds and notes and interest thereon in accordance with section 6101.51 of the Revised Code. At or before the opening of each fiscal year, which shall correspond to the calendar year unless a different year is authorized by the bureau of inspection and supervision of public offices, the board shall adopt a resolution making appropriations for the ensuing year. Such appropriation resolution may be amended or supplemented by the board. The total amount appropriated from any fund for any year shall not exceed the sum of the unencumbered balance in the fund at the beginning of the year and the amounts to be received during such year from bonds authorized, and taxes and special assessments imposed prior to their appropriation, together with all other moneys estimated to be received by the fund during the year. At the close of each fiscal year all unencumbered balances of appropriations shall revert to the funds from which they were made and shall be subject to reappropriation.

No contract shall be let and no order shall be issued involving the expenditure of money unless the accounting officer of the district first certifies that the amount required to meet the same, or, in the case of a continuing contract to be performed in whole or in part in a subsequent fiscal year, the amount required to meet the same in the year in which the contract is made, has been lawfully appropriated for such purpose and is in the treasury or in process of collection to the credit of an appropriate fund free from previous encumbrances. Accounts shall be kept in such form as to show at all times the true condition of each appropriation.

6101.45 Payment of preliminary expenses; preliminary assessment; state share of expenses

After the filing of a petition for the organization of a conservancy district, and before the district is organized, the costs of publication and other official costs of the proceedings shall be paid out of the general funds of the county in which the petition is pending. Such payment shall be made on the warrant of the county auditor or on the order of the court. If the district is organized, such costs shall be repaid to the county out of the first

funds received by the district through levying of assessments or selling of bonds, or the borrowing of money. If the district is not organized, the cost shall be collected from the petitioners or their bondsmen. Upon the organization of the district, the court shall make an order indicating a preliminary division of the preliminary expenses between the counties included in the district in approximately the proportions of interest of the various counties as estimated by said court. The court shall issue an order to the auditor of each county to issue his warrant upon the county treasurer of his county to reimburse the county having paid the total cost.

As soon as any district has been organized, and a board of directors of the conservancy district has been appointed and qualified, such board may levy upon the property within the district in each of not more than two years a preliminary assessment, based upon the benefit determined by the court as provided by section 6101.08 of the Revised Code, but not to exceed three-tenths of a mill on the assessed valuation thereof to be used for the purpose of paying expenses of organization, for surveys and plans, appraisals, estimates of cost, land options, and for other incidental expenses which may be necessary up to the time money is received from the sale of bonds or otherwise. This assessment shall be certified to the auditors of the various counties and by them to the respective treasurers of their counties. If such items of expense have already been paid in whole or in part from other sources, they may be repaid from the receipts of such levy, and such levy may be made although the work proposed may have been found impracticable or for other reasons is abandoned. The collection of such assessment shall conform in all matters to the sections of the Revised Code governing the collection of assessments levied by local political subdivisions, and the sections of the Revised Code, concerning the nonpayment of assessments levied by local political subdivisions shall apply. The board may borrow money in any manner provided for in sections 6101.01 to 6101.84, inclusive, of the Revised Code, and may pledge the receipts from such assessments for its repayment, the information collected by the necessary surveys, the appraisal of benefits and damages, and other information and data being of real value and constituting benefits for which said assessment may be levied. In case a district is disbanded for any cause before the work is constructed, the data, plans, and estimates which have been secure shall be filed with the clerk of the court before which the district was organized and shall be matters of public record available to any person interested.

The board shall, upon levying the preliminary assessment, certify to the director of the department of natural resources an estimate of the amount of money the district will need to pay expenses of organization, for surveys and plans, appraisals, estimates of cost, land options and other incidental expenses up to the time money is received by the district from the sale of bonds or otherwise. The director, within sixty days after the receipt of such certification, shall upon finding that the organization and operation of the district contribute to the general welfare of the state, determine an equitable percentage of the amount so certified to be paid by the state. The director shall certify such determination to the board and shall cause to be paid to the district, out of any moneys appropriated to the department of natural resources for the purpose of assisting conservancy districts to pay expenses of organization, for surveys and

plans, estimates of cost, land options and other incidental expenses, the amount determined by him to be the equitable share of the state in meeting such expenses. The director shall make available to the board all plans, data, surveys or other information, which the department of natural resources or any division thereof may have, which will be beneficial to the board in furthering the purposes for which the district is organized.

6101.451 Conservancy district organization fund; advance of moneys to districts; repayment

A conservancy district or a subdistrict thereof may apply to the director of natural resources for an advance of moneys from the conservancy district organization fund hereby created to enable such district or subdistrict to pay all or a part of the expenses of organization, surveys and plans, appraisals, estimates of cost, land options, and other incidental expenses of the district or subdistrict. The director shall consider such application and shall recommend an amount of moneys reasonably needed by such district or subdistrict.

The order of the director recommending the amount of such moneys needed shall be certified to the controlling board. The controlling board shall then determine the amount to be advanced to such district or subdistrict, and shall certify its action to the auditor of the state, who shall thereupon draw his voucher to the treasurer of the state for payment of the amount specified in such order to said district or subdistrict from moneys appropriated to the conservancy district organization fund.

All amounts received by any such conservancy district or subdistrict as advances from the conservancy district organization fund shall be repaid by it to the state immediately upon the receipt by it of funds from the sale of bonds or from other sources which may be used for that purpose, or in such number of equal annual installments not exceeding five, and commencing at such time as shall be specified in the order of the director.

6101.46 Board of directors may borrow money and issue notes

In order to facilitate the preliminary work, the board of directors of a conservancy district may borrow money and issue notes therefor at a rate or rates of interest not exceeding eight per cent per annum in an amount not greater than seventy-five per cent of the unencumbered proceeds derived or derivable from the preliminary assessment levied, or which the board has authority to levy, under section 6101.45 of the Revised Code, which assessment shall be pledged for the repayment thereof if and when levied. If no preliminary assessment is levied or the proceeds of the assessment levied are found insufficient to pay the interest and retire the notes issued, the same may be paid from the improvement fund. At any time after the levy of a preliminary assessment, on request of the board of directors and authorization by the board of county commissioners, the county auditor of any county having lands within the district shall make advances to the district from the general fund of the county, or from the undistributed proceeds of such assessment, not in excess of the amount of such assessment levied and collectible within the county.

This section does not apply to or affect the validity of any warrants, notes, or other evidences of indebtedness issued prior to July 19, 1937, under authority of this section.

Such warrants, notes, or other evidences of indebtedness may be renewed for a period not to exceed two years, and such renewal obligations may at the option of the board of directors be exchanged for outstanding obligations or sold at private or public sale according to the law governing the original issue.

6101.47 Board of directors may issue bonds

The board of directors of a conservancy district may issue bonds of the district to mature over a period not exceeding ten years for the purpose of retiring any warrant or evidence of indebtedness incurred prior to July 19, 1937, pursuant to sections 6101.45 and 6101.46 of the Revised Code, which have matured or which are about to mature. Such bonds shall be executed by the president of the board, attested by the seal of such district, and by the signature of the secretary of the conservancy district, and shall be registered by the treasurer of state. The indebtedness created under this section shall never exceed one half of one percent of all taxable property listed on the general tax lists and duplicates within the district. The issuance, sale, and characteristics of said bonds shall conform to Section 11 of Article XII, Ohio Constitution, and to sections 133.01 to 133.65, inclusive, of the Revised Code, governing the issuance, sale, and characteristics of bonds issued without a vote of the people, except as this section expressly otherwise provides.

In the event of the issuance of bonds authorized by this section, the board shall levy an assessment uniformly at a level rate upon all the property of the district according to the assessed valuation thereof, payable in annual installments during the life of such bonds, in an amount sufficient to retire said bonds at maturity, which installments of assessments shall bear interest at the same rate as such bonds.

No bonds shall be issued under this section to retire or pay any warrant or evidence of indebtedness which is not a subsisting, valid, and enforceable obligation and indebtedness of the district. This section does not render in any way valid or enforceable any warrant, indebtedness, or evidence of indebtedness which is not otherwise valid and enforceable against the district. Any such indebtedness, otherwise valid, may be retired by any such bond issue although such indebtedness is in a sum in excess of the three tenths of a mill levy authorized by sections 6101.45 and 6101.46 of the Revised Code, but not in excess of the one half of one percent limitation prescribed in this section.

6101.48 Levy and determination of assessments

After the appraisal record as approved by the court, or that part thereof from which no appeal is pending, has been filed with the secretary of the conservancy district as provided in section 6101.37 of the Revised Code, then from time to time, as the affairs of the district demand it, the board of directors of the conservancy district shall levy on all real property and on all public corporations, upon which benefits have been appraised, an assessment of such portion of said benefits as is

found necessary by said board to pay the cost of the execution of the official plan including superintendence of construction and administration, plus one-ninth of said total to be added for contingencies, but not to exceed in the total of principal the appraised benefits so adjudicated.

Such assessment shall be apportioned to and levied on each tract of land or other property and each public corporation in said district in proportion to the benefits appraised, and not in excess thereof. Interest at a rate not to exceed eight per cent per annum, payable semiannually shall be included in and added to the said assessment, but such interest shall not be considered as a part of the cost in determining whether or not the expenses and costs of making the improvement are equal to or in excess of the benefits appraised.

After the assessment is levied the board shall report it to the court for confirmation. Upon the entry of the order of the court confirming the assessment the clerk of the court shall transmit a certified copy of said order to the governing or taxing body of each political subdivision assessed and said governing or taxing body shall receive and file the same. Thereafter the board may order the issuance of notes in an amount not exceeding ninety per cent of the assessment in anticipation of the collection of the assessment.

After the court has confirmed the assessment the secretary of the conservancy district, at the expense of the district, shall prepare in duplicate an assessment record of the district. It shall be in a well-bound book indorsed and named "Conservancy Assessment Record of District." It shall contain in tabular form a notation of the items of property appraised and the public corporations to which benefits have been appraised, the total amount of benefits appraised against each item or public corporation, and the total assessment levied against each item or public corporation. Where successive levies of assessment are made for the execution of the official plan and the acquisition or construction of improvements, the conservancy assessment record shall contain suitable notations to show the number of levies and the amount of each, to the end that the conservancy assessment record may disclose the aggregate of all such levies made up to that time.

Upon the completion of such record it shall be signed and certified by the president of the board and by the secretary of the conservancy district, attested by the seal of the district, and shall then be placed on file and become a permanent record in the office of said district. After the expiration of the thirty day period for the payment of assessments as provided by section 6101.49 of the Revised Code, a copy of that part of the conservancy assessment record affecting lands or public corporations in any county shall be filed with the county auditor of such county.

If it is found at any time that the total amount of assessments levied is insufficient to pay the costs of works set out in the official plan or of additional work done, the board may make an additional levy to provide funds to complete the work, provided the total of all levies of such assessment exclusive of interest does not exceed the total of benefits appraised.

6101.501 Revenue bonds

A conservancy district or a subdistrict thereof may issue revenue bonds for the purpose of paying all or part

of the cost of acquiring or constructing any improvement which the district or subdistrict is authorized to acquire or construct and such improvement may include equipment, land or interests in land and facilities necessary or appropriate to such improvement. Such bonds shall be secured only by a pledge of, and lien upon, such portion as the board of directors of the conservancy district determines of the revenues derived from fees, rates, and charges for the use of any facilities or services of the district or subdistrict, after the payment of costs and expenses of operation and maintenance of such facilities, and the covenant of the district or subdistrict to maintain sufficient fees, rates, and charges to produce adequate revenues to pay such costs and expenses and for the payment of such bonds. Such bonds shall be negotiable instruments, but shall not constitute general obligations of the district or subdistrict.

Such bonds shall bear interest at not to exceed eight per cent per annum, payable semiannually, shall mature in annual or semiannual installments within forty years from their date, and may be made callable and if so issued may be refunded. Such bonds shall be signed by the president of the board and attested by the seal of said district and by the signature of the secretary of the conservancy district, provided that one of such signatures may be a facsimile and a facsimile of such seal may be imprinted on said bonds. Interest coupons attached to such bonds shall bear the facsimile signatures of the president and secretary. In case any officer who has signed such bonds or caused his facsimile signature to be affixed thereto ceases to be such officer before the bonds so signed have been actually delivered, such bonds, nevertheless, may be issued and delivered as though the person who had signed such bonds, or caused his facsimile signature to be affixed thereto, had not ceased to be such officer; any such bonds may be executed on behalf of the district by an officer who at the actual date of execution of such bonds is the proper officer of the district, although at the date of such bonds such person was not such an officer. Such bonds may be sold as provided in section 6101.50 of the Revised Code or at private sale, at the option of the board, and shall be registrable as provided in section 6101.52 of the Revised Code.

In the discretion of the board of directors, such revenue bonds may be further secured by a trust agreement between the board and a corporate trustee, which may be any trust company or bank having the powers of a trust company within or without the state. Such trust agreement may pledge or assign revenues to the payment of the principal of and interest on such bonds and reserves therefor but shall not convey or mortgage any property of the district or subdistrict. Any such trust agreement may contain such provisions for protecting and enforcing the rights and remedies of the bondholders as are reasonable and proper and not in violation of law, including provisions for issue of additional revenue bonds to be secured ratably with any revenue bonds theretofore or thereafter issued, covenants setting forth the duties of the board in relation to the acquisition, improvement, maintenance, operation, repair, and insurance of the facilities in connection with which such bonds are authorized, the custody, safeguarding, and application of all revenues and moneys, the insurance of moneys on hand or on deposit, the rights and remedies of the trustee and the holders of the bonds, including therein provisions restricting the individual right of

action of bondholders as is customary in trust agreements respecting bonds and debentures of corporations, the security to be given by those who contract to construct the project and by any bank or trust company in which the proceeds of bonds or revenues are deposited, and such other provisions as the board deems reasonable and proper for the security of the bondholders. All expenses incurred in carrying out the provisions of any such trust agreement may be treated as a part of the cost of maintenance, operation, and repair of the facilities for which the bonds were issued.

The board shall covenant and agree to maintain, so long as there are outstanding any such bonds payable from revenues, adequate fees and charges for the use of the facilities or services from which such revenues are derived for the payment of the principal and interest on such bonds and for the creation and maintenance of reserves therefor and reserves for operation, maintenance, replacement, and renewal.

If the revenues pledged to pay revenue bonds prove insufficient to pay maturing bonds, bonds which have matured or are about to mature may be refunded, providing the refunding bonds so issued shall mature in not more than fifteen years after issuance; or all of the outstanding bonds, both matured and unmatured, of any such issue may be refunded if such outstanding bonds can be retired by call for redemption or with the consent of the holders, either from the proceeds of the sale of the refunding bonds or by exchange, provided such refunding bonds shall not exceed in amount the par value of the bonds to be refunded plus the redemption price in excess of par value, if any, required to be paid upon their call for redemption and the maturity of such refunding bonds shall not exceed forty years after their issuance.

The terms and provisions of any such refunding bonds, the method of their issue, and the documents to be executed for the security thereof, shall be as provided for an original issue of revenue bonds except that they may mature in one or more installments and contain such provisions for sinking fund and for calls from sinking fund as the board of directors may determine, and except that they may be exchanged in whole or in part for the bonds to be refunded.

6101.54 Petition for readjustment of appraisal of benefits; hearing

Whenever the owners or representatives of twenty-five percent or more of the acreage or value of the lands in a conservancy district or the board of directors of a conservancy district file a petition with the clerk of the court having jurisdiction in the original case, stating that there has been a material change in the values of the property in the district or additional benefits are being derived from the works and the improvements of the district since the last previous appraisal of benefits, and praying for a readjustment of the appraisal of benefits for the purpose of making a more equitable basis for the levy of the maintenance assessment under section 6101.53 of the Revised Code, the clerk shall give notice of the filing and hearing of said petition by publication in the manner provided in division (A) of section

6101.01 of the Revised Code.

Upon hearing of said petition, if said court finds there has been a material change in the values of property in said district, or that additional benefits are derived from the works and improvements of the district, or both, since the last previous appraisal of benefits, the court shall order that there be a readjustment of the appraisal of benefits for the purpose of providing a basis upon which to levy the maintenance assessment of said district. Thereupon the court shall direct the board of appraisers of the conservancy district to make such readjustment in the manner provided in sections 6101.01 to 6101.84, inclusive, of the Revised Code, and said board shall make its report. The same proceedings shall be had thereon, as nearly as may be, as are provided in such sections for the appraisal of benefits accruing for original construction. In making the readjustment of the appraisal of benefits, the readjusted appraisal shall not be limited to the aggregate amount of nor to the benefits or properties or persons listed in the original or any previous appraisal of benefits, and after the making of such readjustment the limitation of the annual maintenance assessment to one percent of the total appraised benefits shall apply to the amount of the benefits as readjusted. There shall be no such readjustment of benefits oftener than once in eight years.

6101.74 Remedy for injury by district

If any person or public corporation, within or without any conservancy district, considers itself injuriously affected in any manner by any act performed by any official or agent of such district, or by the execution, maintenance, or operation of the official plan, and if no other method of relief is offered under sections 6101.01 to 6101.84, inclusive, of the Revised Code, the remedy shall be as follows:

The person or public corporation considering itself to be injuriously affected shall petition the court before which said district was organized for an appraisal of damages sufficient to compensate for such injuries. The court shall thereupon direct the board of appraisers of the conservancy district to appraise said damages and injuries, and to make a report to the court on or before the time named in the order of the court. Upon the filing of said report of the board of appraisers, the court shall cause notice to be given to the petitioner and to the board of directors of the conservancy district of a hearing on said report. At the time of such hearing, the court shall consider the report of the board of appraisers, and may ratify said report or amend it as the court deems equitable, or may return it to the board of appraisers and require it to prepare a new report. Upon the filing of an order of the court approving said report of the board of appraisers, with such modifications as it has made, said order constitutes a final adjudication of the matter unless it is appealed from within twenty days. Appeal to a jury from said order may be had by the petitioner, by the board of directors, or by any person or public corporation which has been assessed for the costs of the district. No damages shall be allowed under this section which would not otherwise be allowed in law.

APPENDIX C

OHIO REVISED CODE SECTIONS
REGARDING POWER SITING

4906.01 Definitions

As used in Chapter 4906, of the Revised Code:

(A) "Person" means an individual, corporation, business trust, association, estate, trust, or partnership or any officer, board, commission, department, division, or bureau of the state or a political subdivision of the state, or any other entity.

(B) "Major utility facility" means:

(1) Electric generating plant and associated facilities designed for, or capable of, operation at a capacity of fifty megawatts or more;

(2) An electric transmission line and associated facilities of a design capacity of one hundred twenty-five kilovolts or more;

(3) A gas or natural gas transmission line and associated facilities designed for, or capable of, transporting gas or natural gas at pressures in excess of one hundred twenty-five pounds per square inch.

"Major utility facility" does not include electric, gas, natural gas distributing lines and gas or natural gas gathering lines and associated facilities as defined by the power siting commission, nor gas or natural gas transmission lines over which an agency of the United States has exclusive jurisdiction.

(C) "Commence to construct" means any clearing of land, excavation, or other action that would adversely affect the natural environment of the site or route of a major utility facility, but does not include surveying changes needed for temporary use of sites or routes for nonutility purposes, or uses in securing geological data, including necessary borings to ascertain foundation conditions.

(D) "Certificate" means a certificate of environmental compatibility and public need issued by the power siting commission.

4906.02 Power siting commission created; membership; compensation; chairman; secretary, duties; nonvoting legislative members

(A) There is hereby created the power siting commission, composed of the chairman of the public utilities commission, the director of environmental protection, the director of health, the director of economic and community development, the director of natural resources, the director of energy, and a representative of the public who shall be an engineer and shall be appointed by the governor, from a list of three nominees submitted to the governor by the office of the consumers' counsel, with the advice and consent of the senate and shall serve at the pleasure of the governor. The public representative shall receive as compensation five thousand dollars per year plus expenses necessarily incurred in the performance of his duties. The director of environmental protection shall be chairman of the power siting commission. All hearings, studies, and consideration of applications for certificates shall be conducted by the power siting commission or representatives of its members. The commission may not make any approval without the consent

of at least four voting members of the commission.

In addition, the commission shall include four legislative members who may participate fully in all the commission's deliberations and activities except that they shall serve as nonvoting members. The speaker of the house shall appoint one legislative member, and the president pro tempore of the senate and minority leader of each house shall each appoint one legislative member. Each such legislative leader shall designate an alternate to attend meetings of the commission when the regular legislative member he appointed is unable to attend. Each legislative member and alternate shall serve for the duration of the elected term that he is serving at the time of his appointment. Notwithstanding section 101.26 of the Revised Code, legislative members of the commission or their designated alternates, when engaged in their duties as members of the commission, shall be paid at the per diem rate of step 1, pay range 32, under schedule B of section 124.15 of the Revised Code and shall receive their necessary traveling expenses. Such payments for legislative members of the commission or their alternates shall be made from the moneys appropriated for payment of expenses of legislative committees.

(B) The commission shall appoint a secretary, who shall be in the unclassified civil service and shall serve at the pleasure of the commission. The secretary shall keep a complete record of all proceedings of the commission, issue all necessary process, writs, warrants, and notices, keep all books, maps, documents, and papers ordered filed by the commission, conduct investigations pursuant to section 4906.07 of the Revised Code, and perform such other duties as the commission may prescribe.

4906.03 Powers and duties of commission

The power siting commission shall:

(A) Require such information from persons subject to its jurisdiction as it considers necessary to assist in the conduct of hearings and any investigations or studies it may undertake;

(B) Conduct any studies or investigations which it considers necessary or appropriate to carry out its responsibilities under this chapter;

(C) Adopt rules establishing criteria for evaluating the effects on environmental values of proposed and alternative sites, and projected needs for electric power, and such other rules as are necessary and convenient to implement this chapter, including reasonable application fees;

(D) Approve or disapprove applications for certificates.

4906.04 Certificate for construction of major utility facility

No person shall commence to construct a major

utility facility in this state without first having obtained a certificate for the facility. The replacement of an existing facility with a like facility, as determined by the power siting commission, shall not constitute construction of a major utility facility. Such replacement of a like facility is not exempt from any other requirements of state or local laws or regulations. Any facility, with respect to which such a certificate is required, shall thereafter be constructed, operated, and maintained in conformity with such certificate and any terms, conditions, and modifications contained therein. A certificate may only be issued pursuant to Chapter 4906. of the Revised Code.

A certificate may be transferred, subject to the approval of the commission, to a person who agrees to comply with the terms, conditions, and modifications contained therein.

4906.05 Exemptions from certificate requirement

No certificate is required for a major utility facility on which construction had already commenced on the effective date of this act or within two years thereafter. This section does not exempt such a facility from any other requirements of state and local laws and regulations.

No certificate is required for any major utility facility already in operation on the effective date of this act, and the facility shall not be exempt from any applicable state or local laws or regulations. A certificate is required for any substantial addition to a facility already in operation. "Substantial addition" shall be defined by the power siting commission.

Any electric generating plant and associated facilities, electric transmission line and associated facilities, or gas or natural gas transmission line and associated facilities which is not a major utility facility is not exempt from state or local laws or regulations.

4906.06 Application for certificate; contents; publication of notice; amendment

(A) An applicant for a certificate shall file with the power siting commission an application, in such form as the commission prescribes, containing the following information:

- (1) A description of the location and of the major utility facility to be built thereon;
- (2) A summary of any studies which have been made by or for the applicant of the environmental impact of the facility;
- (3) A statement explaining the need for the facility;
- (4) A statement of the reasons why the proposed location is best suited for the facility;
- (5) A statement of how the facility fits into the applicant's forecast contained in the report submitted under section 1551.17 of the Revised Code;

(6) Such other information as the applicant may consider relevant or as the commission may by regulation or order require. Copies of the studies referred to in division (A)(2) of this section shall be filed with the commission, if ordered, and shall be available for public inspection.

The application shall be filed not less than two years,

except one year in the case of transmission lines, nor more than five years prior to the planned date of commencement of construction. Such period may be waived by the commission for unforeseen emergencies.

(B) Each application shall be accompanied by proof of service of a copy of such application on the chief executive officer of each municipal corporation and county and the head of each public agency, charged with the duty of protecting the environment or of planning land use, in the area in which any portion of such facility is to be located.

(C) Each applicant shall within seven days of the filing of the application give public notice to persons residing in the municipal corporations and counties entitled to receive notice under division (B) of this section, by the publication of a summary of the application in newspapers of general circulation in such area. Proof of such publication shall be filed with the commission.

(D) Inadvertent failure of service on, or notice to, any of the persons identified in divisions (B) and (C) of this section may be cured pursuant to orders of the commission designed to afford them adequate notice to enable their effective participation in the proceeding. In addition, the commission may, after filing, require the applicant to serve notice of the application or copies thereof or both upon such other persons, and file proof thereof, as the commission considers appropriate.

(E) An application for an amendment of a certificate shall be in such form and contain such information as the commission prescribes. Notice of such an application shall be given as required in divisions (B) and (C) of this section.

4906.07 Hearing on application; fixing date; investigation; written report

(A) Upon the receipt of an application complying with section 4906.06 of the Revised Code, the power siting commission shall promptly fix a date for a public hearing thereon, not less than sixty nor more than ninety days after such receipt, and shall conclude the proceeding as expeditiously as practicable.

(B) On an application for an amendment of a certificate, the commission shall hold a hearing in the same manner as a hearing is held on an application for a certificate if the proposed change in the facility would result in any material increase in any environmental impact of the facility or a substantial change in the location of all or a portion of such facility other than as provided in the alternates set forth in the application.

(C) The secretary of the power siting commission shall investigate each application filed with the commission and shall, not less than fifteen days prior to the date any application is set for hearing submit a written report to the commission and to the applicant. A copy of such report shall be made available to any person upon request. Such report shall set forth the nature of the investigation, and shall contain recommended findings with regard to division (A) of section 4906.10 of the Revised Code and shall become part of the record and served upon all parties to the proceeding.

4906.08 Parties to certification proceeding; testimony by parties and other persons

(A) The parties to a certification proceeding shall in-

clude:

(1) The applicant;

(2) Each person entitled to receive service of a copy of the application under division (B) of section 4906.06 of the Revised Code, if it has filed with the power siting commission a notice of intervention as a party, within thirty days after the date it was served with a copy of the application;

(3) Any person residing in a municipal corporation or county entitled to receive service of a copy of the application under division (B) of section 4906.06 of the Revised Code; and any other person, if such a person has petitioned the commission for leave to intervene as a party within thirty days after the date of publication of the notice required by division (C) of section 4906.06 of the Revised Code, and if such petition has been granted by the commission for good cause shown.

(B) The commission may, in extraordinary circumstances for good cause shown, grant a petition for leave to intervene as a party to participate in subsequent phases of the proceeding, filed by a person identified in division (A)(2) or (A)(3) of this section, but who failed to file a timely notice of intervention or petition for leave to intervene, as the case may be.

(C) The commission shall accept written or oral testimony from any person at the public hearing, but the right to call and examine witnesses shall be reserved for parties. However, the commission may adopt rules to exclude repetitive, immaterial, or irrelevant testimony.

4906.09 Record of hearing; rules of conduct

A record shall be made of the hearing and of all testimony taken. Rules of evidence, as specified by the power siting commission, shall apply to the proceeding. The commission may provide for the consolidation of the representation of parties having similar interests.

4906.10 Granting or denying certificate; period of initial operation; conditional certificate

(A) The power siting commission shall render a decision upon the record either granting or denying the application as filed, or granting it upon such terms, conditions, or modifications of the construction, operation, or maintenance of the major utility facility as the commission considers appropriate. The certificate shall be conditioned upon the facility being in compliance with standards and regulations adopted under Chapters 3704., 3734., and 6111. of the Revised Code. The period of initial operation, under a certificate, shall expire two years after the date on which electric power is first generated by the facility. During the period of initial operation the facility shall be subject to the enforcement and monitoring powers of the director of environmental protection under Chapters 3704., 3734., and 6111. of the Revised Code and to the emergency provisions thereunder. If a major utility facility constructed in accordance with the terms and conditions of its certificate is unable to operate in compliance with all applicable requirements of state laws, regulations, and standards pertaining to air pollution, such facility may apply to the director of environmental protection for a conditional operating permit under division (G) of section 3704.03 of the Revised Code and the regulations adopted thereunder. The oper-

ation of a major utility facility in compliance with such a conditional operating permit is not in violation of its certificate. After the expiration of the period of initial operation of a major utility facility, such facility shall be under the jurisdiction of the environmental protection agency, and shall comply with all laws, regulations, and standards pertaining to air pollution, water pollution, and solid waste disposal.

The commission shall not grant a certificate for the construction, operation, and maintenance of a major utility facility, either as proposed or as modified by the commission, unless it finds and determines:

(1) The basis of the need for the facility;

(2) The nature of the probable environmental impact;

(3) That the facility represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations;

(4) In case of an electric transmission line, that such facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems; and that such facilities will serve the interests of electric system economy and reliability;

(5) That the facility will comply with Chapters 3704., 3734., and 6111. of the Revised Code and all regulations and standards adopted thereunder;

(6) That the facility will serve the public interest, convenience, and necessity.

(B) If the commission determines that the location of all or a part of the proposed facility should be modified, it may condition its certificate upon such modification, provided that the municipal corporations and counties, and persons residing therein, affected by the modification, shall have been given reasonable notice thereof.

(C) A copy of the decision and any opinion issued therewith shall be served upon each party.

4906.11 Commission to issue opinion on certification

In rendering a decision on an application for a certificate, the commission shall issue an opinion stating its reasons for the action taken.

4906.12 Applicability of PUCO statutes

Sections 4903.02 to 4903.16 and sections 4903.20 to 4903.23 of the Revised Code shall apply to any proceeding or order of the power siting commission under Chapter 4906. of the Revised Code, in the same manner as if the commission were the public utilities commission under such sections.

4906.13 Exclusion from state or local jurisdiction

No public agency or political subdivision of this state may require any approval, consent, permit, certificate, or other condition for the construction or initial operation of a major utility facility authorized by a certificate issued pursuant to Chapter 4906. of the Revised Code. Nothing herein shall prevent the application of state laws for the protection of employees engaged in the construction of such facility nor of municipal regulations that do not pertain to the location or design of, or pollu-

tion control and abatement standards for, a major utility facility for which a certificate has been granted under this chapter.

4906.14 Joint proceedings with state or federal agencies

The power siting commission, in the discharge of its duties under Chapter 4906. of the Revised Code, may make joint investigations, hold joint hearings within or without the state, and issue joint or concurrent orders in conjunction or concurrence with any official or agency of any state or of the United States, whether in the holding of such investigations or hearings, or in the making of such orders, the commission is functioning under agreements or compacts between states or under the concurrent power of states to regulate interstate commerce, or as an agency of the United States, or otherwise. The commission, in the discharge of its duties under Chapter 4906. of the Revised Code, may negotiate and enter into agreements or compacts with agencies of other states, pursuant to any consent of congress, for cooperative efforts in certificating the construction, operation, and maintenance of major utility facilities in accord with the purposes of such sections and for the enforcement of the respective state laws regarding such facilities.

4906.98 Prohibitions

No person shall willfully construct a major utility facility without first obtaining a certificate.

No person shall willfully construct, operate, or maintain a major utility facility other than in compliance with the certificate he has obtained.

4906.99 Penalties

Whoever violates section 4906.98 of the Revised Code shall be fined not less than one thousand dollars nor more than ten thousand dollars for each day of violation, or imprisoned for not more than one year, or both.

APPENDIX D

ACTION ON NOMINATED SPECIAL MANAGEMENT AREAS

<u>NOMINATED AREA</u>	<u>ACTION TAKEN</u>
<u>Lucas County</u>	
Lucas County Shoreline	Addressed by program policies
Point Place	Addressed by program policies
Maumee Bay and Estuary	Active Nomination
Maumee River in Toledo	Included in Maumee Bay and Estuary
Maumee Bay State Park	Proposed Designation-Site-specific APC
Cedar Point National Wildlife Refuge	Proposed Designation-Generic APC
Jerusalem Township Beaches	Addressed by program policies
Metzger Marsh	Proposed Designation-Generic APC
Boat Ramp - Jerusalem Township	Addressed by program policies
Grassy Island	Active Nomination
Ewing Island	Addressed by program policies
Port of Toledo	Proposed Designation-Generic APC
Turtle Island	Joint jurisdiction with Michigan
Cullen Island	Proposed Designation-Site-specific APC

<u>NOMINATED AREA</u>	<u>ACTION TAKEN</u>
Sand and Gravel Dredging Area	Included in Maumee Bay active nomination
<u>Ottawa County</u>	
West Harbor Channel	Corps actions underway
East Harbor State Park	Proposed Designation-Generic APC
Marblehead Lighthouse	Active Nomination
Middle Bass Island	Active Nomination
Sandusky Bay	Active Nomination
Hanthorn Property	Addressed by program policies
Tack Property	Addressed by program policies
Oak Harbor Wetland	Proposed Designation-Generic APR
Little Portage River Wetland	Proposed Designation-Generic APR
Portage River Wetland	Proposed Designation-Generic APR
Catawba Island Area	Addressed by program policies
Cedar Woods Area	Addressed by program policies
Bay Point Wetlands	Proposed Designation-Generic APR
Cook's Woods	Addressed by program policies
Meadow Brook Area	Proposed Designation-Generic APR

<u>NOMINATED AREA</u>	<u>ACTION TAKEN</u>
Celotex Property	Included in Sandusky Bay Active Nomination
Port of Port Clinton	Proposed Designation-Generic APC
Major Islands Area	Active Nomination
Small Islands	Active Nomination
Locust Point Reef Complex	Proposed Designation-Generic APC
<u>Sandusky County</u>	
Muddy Creek Bay	Active Nomination (included with Sandusky Bay)
Sandusky Bay	Active Nomination
Brady's Island	Addressed by program policies
Peninsular Farms	Addressed by program policies
Sandusky River (across from Peninsular Farms)	Addressed by program policies
Ohio Power Lands	Proposed Designation-Generic APR
Miller's Spring	Outside CZM boundary
Demars Property	Addressed by program policies
Gilbert Property	Addressed by program policies
Lamalie Marsh	Proposed Designation-Generic APR
Shannon, Scranton, Schwartz Property	Addressed by program policies

<u>NOMINATED AREA</u>	<u>ACTION TAKEN</u>
Gordon Marsh	Proposed Designation-Generic APR
South Creek	Addressed by program policies
Little Pickerel Creek	Addressed by program policies
<u>Erie County</u>	
Sandusky Bay	Active Nomination
Cold Creek	Addressed by program policies
Wildlife Realty Marshes	Proposed Designation-Site- specific APR
Huron River Marshes	Addressed by program policies
Old Woman Creek	Proposed Designation-Site- specific APC
Sherod Park	Proposed Designation-Generic APC
West Lake Road	Addressed by program policies
Vermilion Township Beach	Addressed by program policies
Vermilion Lagoons Beach	Addressed by program policies
Crystal Cove	Addressed by program policies
Chappel Creek	Addressed by program policies
Port of Sandusky	Proposed Designation-Generic APC

NOMINATED AREA

ACTION TAKEN

Port of Huron	proposed Designation-Generic APC
Port of Vermilion	Proposed Designation-Generic APC
Battery Park	Proposed Designation-Site-specific APC
Huron Diked Disposal Site	Proposed Designation-Site-specific APC

Lorain County

Northern Union Area	Addressed by program policies
Port of Lorain	Proposed Designation-Generic APC
Avon Lake Erosion Area	Addressed by program policies
Lorain Diked Disposal Site	Proposed Designation-Site-specific APC
Lorain Lighthouse	Proposed Designation-Site-specific APR
Vermilion River Park	Proposed Designation-Generic APC
Ohio Edison Company	Addressed by program policies
Vermilion Sand and Gravel Dredging Areas	Addressed by program policies
Hole-in-the-Wall Beach	Active Nomination
Miller Road Park	Active Nomination

Cuyahoga County

E. 270th Street, Euclid	Addressed by program policies
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<u>NOMINATED AREA</u>	<u>ACTION TAKEN</u>
City of Euclid Shoreline	Addressed by program policies
Bratenahl	Addressed by program policies
Cleveland Lakefront State Park	Proposed Designation-Site-specific APC
Gordon Park	Proposed Designation-Site-specific APC (included in Cleveland Lakefront State Park)
Cleveland Lakefront (E. 9th Street to E. 55th Street)	Active Nomination
E. 72nd Street	Proposed Designation-Site-specific APC (included in Cleveland Lakefront State Park)
Edgewater Beach and Marina	Proposed Designation-Site-specific APC (included in Cleveland Lakefront State Park)
E. 55th Nike Site	Rejected - nonidentifiable site
Lakewood Park	Proposed Designation-Generic APC
Huntington Park	Proposed Designation-Generic APC
Lake Erie Jetport	Not a defined site
Cleveland Harbor and Whiskey Island	Proposed Designation-Generic APC
Cuyahoga Riverfront	Active Nomination

<u>NOMINATED AREA</u>	<u>ACTION TAKEN</u>
<u>Lake County</u>	
Willowick Shoreline	Addressed by program policies
Chagrin River Islands	Active Nomination
Mentor Marsh	Active Nomination
Fairport Harbor Marsh	Proposed Designation-Generic APR
Sunset Point - Painesville Township	Addressed by program policies
McKinley Creek	Addressed by program policies
Diamond Alkali	Addressed by program policies
U.S. Reservation	Addressed by program policies
Klump-Perry Property	Addressed by program policies
Madison-on-the-Lake Area	Addressed by program policies
Arcola Creek	Active Nomination
Port of Fairport Harbor	Proposed Designation-Generic APC
Fairport Sand and Gravel Dredging Area	Addressed by program policies
<u>Ashtabula County</u>	
Geneva State Park	Proposed Designation-Site-specific APC
Conneaut Township Park	Proposed Designation-Generic APC

<u>NOMINATED AREA</u>	<u>ACTION TAKEN</u>
Conneaut River, Turkey Creek, U.S. Steel	Addressed by program policies
Vinney,Eisner, Isaac Property	Rejected - outside CZM boundary
Konold Property	Addressed by program policies
Palmer Drive	Addressed by program policies
Indian Creek	Addressed by program policies
CEI Property	Addressed by program policies
Booth Property	Addressed by program policies
Hamilton Corp. Property	Addressed by program policies
Rutter-Cormondy Property	Addressed by program policies
Moreland Club	Addressed by program policies
Di Vittorio Property	Addressed by program policies
Camp Calvary	Addressed by program policies
Port of Ashtabula	Proposed Designation-Generic APC
Port of Conneaut	Proposed Designation-Generic APC
Route 531 Access Area	Active Nomination

APPENDIX E

STATE AND LOCAL WATERFRONT PARKS
IN OHIO'S COASTAL AREA

LUCAS COUNTY

Toledo

Cullen Park
Bayview Park
Detweiler Park
Promenade Park
Walbridge Park

Maumee

Sidecut Metropark

Perrysburg

Orleans Park

Jerusalem Township

Maumee Bay State Park

OTTAWA COUNTY

Port Clinton

Lakeview Park

Catawba Island Township

Erie Islands State Park

Put-in-Bay Township

Erie Islands State Park

Danbury Township

Erie Islands State Park

SANDUSKY COUNTY

None

ERIE COUNTY

Sandusky

J.C. Park

Battery Park

Kelleys Island

Erie Islands State Park

Huron

Main Street Park

Nickel Plate Park

Vermilion

Sherod Park

Main Street Beach

LORAIN COUNTY

Vermilion

Showse Park

Vermilion River Reservation

Lorain

Lakeview Park
Lakefront Park
Century Park
Cromwell Park

Sheffield Lake

Community Park
West Shore Park
Shellcove Park

Avon Lake

Miller Road Park
Municipal Park

CUYAHOGA COUNTY

Bay Village

Huntington Park
Cahoon Park
Columbia Park

Rocky River

Rocky River Park
Rocky River Reservation
Lake Edge Park

Lakewood

Lakewood Park

Cleveland

Cleveland Lakefront State Park
Edgewater
East 55th Street Marina
Gordon
Wildwood
Settler's Landing
Heritage Park

Euclid

Euclid Park
Sims Park

LAKE COUNTY

Willowick

Willowick City Park*

Timberlake

Timberlake Park

Willoughby

Osborne Park

Mentor-on-the-Lake

Mentor-on-the-Lake Park
Mentor City Park

Mentor and Painesville Township

Headlands Beach State Park

Fairport Harbor

Fairport Harbor Beach Park

Painesville Township
Painesville Township Park
Perry Township
Perry Township Park
Parnly Park
North Perry
North Perry Park
Lake Shore Reservation
Madison Township
Tuttle Park
Madison Township Park
Arcola Creek Park*

ASHTABULA COUNTY

Geneva-on-the-Lake
Geneva State Park
Geneva Township Park
Saybrook Township
Saybrook Township Park
Ashtabula
Walnut Beach
Ashtabula Township
Ashtabula Township Park
Conneaut
Conneaut Township Park
Lakeview Park

* In acquisition and development stages

APPENDIX F

HISTORIC SITES IN OHIO'S COASTAL AREA

LUCAS COUNTY

City of Maumee

First Presbyterian Church of Maumee Chapel
200 E. Broadway

Fort Miamis Site
Between Michigan, Water and Corey Streets and the Maumee
River

Peck Griswold House
228 E. Broadway

Hanson House
405 E. Broadway

House of Four Pillars
322 E. Broadway

Isaac Hull Store
114 E. Harrison

Maumee Historic District
Bounded roughly by Allen, W. Harrison, Rosamond, W. Broad-
way, Case and W. Dudley Streets

Maumee Sidecut
North of Maumee River, southwest of Ewing Island

City of Toledo

Fort Industry Square

Albert Neukom House
301 Broadway

Vistula Historic District
Champlain, Summit, Walnut and Magnolia Streets

Successful Sales Company (Oliver House)
27 Broadway

Toledo Yacht Club
Bay View Park

WOOD COUNTY

City of Perrysburg

East River Road Historic District II

Fort Meigs
1.3 miles southwest of Perrysburg

Perrysburg Historic District
Front Street, 2nd Street and 3rd Street areas

Spafford House
27338 W. River Road

City of Rossford

East River Road District I

OTTAWA COUNTY

Danbury Township

Johnson Island Civil War Prison and Fort Site
East shore area of Johnson's Island

Marblehead Lighthouse
Ohio Route 163

War of 1812 Battle Site
East Bay Shore Road

Put-in-Bay Township

Jay Cooke House
Gibraltar Island

Inselruhe
Bayview & Chapman

Perry's Victory and International Peace Memorial

City of Port Clinton

Betsy Mo-John Cabin
4 miles east of Port Clinton

Ottawa County Courthouse
West 4th and Madison

ERIE COUNTY

City of Huron

Christ Episcopal Church
Park and Ohio Streets

Village of Kelleys Island

Inscription Rock

Kelleys' Island South Shore District
Water Street

City of Sandusky

Engels and Krudwig Wine Company Building
220 W. Water Street

Exchange Hotel
202-204 E. Water Street

Baltimore and Ohio Railroad Company Depot
Washington and Warren Streets

Rush R. Sloan House
403 E. Adams Street

Water Street Commercial Buildings
101-165 E. Water Street and 101-231 W. Water Street

Samuel M. White House
304 E. Adams Street

LORAIN COUNTY

City of Lorain

103rd Ohio Volunteer Infantry Barracks
5501 E. Lake Road

William H. Root House
3535 East Erie Avenue

Lorain Lighthouse
West Breakwall, Lorain Harbor

City of Avon Lake

Peter Miller House
Miller Road Park

Village of Sheffield

Eiden Prehistoric District
East of Lorain

CUYAHOGA COUNTY

City of Bay Village

Bay View Hospital
23200 Lake Road

Village of Bratenahl

Gwinn Estate (William G. Mather House)
12407 Lake Shore Boulevard

Howard M. Hanna, Jr., House
11505 Lake Shore Boulevard

City of Cleveland

Former Cleveland Harbor Station, U.S. Coast Guard
New West Pier

Detroit-Superior High Level Bridge
Between Detroit and Superior Avenues

Division Avenue Pumping Station
Division Avenue (at the foot of W. 45th Street)

Lorain-Carnegie Bridge
Between Lorain and Carnegie Avenues

Rockefeller Park Bridge
Penn Central Railroad Bridge

Superior Avenue Viaduct
Superior Avenue

Upson-Walton Company (Samsel Rope and Marine Supply Company)
1310 Old River Road (W. 11th Street)

City of Lakewood

Clifton Park Lakefront District
Bounded by Clifton Boulevard, Rocky River, Lake Erie and
Webb Road

John Honam House
14710 Lake Avenue

Cities of Rocky River and Lakewood

Detroit Avenue Bridge (Rocky River Bridge)
Detroit Avenue at Rocky River

LAKE COUNTY

Village of Fairport Harbor

Fairport Marine Museum
129 2nd Street

ASHTABULA COUNTY

City of Ashtabula

Ashtabula Harbor Commercial District
Both sides of W. 5th Street from the 1200 block to the
Ashtabula River

Col. William Hubbard House
Lake Avenue and Walnut Boulevard

City of Conneaut

Kilpi Hall
1025 Buffalo Street

Lake Shore and Michigan Southern Passenger Depot
342 Depot Street

APPENDIX G

STATE AGENCIES INVOLVED IN CZM PROGRAM IMPLEMENTATION

Department of Natural Resources (DNR) - Ohio's DNR has many authorities related to coastal resources and their management. The divisions and offices with CZM-related responsibilities are listed below.

The Division of Geological Survey is responsible for locating, inventorying, mapping and analyzing the mineral resources of Ohio. The Division issues permits for removal of minerals from under the bed of Lake Erie, including potential oil and gas extraction. The Lake Erie Section conducts research on physical limnology and shore erosion, and provides such expertise to agencies and citizens.

The Division of Natural Areas and Preserves is responsible for acquiring and managing areas of natural significance; the Division also is responsible for the state's Scenic Rivers Program.

The Division of Oil and Gas administers, implements and enforces statutes, rules and regulations pertaining to oil and gas field operations, including potential operations in Lake Erie.

The Division of Soil and Water Districts coordinates with local districts the implementation of agricultural and urban sediment pollution abatement measures.

The Division of Water conducts the state water planning program, the state ground water inventory program, the state flood plain management program and the Ohio Capability Analysis Program.

The Division of Watercraft administers boat licensing, titling and safety regulations; it also participates with local communities in watercraft project construction.

The Division of Wildlife is responsible for the protection, propagation, preservation and management of the state's wildlife resources. Ohio's Stream Litter Law is enforced by the Division.

The Office of Chief Engineer implements the Department's capital improvement program and acts as shore erosion agent for the state.

The Office of Outdoor Recreation Services oversees the planning of all State recreation facilities and the distribution of federal grants to assist local communities in acquiring and developing outdoor recreation facilities. The Office also formulates the State Comprehensive Outdoor Recreation Plan and coordinates A-95 project reviews and U.S. Army Corps of Engineers Section 10 and 404 permit reviews for the Department.

Environmental Protection Agency (EPA) - Ohio EPA has broad authorities to protect the state's air, water and land from pollution. Office of Air Pollution Control oversees regulation and control of air pollution through surveillance of pollution sources, permit review and long range comprehensive planning. Office of the Planning Coordinator, in cooperation with other Ohio EPA offices such as the Office of Wastewater Pollution Control, develops statewide water quality management plans and reviews and comments on Section 208 plans by designated agencies. The Office of Wastewater Pollution Control issues National Pollutant Discharge Elimination System permits and enforces requirements, and also conducts other compliance monitoring and provides technical expertise. Office of Public Water Supply is responsible for a statewide comprehensive public water supply program. Office of Land Pollution Control directs control and disposal of solid waste, including landfills, hazardous wastes, municipal and industrial sludge, and litter and garbage dumped into or along bodies of water.

Department of Energy (DOE) - Ohio's Department of Energy formulates state energy policy leading to energy conservation, energy resource development, dissemination of energy-related data and information, accurate forecasts of supply and demand and coal research and development. DOE also administers the Coastal Energy Impact Program in Ohio.

Power Siting Commission (PSC) - Ohio's Power Siting Commission reviews proposals for major utility facilities to

determine whether or not to issue required certificates of environmental compatibility and public need. Facilities covered are electric generating plants of 50 megawatts or more, electric transmission lines of 125 kilovolts or more and gas transmission lines capable of transporting gas at more than 125 pounds per square inch of pressure.

Department of Health - Among other roles, Ohio Department of Health acts to prevent illness through control of the environmental sources of disease and disability. Through the Ohio Sanitary Code the Department also works with local agencies to enforce sanitary standards at bathing beaches and marinas.

Department of Administrative Services - Ohio's Department of Administrative Services leases lands which underlie Lake Erie to adjacent upland owners wishing to improve and develop their shoreline to an extent which will encroach upon lake waters and bed. The Department may also lease offshore lake bed.

Department of Agriculture - In addition to its traditional agricultural assistance programs, Ohio's Department of Agriculture attempts to minimize the loss of productive agricultural land to nonfarm uses. This is accomplished by comment on projects undergoing A-95 review, review of local land use plans and review of projects extending sewer and water service:

Department of Transportation (DOT) - Ohio's Department of Transportation has responsibility for planning, constructing and maintaining a balanced system of air, land and water transportation.

Ohio Historical Society (OHS) - The Society maintains the National Register of Historic Places in Ohio which includes all historic and archeological sites. The Ohio Historic Site Preservation Advisory Board must review and approve all nominations for the register before submission for federal approval. Impact of public projects on designated historic sites is reviewed by the Society.

Ohio Water Development Authority (OWDA) - The OWDA provides financing to local governments for construction of water and wastewater treatment facilities and to industry for waste treatment projects. The OWDA also finances resource recovery projects.

Ohio Air Quality Development Authority (OAQDA) - The OAQDA finances, through revenue bonds, a loan program to industries for installation of air pollution control equipment.

Governor's Office - The Program Coordination Section of the Governor's Office ensures that all planning activities conducted by various state agencies are compatible with statewide planning policies and that there are no overlapping or duplicating program responsibilities.

Office of Budget and Management (OBM) - OBM's State Clearinghouse Section receives applications from local, state and regional agencies seeking federal funds and processes them for review, pursuant to federal OMB Circular A-95.

State-Local Government Commission - Ohio's State-Local Government Commission serves as a conflict resolution forum for disagreements associated with local, state and regional agencies. The Ohio Revised Code authorizes the State-Local Government Commission to:

Serve as a forum for the discussion and resolution of problems associated with the relationships between local, state and federal governments;

Engage in a continual study of the relationships between state and local governments, the services provided by the various units and levels of government within the state, the division of responsibility in providing and financing governmental services, possibilities for improving the organizational structure and operational efficiency of the governmental units of the state, the state and local tax structure, and the revenue requirements and fiscal policies of the state and its political subdivisions;

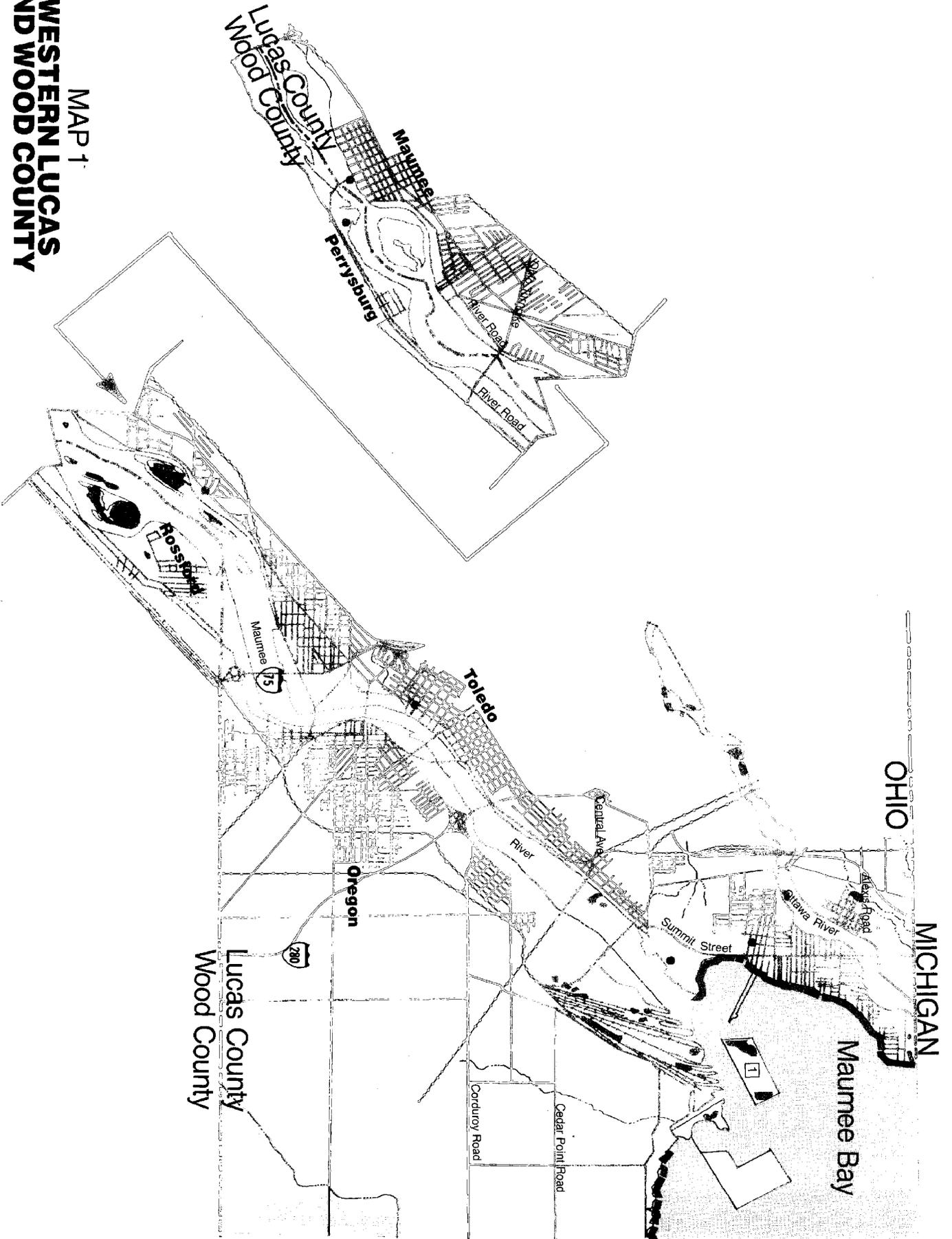
Give critical attention to the conditions and controls involved in the administration of federal and state grant programs and the effects and impact of proposed and existing federal and state grant programs on the various units and levels of government within the state;

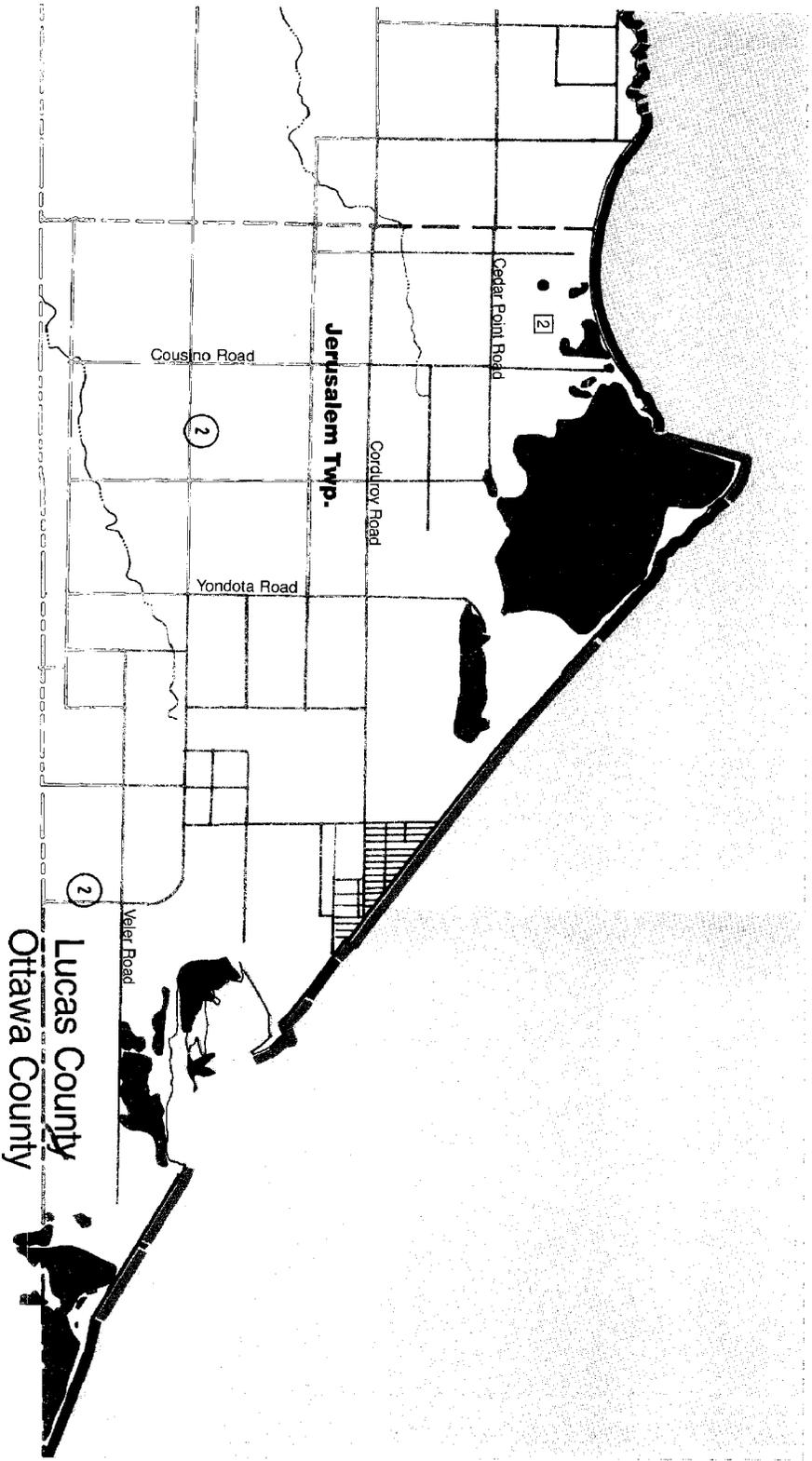
Report annually to the Governor, General Assembly and appropriate departments and agencies of the state the results of its studies during the preceding year and recommend legislation and constitutional amendments concerning the subjects within the jurisdiction of the Commission. The Commission may also submit additional reports to the Governor, General Assembly and any unit of

government or organization the commission determines appropriate. Notices that copies of the annual report and any additional reports prepared by the Commission are available upon request shall be sent to each county, township and municipal corporation within the state.

Encourage and, where appropriate, coordinate studies on the relationships between local, state and federal governments conducted by colleges and universities, state, local and federal agencies, and research and consulting organizations.

**MAP 1
WESTERN LUCAS
AND WOOD COUNTY**





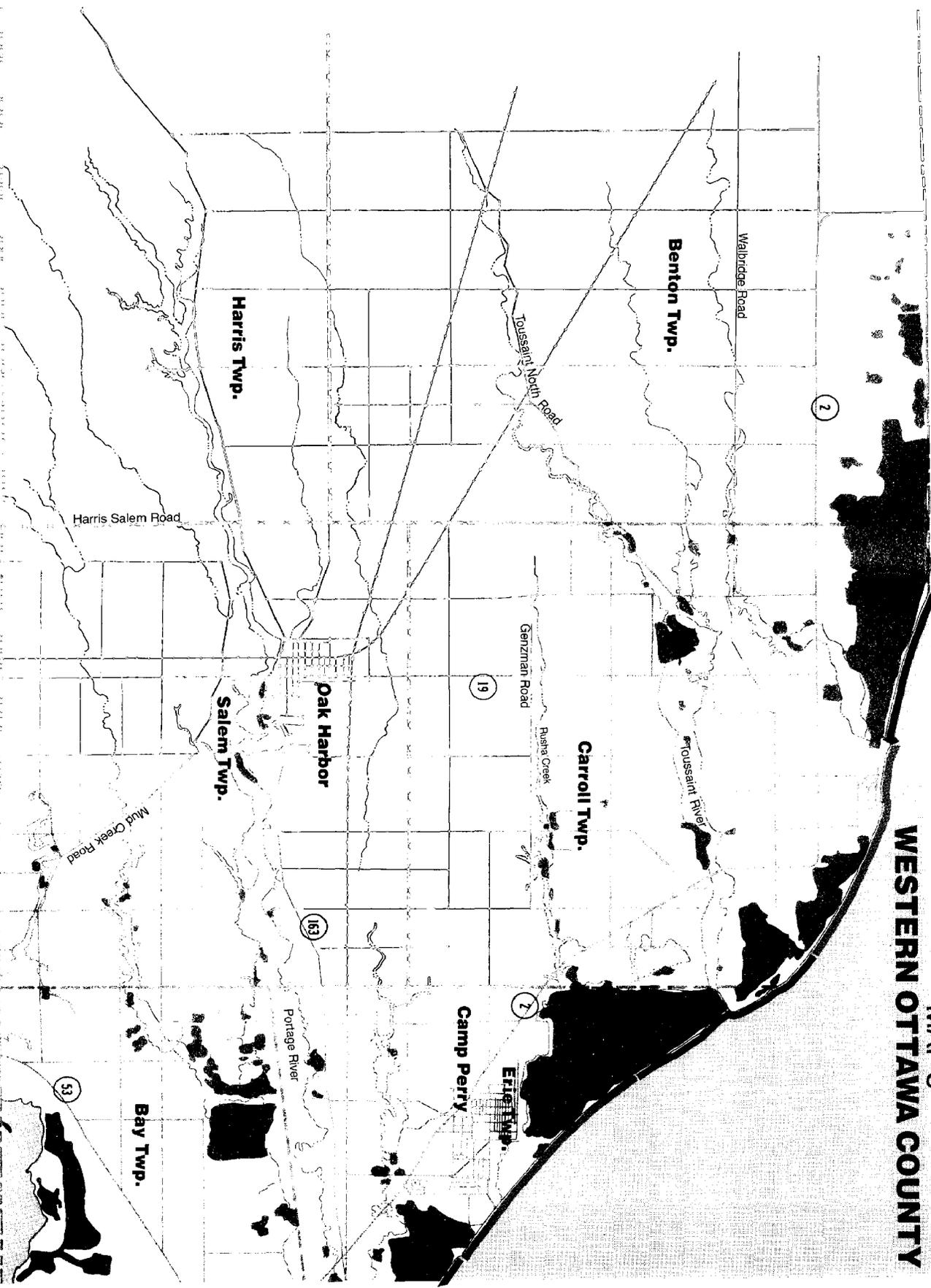
Lucas County
Ottawa County

MAP 2
EASTERN LUCAS COUNTY

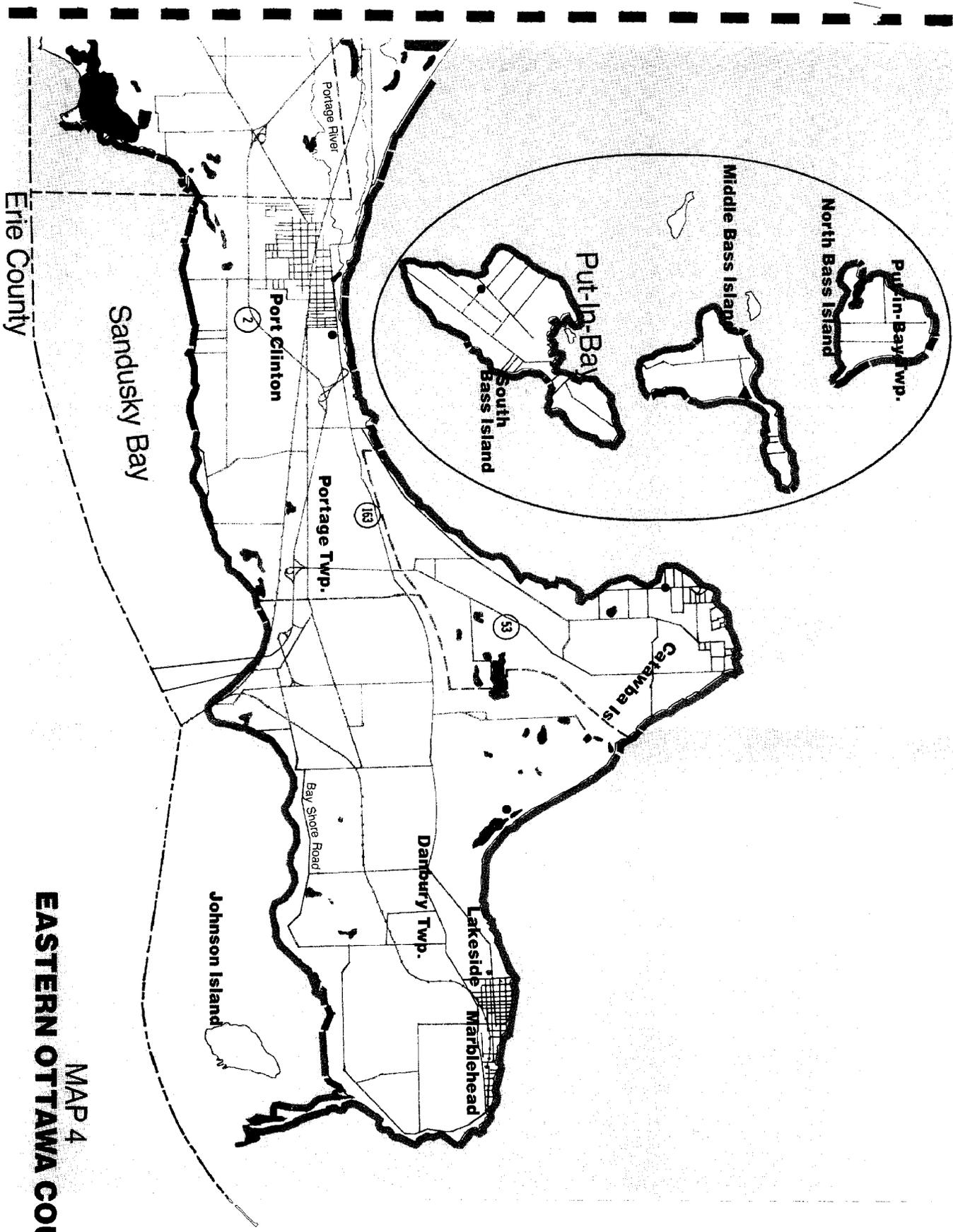
Lucas County

WESTERN OTTAWA COUNTY

MAP 3

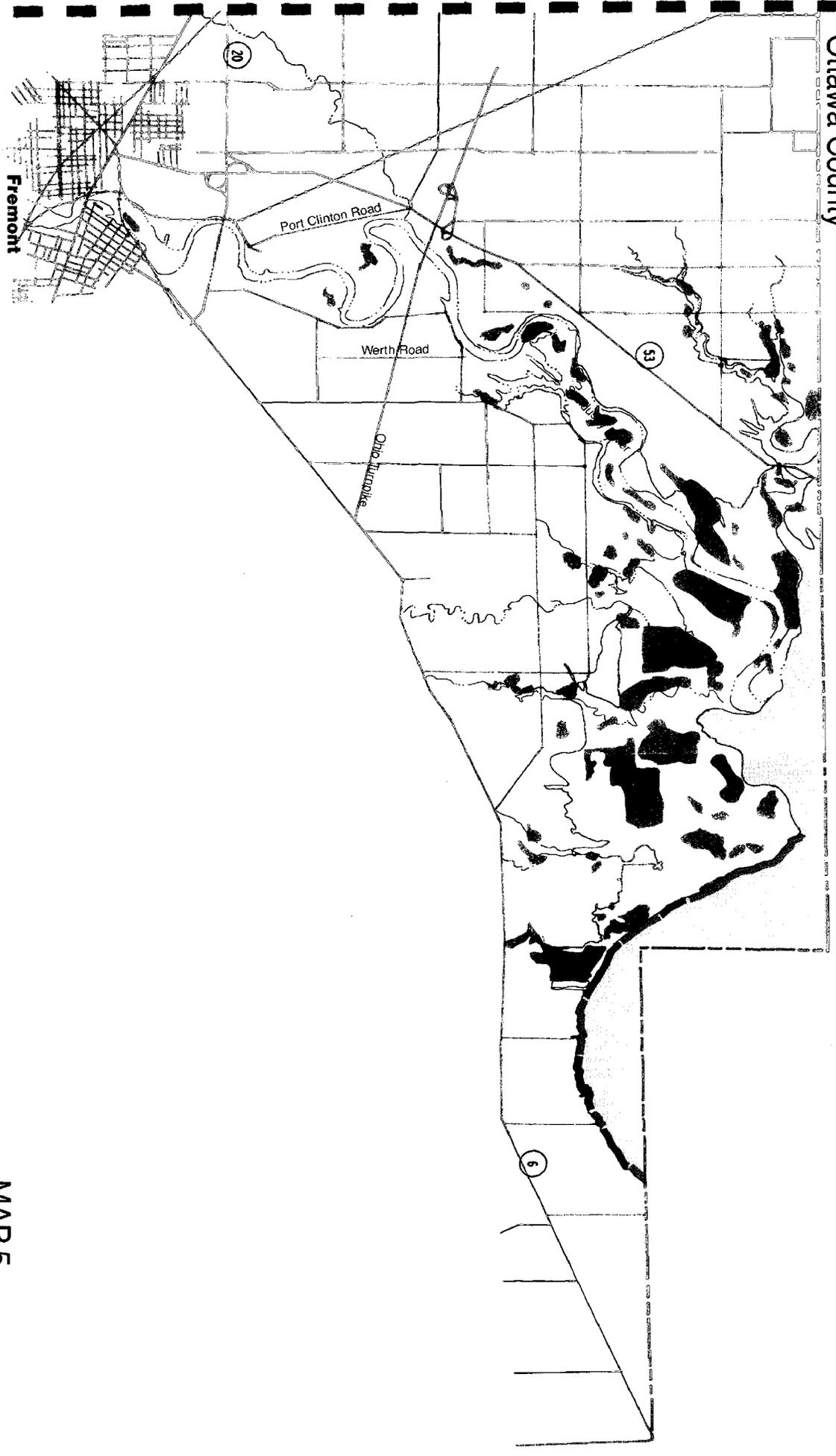


Sandusky County

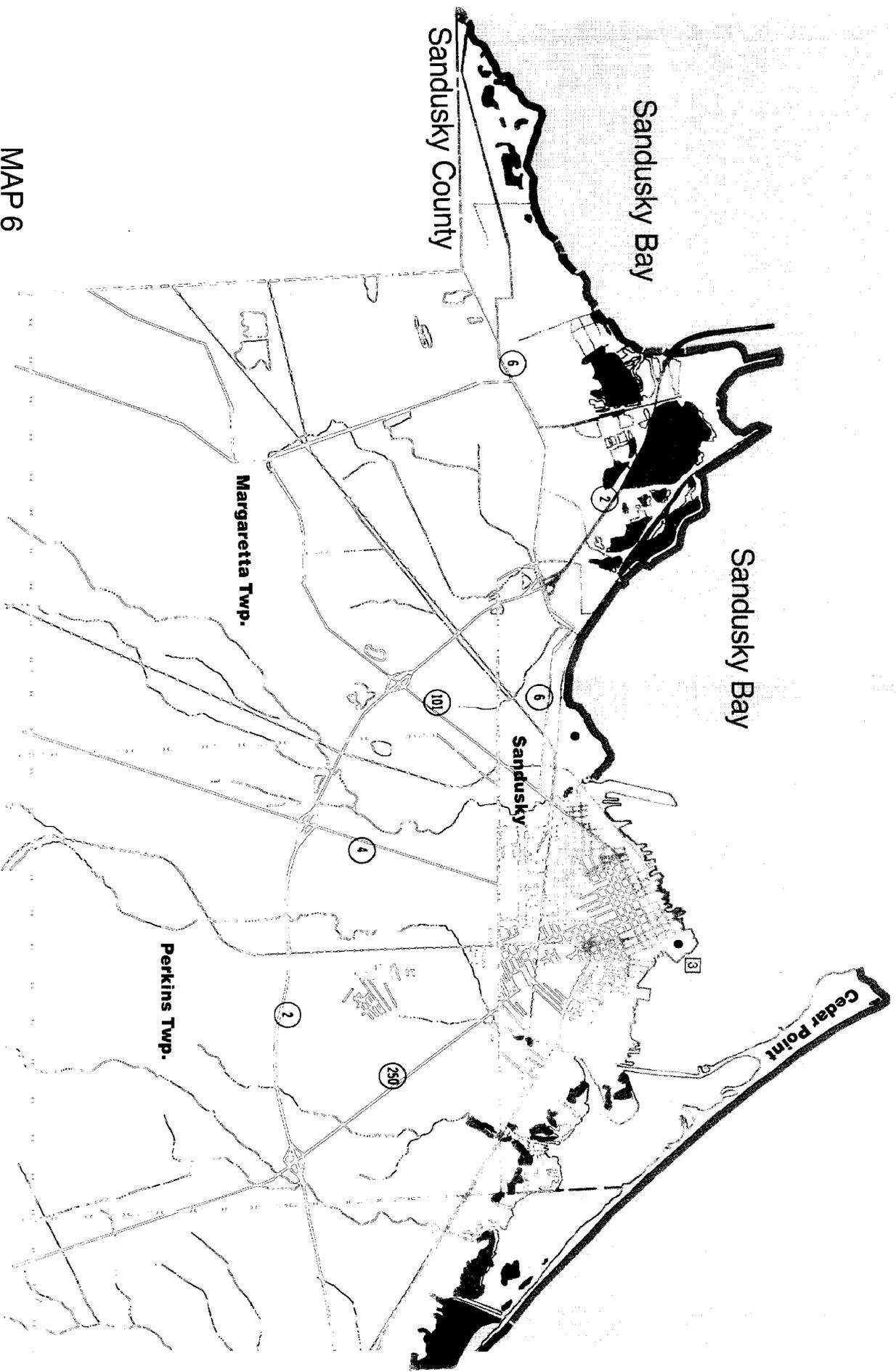


MAP 4
EASTERN OTTAWA COUNTY

Ottawa County

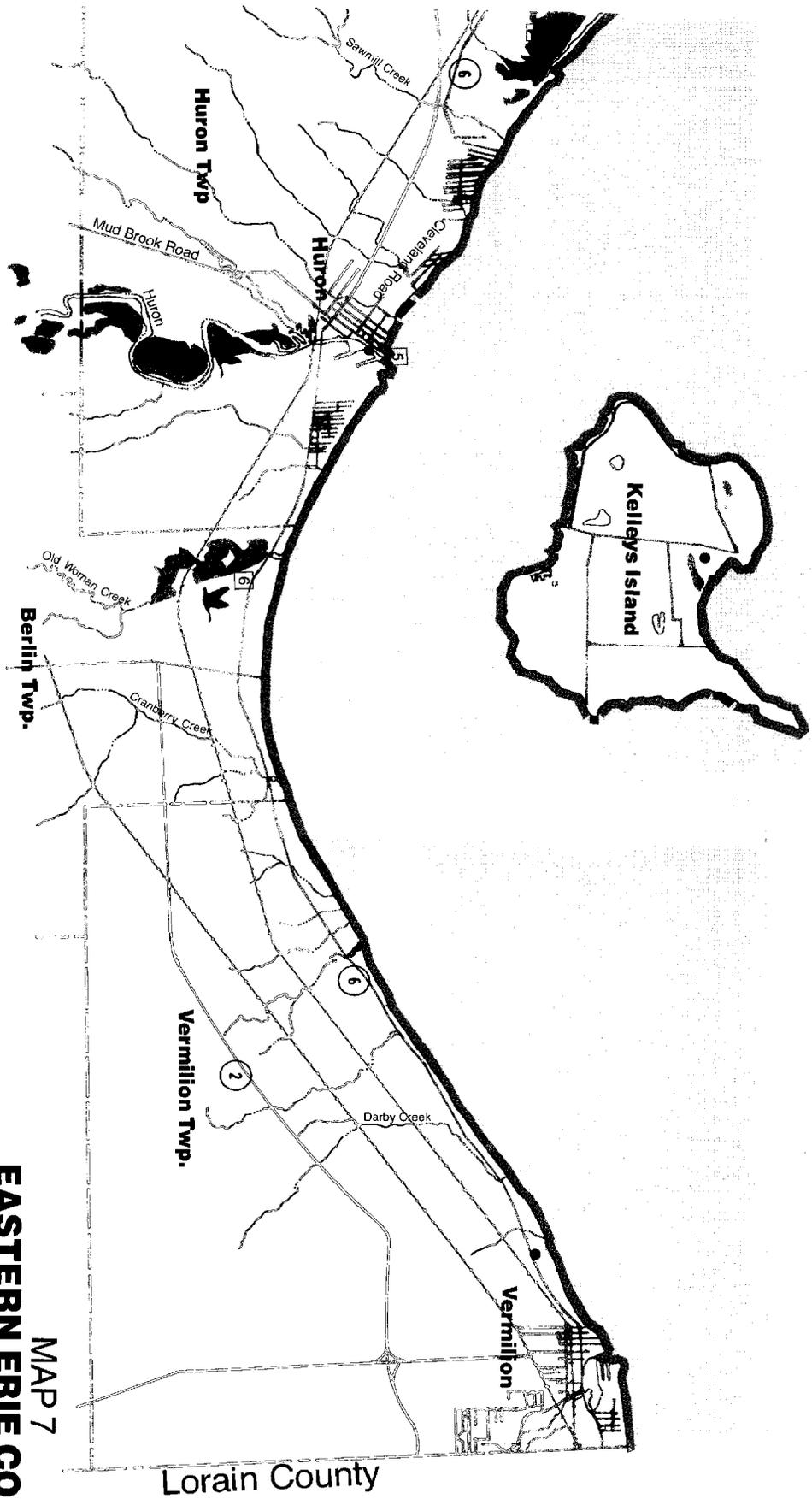


MAP 5
SANDUSKY COUNTY



MAP 6
WESTERN ERIE COUNTY

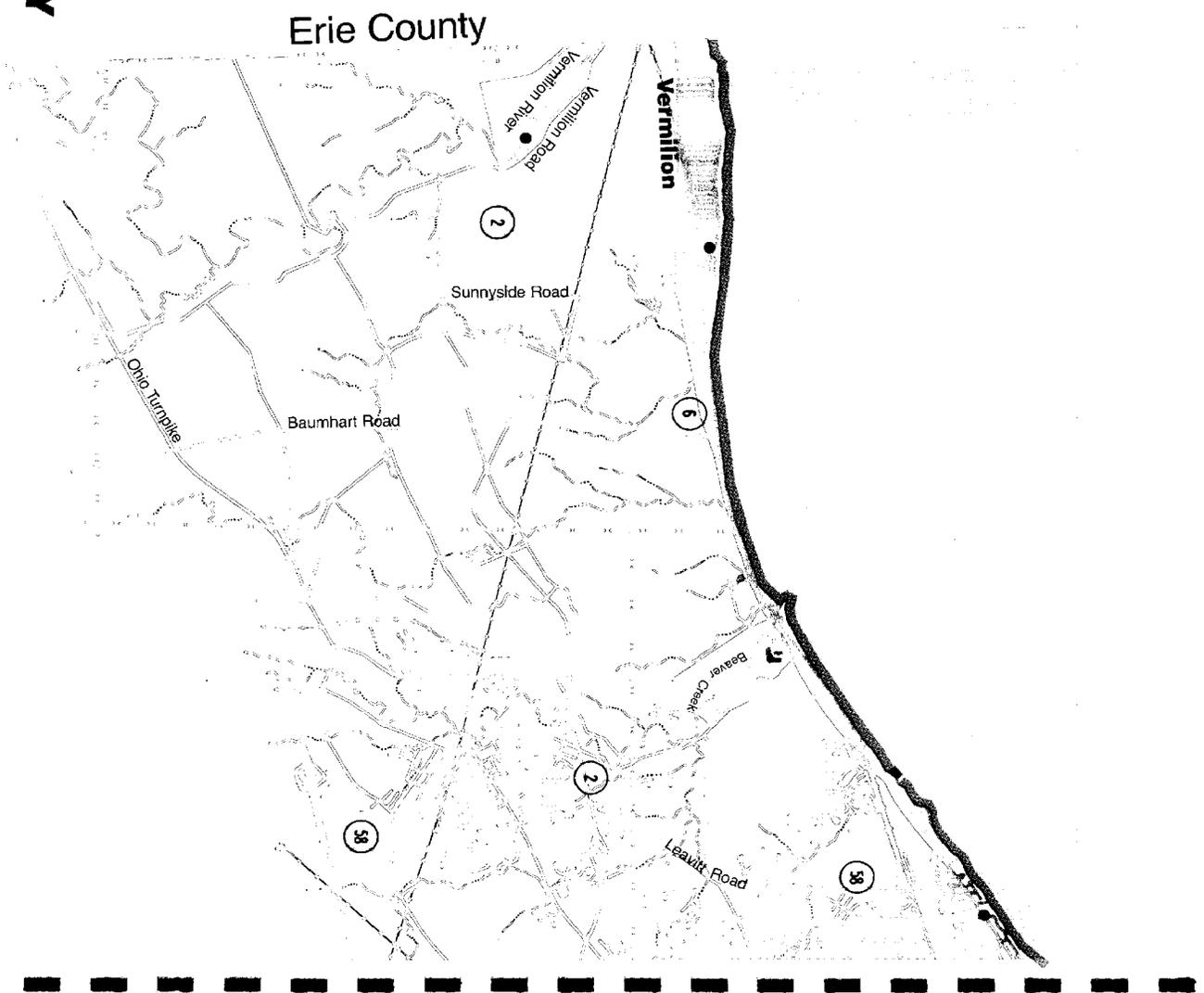


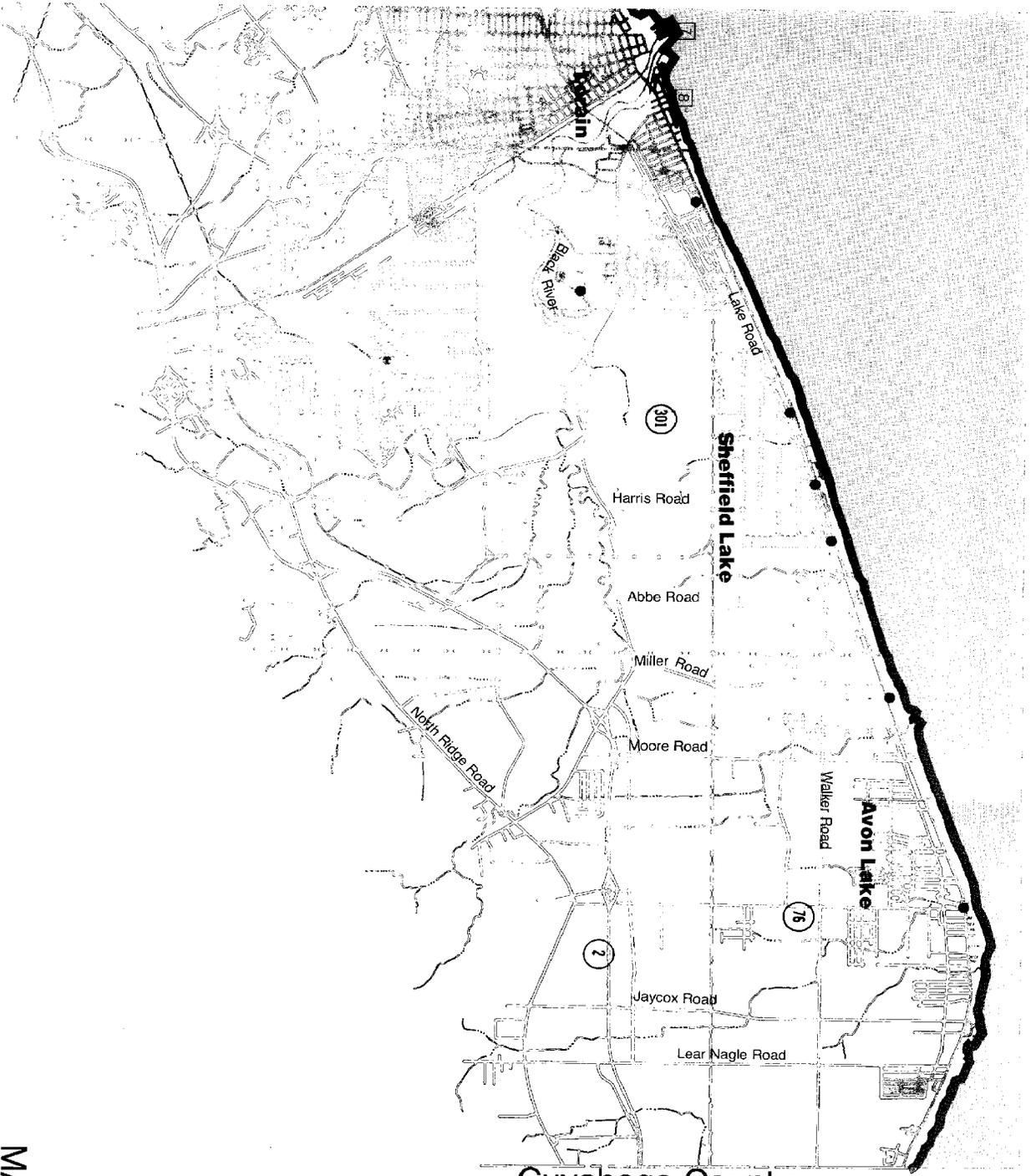


MAP 7
EASTERN ERIE COUNTY

Lorain County

MAP 8
WESTERN LORAIN COUNTY

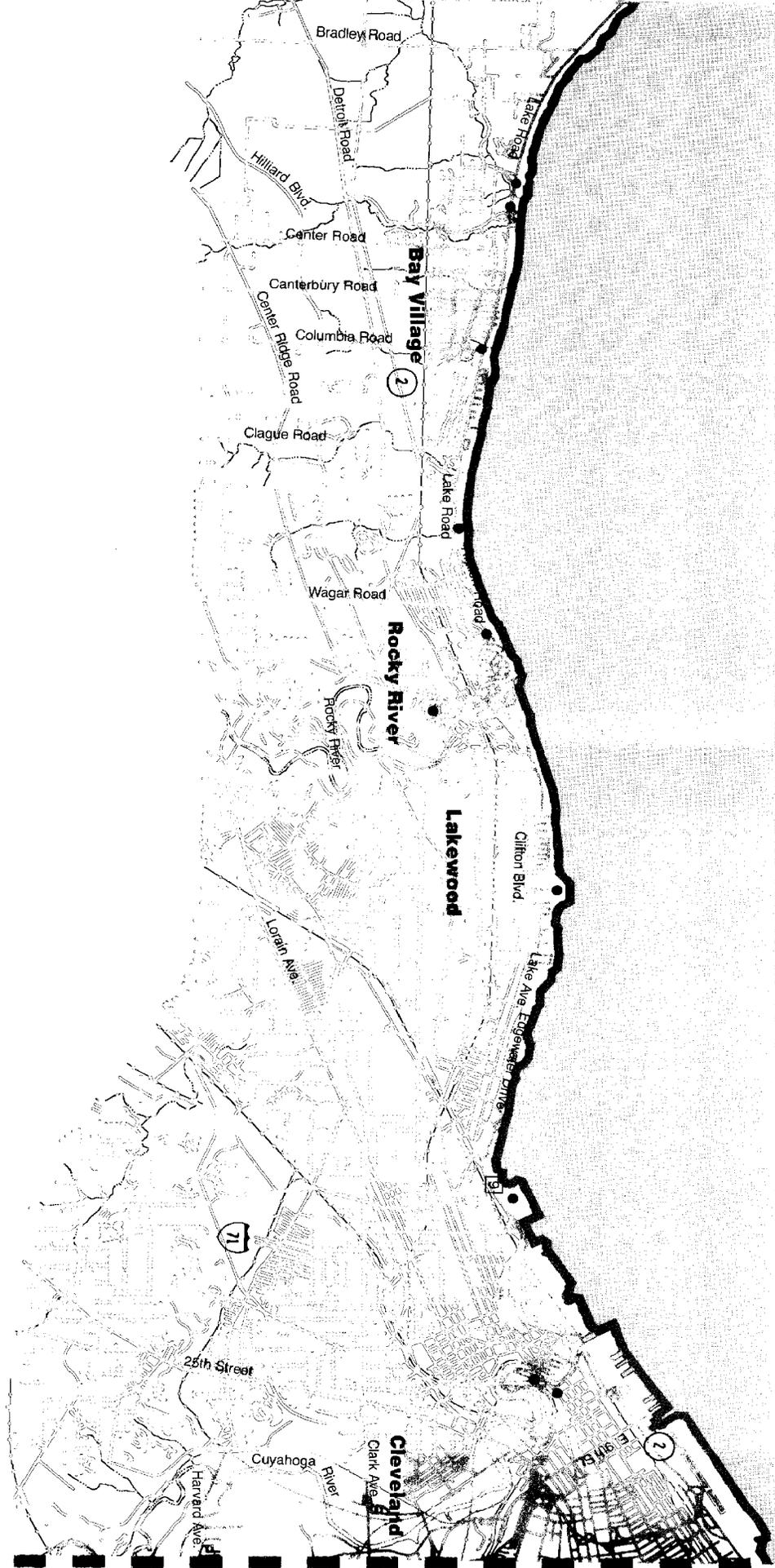




EASTERN LORAIN COUNTY
MAP 9

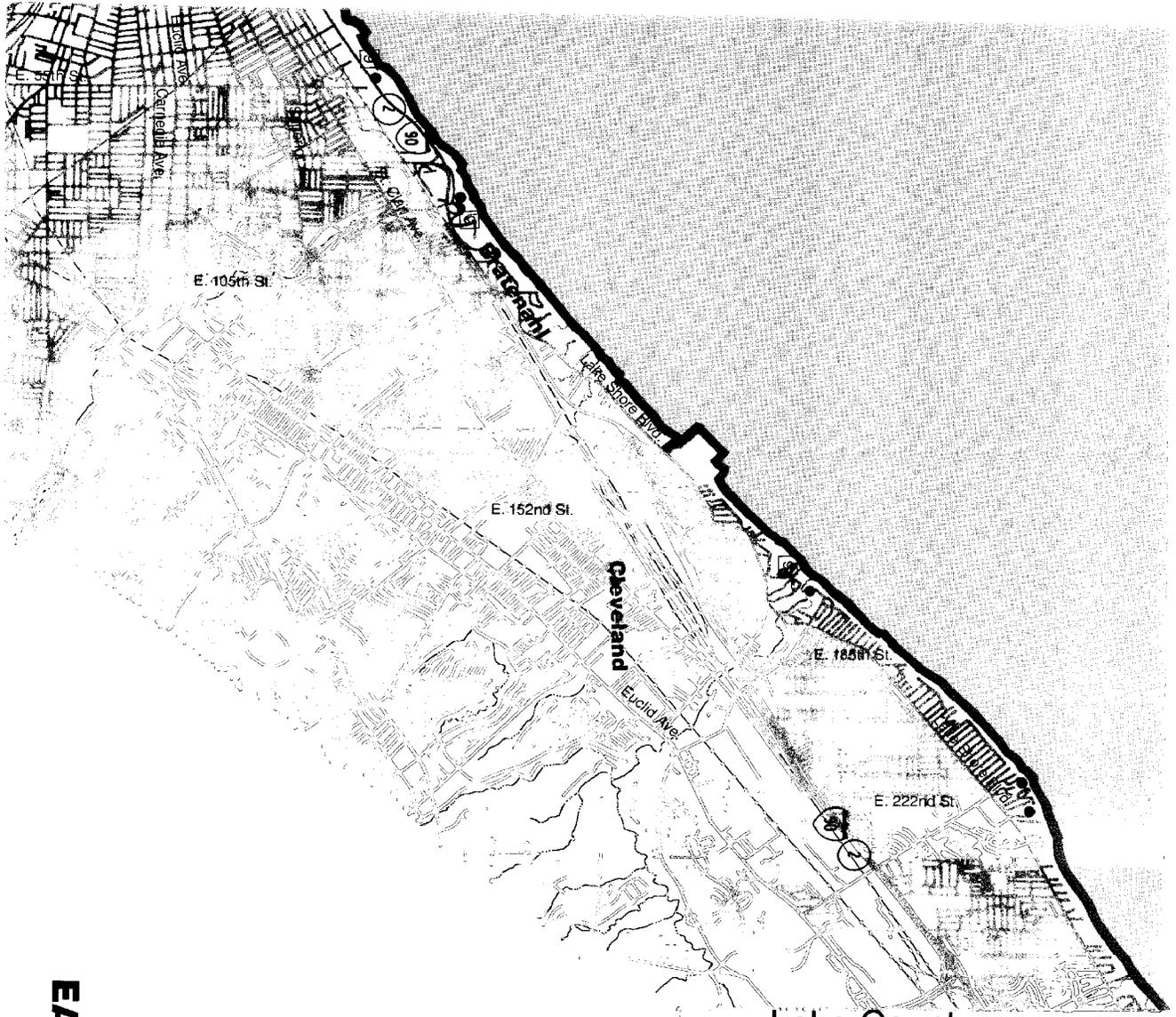
Cuyahoga County

Lorain County



MAP 10

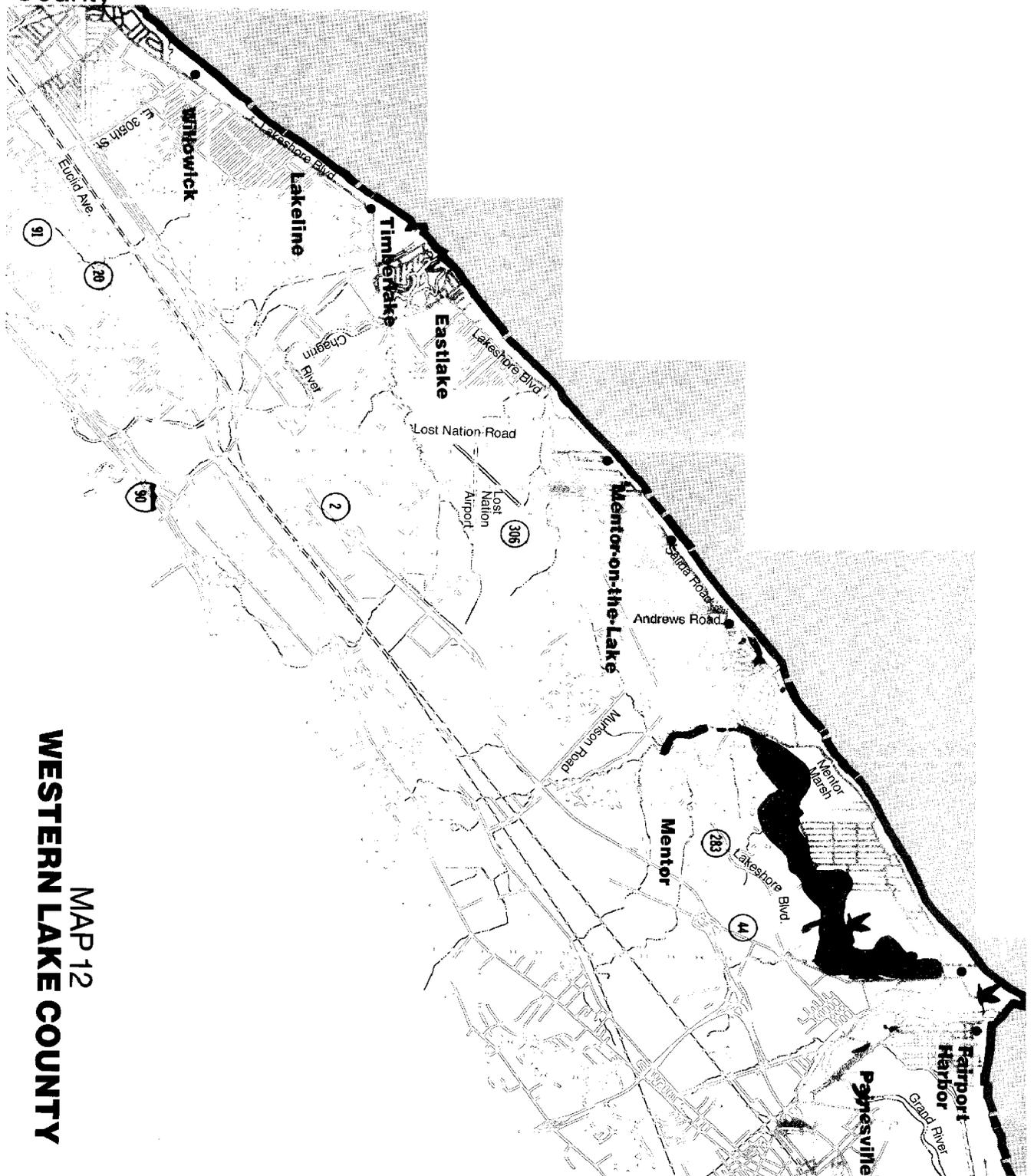
WESTERN CUYAHOGA COUNTY



Lake County

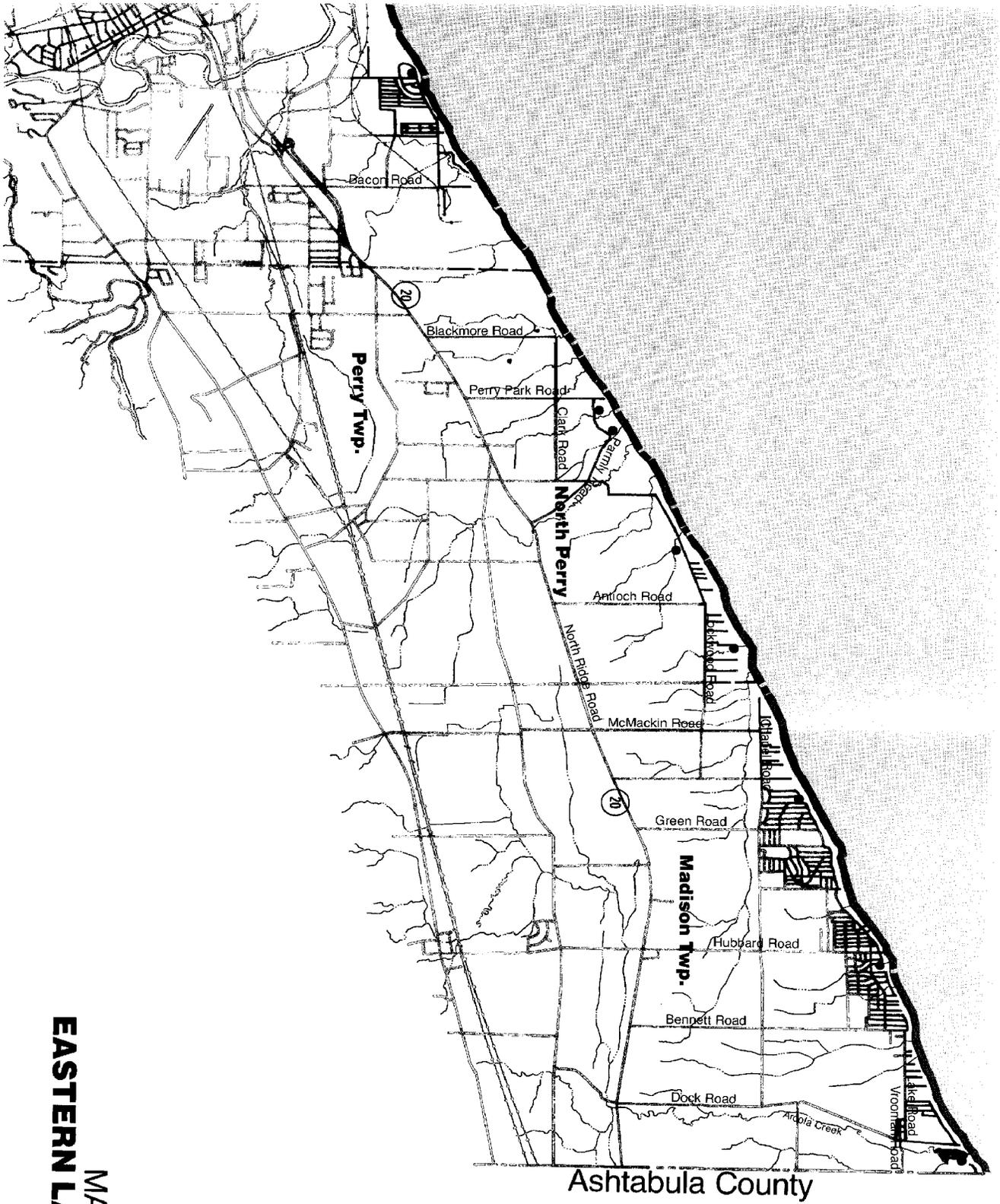
EASTERN CUYAHOGA COUNTY
MAP 11

Cuyahoga
County



MAP 12
WESTERN LAKE COUNTY





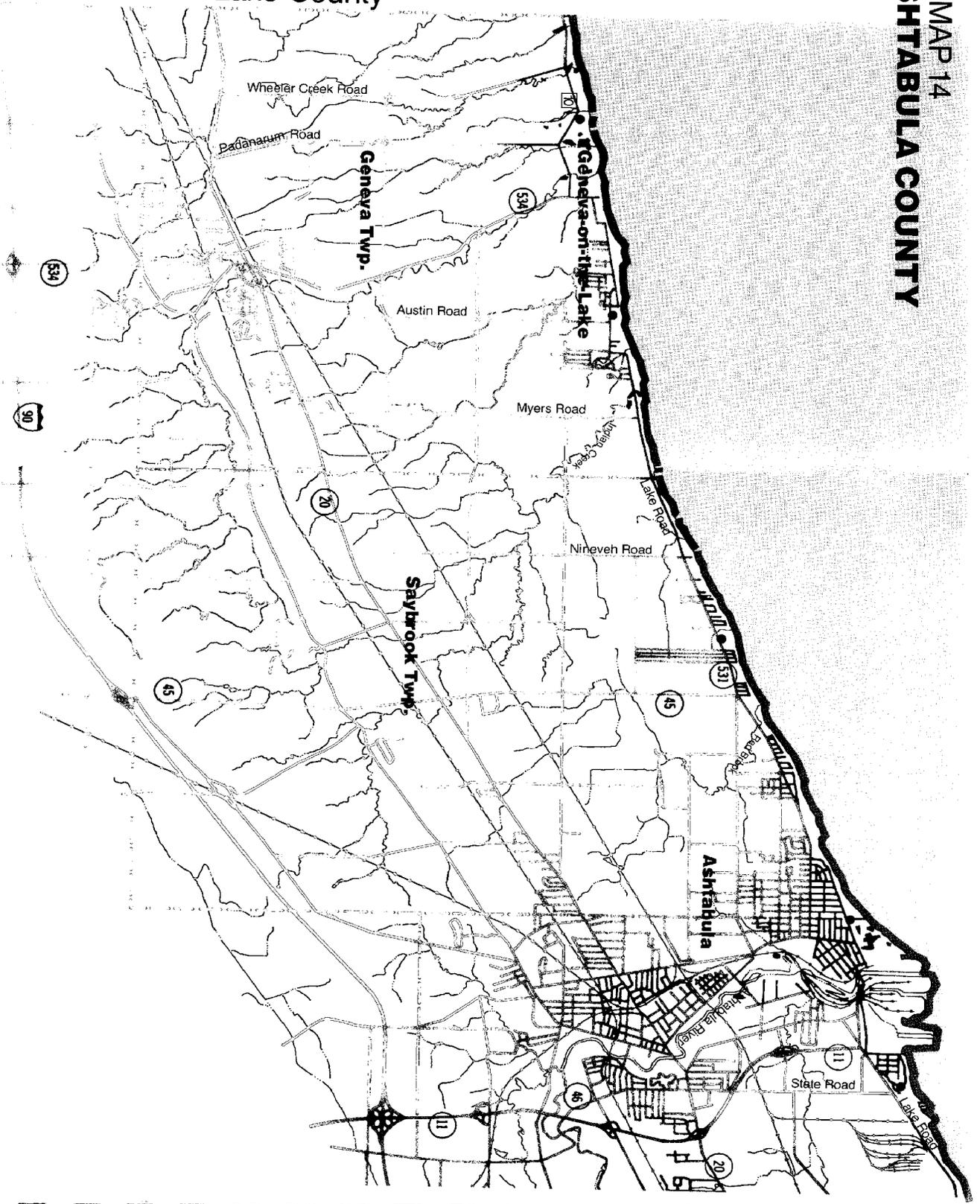
EASTERN LAKE COUNTY

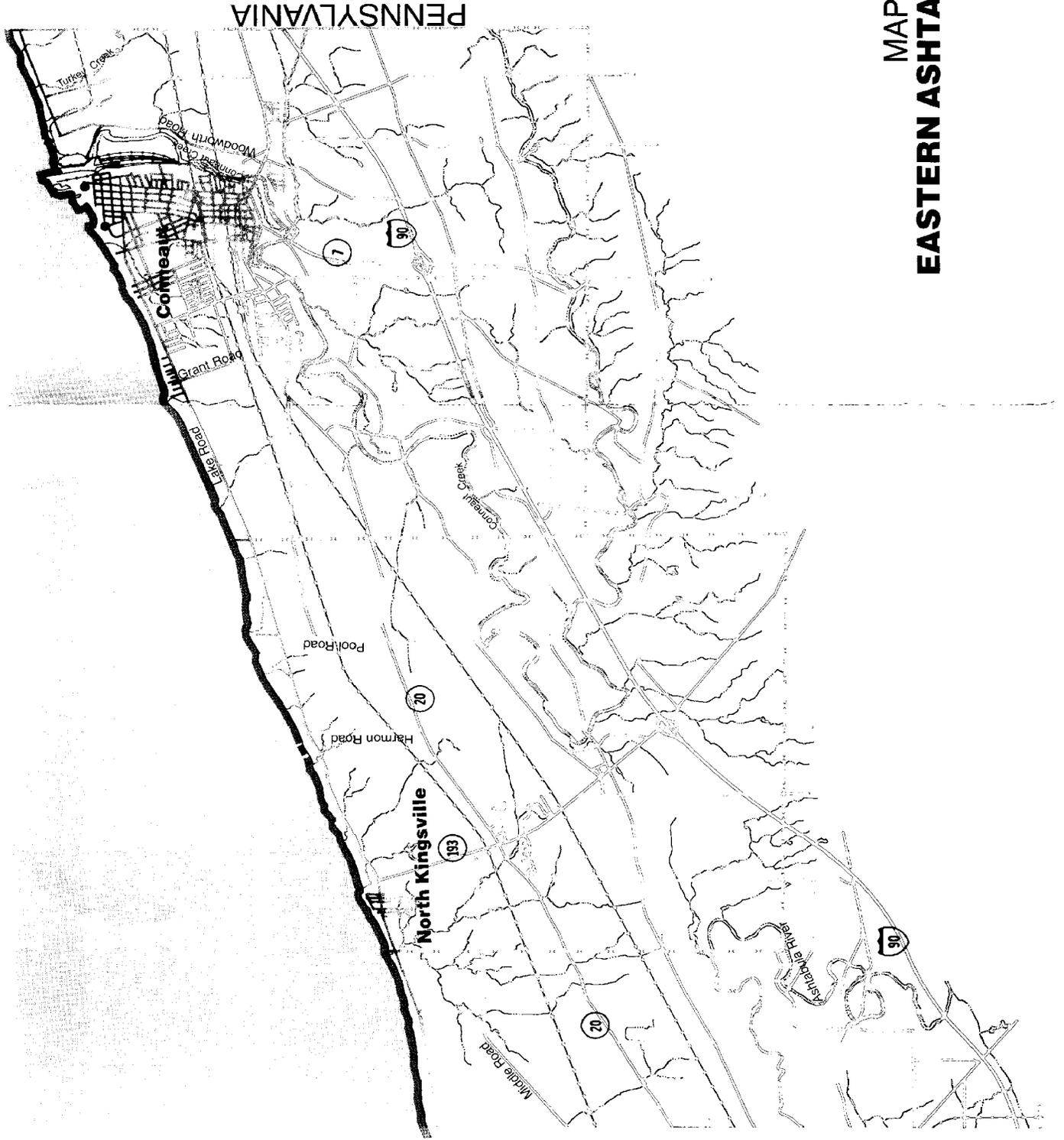
MAP 13

WESTERN ASHTABULA COUNTY

MAP 14

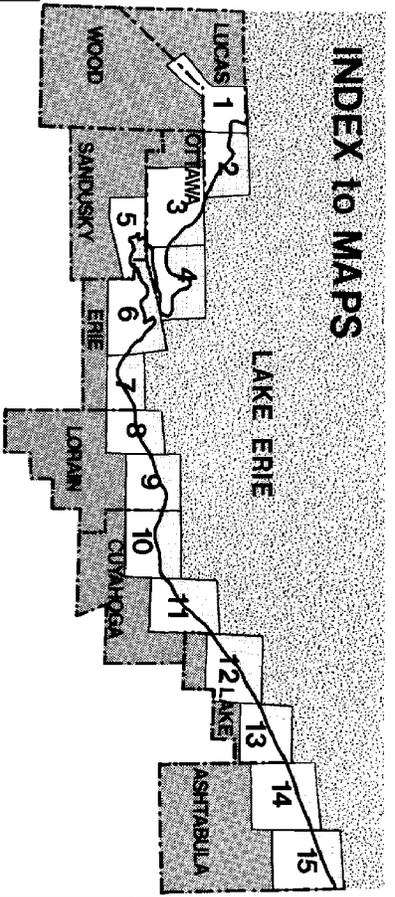
Lake County





MAP 15
EASTERN ASHTABULA COUNTY

INDEX TO MAPS



LANDWARD EXTENT OF COASTAL AREA

- STATE AND LOCAL WATERFRONT PARKS
- ◀ STATE NATURE PRESERVES AND WILDLIFE AREAS
- ▨ WETLANDS*
- ▧ SHORELINE RECESSSION LESS THAN 3 FEET PER YEAR**
- ▩ SHORELINE RECESSSION 3 FEET OR GREATER PER YEAR**

SCALE*** 1:63,360



- 1 CULLEN ISLAND
- 2 MAUMEE BAY STATE PARK
- 3 BATTERY PARK
- 4 WILDLIFE REALTY MARSHES
- 5 HURON HARBOR DREDGE DISPOSAL SITE
- 6 OLD WOMAN CREEK ESTUARINE SANCTUARY
- 7 LORAIN LIGHTHOUSE
- 8 LORAIN HARBOR DREDGE DISPOSAL SITE
- 9 CLEVELAND LAKEFRONT STATE PARK
- 10 GENEVA STATE PARK

*Riverine, lacustrine and palustrine wetlands identified from June, 1978, aerial photos. Generalized wetland areas are depicted rather than exact boundaries.
 **Due to the small scale of the maps, unappreciable reaches of one rate may be included in the area indicated for the other rate.
 ***The scale for Maps 3 and 4 (Ottawa County) is 1:71,592 or 1 inch = 1.13 miles.

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