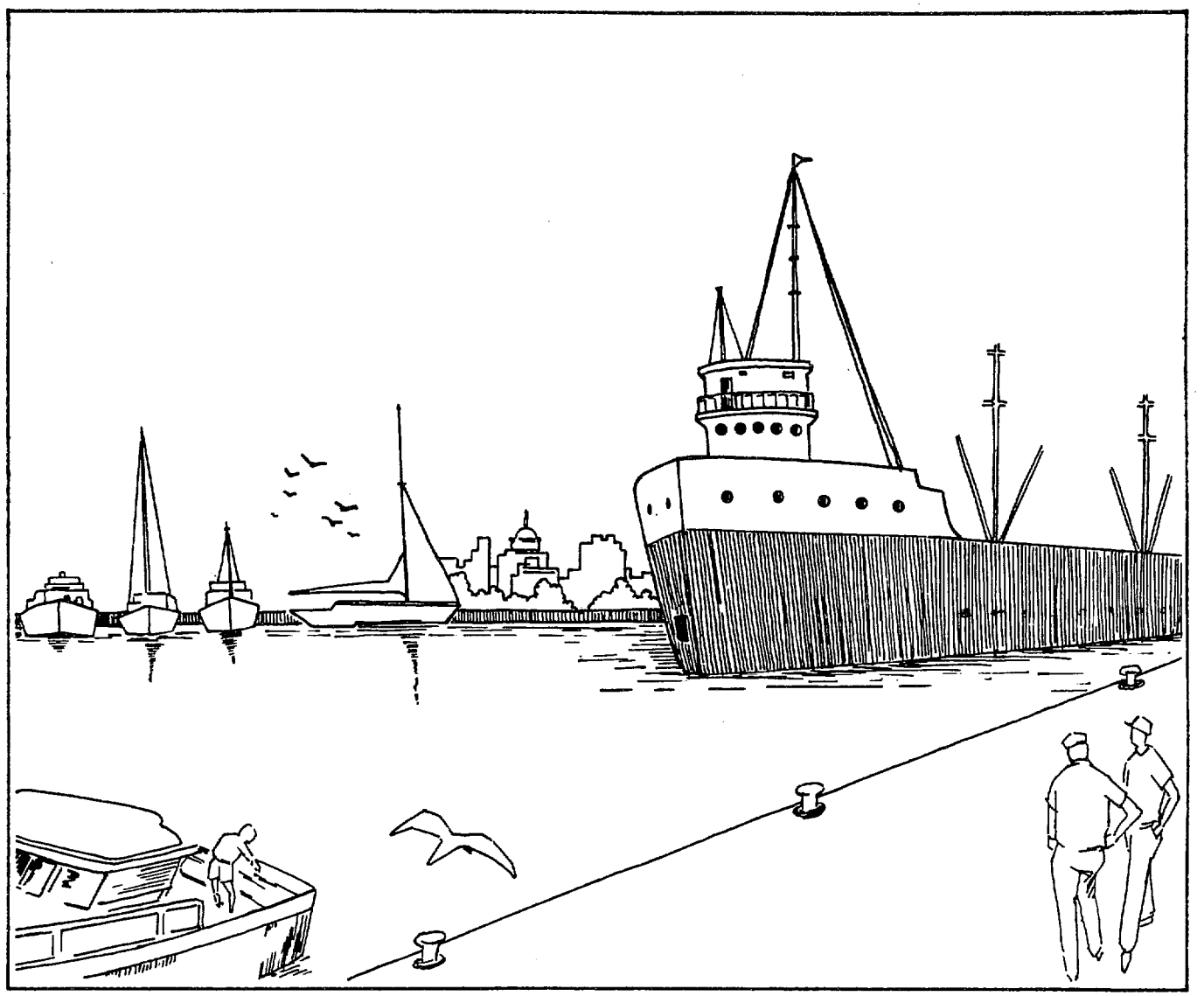
Commonwealth of Pennsylvania Coastal Zone Management Program and Final Environmental Impact Statement

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



August 1980

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Washington, D.C. 20230

OFFICE OF THE ADMINISTRATOR

August 22, 1980

Dear Reviewer:

In accordance with the provisions of Section 102(2)(C) of the National Environmental Policy Act of 1969, we are enclosing for your review and consideration the final environmental impact statement prepared by the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, Department of Commerce, on the proposed Pennsylvania Coastal Zone Management Program.

Any written comments or questions you may have should be submitted to the contact person identified below by September 29, 1980. Also, one copy of your comments should be sent to me in Room 5813, U.S. Department of Commerce, Washington, D.C. 20230.

CONTACT PERSON

John Paul Tolson
Great Lakes Regional Manager
Office of Coastal Zone Management
3300 Whitehaven Street, N.W.
Washington, D. C. 20235
Telephone: 202/634-4124

Thank you for your cooperation in this matter.

Sincerely,

Joyce M. T. Wood

Joyce M. T. Wood
Director
Office of Ecology and Conservation

Enclosures

UNITED STATES DEPARTMENT OF COMMERCE

FINAL ENVIRONMENTAL IMPACT STATEMENT

AND THE

PROPOSED COMMONWEALTH OF PENNSYLVANIA

COASTAL ZONE MANAGEMENT PROGRAM

Prepared by:

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

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Harrisburg, Pennsylvania 17120

The Coastal Zone Management Program is partially financed by the Federal Government through the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration under Section 305 of the Coastal Zone Management Act of 1972 (P.L. 92-583) as amended.

August, 1980

NOTE TO READERS

The Executive Order, which appears in Appendix A and is discussed on Page II-4-3, will be signed by the Governor, with no significant changes, prior to Program approval. The Memoranda of Understanding (MOU), which also appear in Appendix A and are discussed on Pages II-4-3 and II-4-4, were developed to better define the interactions between various State agencies and the lead State agency, the Department of Environmental Resources. It is anticipated that these MOU, which have no bearing on Program approvability, will be signed with no significant changes prior to Program approval.

COMMONWEALTH OF PENNSYLVANIA
GOVERNOR'S OFFICE
HARRISBURG

THE GOVERNOR

August 21, 1980

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

Dear Mr. Glazer:

I have the extreme pleasure to submit the Commonwealth of Pennsylvania Coastal Zone Management Program and Final Environmental Impact Statement for approval under Section 306 of the Federal Coastal Zone Management Act of 1972, as amended.

This document is the culmination of many years of effort in developing a program for managing the coastal resources of Pennsylvania in a sound and rational manner. As part of the comprehensive planning process associated with this endeavor, affected governmental agencies, interest groups and concerned citizens at the national, state and local levels have worked together to identify problems and issues, conduct technical studies, establish policies, and develop an acceptable and effective means for implementation. Moreover, the program has been open to extensive review and comment through a series of public meetings and workshops, intergovernmental coordinative mechanisms and, most recently, public hearings to receive formal testimony on the Draft Environmental Impact Statement.

Based upon the extraordinary degree of involvement and support demonstrated during the development of the program and my review of this document, I have approved the Pennsylvania Coastal Zone Management Program. I will also issue an Executive Order which endorses the policies of the program, designates the Department of Environmental Resources as the lead agency for receiving and administering federal implementation grants, and directs all state agencies under my jurisdiction to enforce and act consistently with the goals, policies and objectives of the Coastal Zone Management Program. Furthermore, I certify that

Pennsylvania has the necessary legal authorities and the organizational structure in place to implement the management program.

I personally feel that the Commonwealth of Pennsylvania, and its two geographically distinct coastal zones, the Delaware Estuary and Lake Erie, will benefit a great deal from the financial and technical assistance provided by the implementation of the Coastal Zone Management Program. Most importantly, our capacity to manage the Commonwealth's limited, but nonetheless extremel valuable, coastal resources will be greatly enhanced. In this regard, I am requesting your timely approval of this program.

I would also like to take this opportunity to express my appreciation for the cooperation and assistance provided by the Office of Coastal Zone Management through program development. I am looking forward to the continuation of this fine relationship.

Sincerely,

Dick Thornburgh
Governor

DESIGNATION: Final Environmental Impact Statement

TITLE: Proposed Federal Approval of the Pennsylvania Coastal Zone Management Program

ABSTRACT: The State of Pennsylvania has submitted its Coastal Zone Management Program to the Office of Coastal Zone Management for approval. Approval would allow program administrative grants to be awarded to the State, and require that Federal actions be consistent with the program. This document includes a copy of the program (Part II) which is a comprehensive management program for coastal land and water use activities. It consists of numerous policies on diverse management issues which are enforced by various State laws, and is the culmination of several years of program development.

Approval and implementation of the program will enhance governance of the State's coastal land and water areas and uses according to the coastal policies and standards. The effect of these policies is to condition, restrict or prohibit various uses in parts of the coastal zone, while encouraging development and other uses in other parts. This program will improve decision-making processes for determining appropriate coastal land and water uses in light of resource consideration and increase public awareness in coastal resources. The program will result in some short-term economic impacts on coastal users but will lead to increased long-term protection of the State's coastal resources.

Federal alternatives include delaying or denying approval if certain requirements of the Coastal Zone Management Act have not been met. The State could modify parts of the program or withdraw their application for Federal approval if either of the above Federal alternatives result from circulation of this document.

APPLICANT: Pennsylvania Department of Environmental Resources, Office of Resources Management

LEAD AGENCY:	U.S. DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration Office of Coastal Zone Management
CONTACT:	Mr. John Paul Tolson Acting Great Lakes Regional Manager Office of Coastal Zone Management 3300 Whitehaven Street, N.W. Washington, D.C. 20235 (202) 634-4124
COMMENTS:	Review period on this statement ends September 29, 1980.

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SUMMARY

SUMMARY

A. Program Summary

The Pennsylvania coastal zone consists of two widely separated coastal areas. At the extreme northwest corner of the State, a largely rural shoreline stretches 63 miles along Lake Erie between the borders of Ohio and New York. Across the State in the extreme southeast corner, the Delaware River forms a 57-mile segment of largely urbanized coastal area from the furthest extent of tidal influence near Morrisville to the border with the State of Delaware. This segment contains the City of Philadelphia, the fourth largest city in the United States. Both coastal areas share common concerns, but there are also coastal issues which are of more significance to one area than the other.

Issues

The Pennsylvania Coastal Zone Management Program (CZMP), in addressing the major coastal resource management issues of State, Federal, and local concern, has developed policies in ten areas to guide State decision-making in the coastal zones. These areas are:

1. Coastal Hazards
2. Dredging and Spoil Disposal
3. Fisheries Management
4. Wetlands
5. Public Access for Recreation
6. Historic Sites and Structures
7. Port Activities
8. Energy Facility Siting
9. Intergovernmental Coordination
10. Public Involvement

Management Techniques

Pennsylvania proposes to combine multiple authorities and programs of the Commonwealth into a set of regulatory and nonregulatory policies. These policies will be applied in a uniform fashion to address the ten coastal issues throughout the Lake Erie and Delaware Estuary coastal zones. All State agencies are directed to comply with the enforceable policies of the management program through an Executive Order. This is not required for Program approval, however, since all regulatory policies included in the Program are executed by the Department of Environmental Resources. The Commonwealth agencies responsible for carrying out the nonregulatory policies included in the management program may enter into Memoranda of Understanding with the Department of Environmental Resources. These Memoranda of Understanding will establish operating procedures between these agencies and the Department of Environmental Resources. The Memoranda of Understanding are not required for purposes of Program approval.

The regulatory aspect of the program is centered around the following State authorities:

1. Dam Safety and Encroachment Act (controls obstructions and encroachments in wetlands and in the beds of Lake Erie and the Delaware River);

2. Floodplain Management Act;

3. Bluff Recession and Setback Act

4. Clean Streams Act, as amended; and

5. Air Pollution Control Act, as amended.

All activities proposed for areas within the coastal zone which are subject to the Dam Safety and Encroachments Act, the Floodplain Management Act, and the Bluff Recession and Setback Act will be subject to the management program. Activities throughout the coastal zone which are subject to the Clean Streams Law and Air Pollution Control Act will also be subject to the management program. These and other regulatory authorities which are incorporated into the management program are discussed in Appendix A.

Two program authorities which are delegated for local administration based on State standards, are the Floodplain Management Act, administered by the Department of Community Affairs and the Department of Environmental Resources, and the Bluff Recession and Setback Act, administered by the Department of Environmental Resources. A third program authority which has a provision for delegation for local administration based on State standards is the Dam Safety and Waterway Management Act, administered by the Department of Environmental Resources.

Planning and technical assistance will be a large component of the nonregulatory aspects of the Pennsylvania CZMP. Major activities to be undertaken include:

1. Grants to local governments for updating comprehensive plans, zoning ordinances, and regulations.

2. Grants to local/regional agencies to encourage additional public access at specific sites along the shorelines of Lake Erie and the Delaware River.

3. Technical assistance to property owners to provide advice on the best techniques for preventing shoreline erosion and protecting shoreline property.

4. Planning assistance to the Ports of Erie, Philadelphia, and Chester.

5. Financial assistance to the Pennsylvania Fish Commission to develop a comprehensive coastal fisheries management plan for the Delaware River Estuary and Lake Erie.

6. Development of a process to streamline and simplify regulatory processes in the coastal areas.

7. Acquisition of wetlands and coastal access sites with Coastal Energy Impact Program funds if the sites become available.

8. Small scale preservation and restoration projects of recreation and historic sites.

Program Monitoring and Evaluation

The CZMP will monitor the activities of the State agencies through:

1. Individual review of State permits in the coastal area.

2. Periodic review of locally administered State authorities.

3. Various project review committees such as the Coastal Zone Advisory Committee, the Water Resources Coordinating Committee, and the Water Resources Policy Advisory Committee.

4. A-95 process and the State Project Review Evaluation Process.

5. Review of the Pennsylvania Bulletin which provides official notice of actions of the Commonwealth.

Implementation of the program will be accomplished through the statutory provisions networked into the program and reliance upon the Executive Order. In the case of the Bluff Recession and Setback Act and the Floodplain Management Act which are administered by local governments, the Department of Environmental Resources can bring judicial action against a municipality which it finds has failed to comply with the provisions of the Acts or the regulations. Enforcement of the Program is facilitated by the fact that all of the five major regulatory authorities are administered by the Department of Environmental Resources, the lead CZM agency.

The State agencies subject to the Executive Order are:

1. Department of Commerce
2. Department of Community Affairs
3. Department of Environmental Resources

4. Department of Transportation

Agencies bound to comply with the management program by a Memorandum of Understanding are:

1. Fish Commission
2. Historical and Museum Commission
3. Public Utility Commission

In addition, navigable waters, air, wetlands, and all other public trust resources of the Commonwealth are protected by Article I, Section 27, of the Pennsylvania Constitution. The constitutional provision mandates that all State agencies, independent boards and commissions, and executive departments conduct their activities in a manner which protects these public trust resources of the Commonwealth.

Conflict Resolution

Most conflicts which arise during implementation of the program will be resolved through informal staff level discussions. In those instances where conflicts cannot be resolved informally, a number of legal and administrative mechanisms are available to resolve the conflict. The legal mechanisms available to agencies, groups, and individuals are the legislative process, the Environmental Quality Board, the Environmental Hearing Board, citizen suits under Article I, Section 27 of the Pennsylvania Constitution, and other judicial processes. Administrative mechanisms include intradepartmental processes within the Department of Environmental Resources and interdepartmental processes between State agencies which are networked into the program. These processes will involve the Governor, the Governor's cabinet, the coastal zone advisory committee, as well as informal staff level discussion.

Coastal Boundary

The boundary of the Lake Erie coastal zone is as follows:

1. Extends to the international boundary with Canada in Lake Erie.

2. Extends from 900 feet to over three miles inland from the shoreline. This area includes erosion hazard areas, wetlands, and floodplains in which the State can manage activities with direct and significant impacts on coastal waters.

3. Extends on land and water to the borders with Ohio and New York.

The boundary of the Delaware Estuary coastal zone is as follows:

1. Extends to the boundary with New Jersey in the Delaware River.

2. Extends from 1/8 to over 3-1/2 miles inland from the banks of the Delaware. This area includes wetlands and floodplains in which the State can manage activities with direct and significant impacts on coastal waters.

3. Extends on land and in water from the upper extent of tidal influence near Morrisville, Pennsylvania, including all tidal tributaries to the border with Delaware.

In both areas the boundary excludes lands the use of which is by law subject solely to the discretion of or which is held in trust by the Federal Government, its officers or agents.

Program Funding

The Pennsylvania Coastal Zone Management Program will be financed through funds provided by annual grants from the National Oceanic and Atmospheric Administration (NOAA) pursuant to Section 306 of the Coastal Zone Management Act, as amended, and State funds used to match the Federal funds. Up to 80 percent of the costs of program implementation can be funded with Federal monies. Approximately $1.3 million will be available annually in Federal funds to assist the Commonwealth in carrying out its management program. In addition, the State is eligible for funding from the Coastal Energy Impact Program (CEIP) as a result of its participation in the Federal Coastal Zone Management Program. CEIP funds are available to deal with the impacts of Outer Continental Shelf energy activities or coastal energy activities and will be used to help carry out the policies of the CZM Program.

As a result of implementing the Pennsylvania Coastal Zone Management Program, institutional, environmental, social, and economic changes are likely to result in the two coastal areas.

The following institutional changes will occur as a result of the Pennsylvania CZM Program:

1. The Executive Order and Memoranda of Understanding will serve to focus the efforts of State agencies, independent commissions, and executive departments on the policies of the management program. This should result in an increased level of coordination and information exchange between State agencies and the Pennsylvania Coastal Zone Management Program.

2. Uses and resources that are in the national interest will be considered in State decision-making.

3. Measures to simplify coastal regulatory procedures and improve intergovernmental coordination in the management of coastal resources will be implemented.

4. Procedures to ensure the consistency of Federal actions in the CZM Program will be instituted.

Environmental changes will occur as the State begins to implement its new floodplain, wetlands, and erosion hazard setback authorities. Management of floodplain areas will require local participation in the National Flood Insurance Program, prohibitions against construction of certain special hazards in floodplains, and regulation of:

1. Any obstruction otherwise regulated under the Water Obstructions Act (as replaced by the Dam Safety and Encroachments Act).

2. Any flood control project constructed, owned, or maintained by a governmental unit.

3. Any highway or other obstruction, constructed, owned, or maintained by the Commonwealth or a political subdivision thereof.

4. Any obstruction owned or maintained by a person engaged in the rendering of a public utility service.

The Dam Safety and Encroachments Act gives the State authority to protect wetlands. Dams, water obstructions and encroachments proposed in or otherwise affecting any important wetland will have to meet performance standards as stated in Chapter 105 of the Pennsylvania Code of Regulations. These standards will require that the maintenance of the character and function of coastal wetlands be a primary consideration for the permitting of any action occurring in those wetlands.

Provisions of the Bluff Recession and Setback Act requires structural setbacks in erosion hazard areas. This will help to slow the rate of bluff erosion caused by the weight of structures and the additional overland runoff they induce. It will prevent structures, septic tanks, public infrastructure such as sewer and water lines and other materials from falling into Lake Erie, thereby reducing a potentially hazardous situation in the nearshore areas of the lake. Ultimately, it will safeguard the public from hazardous development.

Social changes are likely to occur as a result of increased efforts to provide recreational access to the waters of Lake Erie for sightseers, pier fishermen and boaters. Additional access sites for pedestrians coupled with the present efforts at

stocking salmonids in Lake Erie and improving water quality in the Delaware River will increase recreational opportunities to millions of people in the Commonwealth.

Economic changes likely to result from program implementation are as follows:

1. Decrease public cost for disaster assistance as a result of inappropriate activities in flood and erosion hazard areas.

2. Decrease the cost to individuals and corporations of securing permits for coastal activities as a result of faster, more streamlined permitting systems and improved intrastate coordination and State/Federal coordination.

3. Provide increased opportunities for water dependent industry along both waterfronts.

4. Provide incentive for expanding economic development in port areas.

5. Decrease in the value of some property that will be subject to the regulatory aspects of the management program. This decrease, however, should be offset by the public values provided by the natural function of wetlands and floodplains, and decrease of public payments for victims subject to flooding and erosion losses and reduction of costs of replacing facilities constructed with public funds.

6. Increase recreational business opportunities as more people take advantage of increased recreational opportunities provided by the program.

In addition to making these major improvements to the overall management structure, the Pennsylvania Coastal Zone Management Program will also make a number of other improvements to the management system. These improvements include the following:

1. Nomination of geographic areas within the coastal boundary that are of particular concern to the State, and implementation of special management techniques for these areas.

2. Implementation of special planning procedures to work toward the resolution of specific problems in the following three areas:

   - Shoreline erosion
   - Shorefront access and protection
   - Energy facilities

3. Implementation of measures to improve public awareness of coastal issues and increase public participation in coastal decision-making processes.

4. Implementation of special measures to improve the data base for coastal management and conduct special management studies as necessary.

C. What The Program Will Not Do

The Pennsylvania Coastal Management Program is designed to provide solutions to coastal problems and issues that have a direct and significant impact on the coastal zone. However, it is not designed to:

1. Substantially alter the respective governmental jurisdiction over coastal resources, activities or land uses. Agencies currently having responsibility for management of these resources and activities will continue to exercise their authorities in accordance with the policies, standards and evaluation procedures established by the Pennsylvania Coastal Management Program. Two exceptions to this are: a) the local administration of State erosion setback regulations along the Lake Erie shoreline; and b) State control over water obstructions and encroachments in the Delaware River within the City of Philadelphia (formerly these were under the control of the City of Philadelphia).

2. Control all development in or near the coastal zone. Development is permissible and encouraged in the coastal zone as long as it meets certain performance standards in wetlands and floodplains in both coastal zones, and erosion hazard areas along Lake Erie, and air and water quality regulations throughout the coastal zone.

3. Change the existing patterns of public and private shorefront ownership, except that additional public recreational access will be encouraged through acquisition of suitable properties, when they are available, by traditional acquisition programs.

4. Provide funds for land acquisition. Grants to implement the management program prohibit land acquisition. The State will use the management program only to undertake the preliminary steps necessary to determine if acquisition to meet program objectives is feasible. However, funds from CEIP will be used to acquire wetlands and sites for public areas if and when they become available.

D. Areas of Controversy

Throughout the process of program development, some agencies and individuals have raised issues of concern regarding certain aspects of the program.

The arguments concerning these issues have been that:

1. The program was an effort by the State to exercise comprehensive control over all land use in the coastal zone.

The major goal of the Coastal Zone Management Program is to strengthen the capacities of the State and local units of government to manage the coastal resources of the Commonwealth more efficiently, while addressing specific issues of State and local concerns including the encouragement of economic development and the protection of important natural resources. In so doing, the program recognizes the long standing authority vested in local governments to manage local affairs and it is designed to assist them wherever possible in these efforts. The program will not create a new layer of government at the Federal, State, or local level. The Pennsylvania Coastal Zone Management Program is not a zoning program. Coastal zone management in the Commonwealth is not based on, and does not advocate, Federal or State comprehensive land use regulation. Specific concerns of the coastal zone plan, such as water quality improvement, bluff recession hazards and floodplain development, can be and are addressed through specific State and local programs without intruding on the fundamental responsibilities of municipalities for land use planning and zoning. At the same time, local governments are encouraged to consider and, if possible, incorporate coastal concerns - both problems and opportunities - in carrying out municipal land use planning, subdivision and zoning efforts.

2. The program will add another layer of bureaucracy.

Other State agencies and bureaus within the Department of Environmental Resources had expressed this concern. However, the CZMP has demonstrated that through its review and monitoring of State agency activities within the coastal area, other agencies will be apprised of projects and activities concurrently. Formerly, agencies and departments may not have learned of projects outside their purview until late in project development. This effort to improve State agency coordination should result in fewer project delays and better decision-making by the responsible State agencies.

3. The program would impede or deny economic growth and development in the coastal areas because of an excessive environmental orientation.

The program will not discourage appropriate economic growth in coastal areas. In fact, the program has designated development opportunity areas as special management areas that should be used to accommodate growth and economic development. In addition, several of the State's coastal policies encourage economic development. The State will permit development activities to occur provided they have met any regulatory standards to which the activities may be subject. Finally, the CZMP will improve and streamline the permit decision-making process in order to help encourage appropriate economic development.

E. Issues to be Resolved

At this time, the issues to be resolved prior to program approval are as follows:

1. Designation of Bluff Recession Hazard Areas.

2. Adoption of final regulations for the Bluff Recession and Setback Act and Dam Safety and Encroachments Act. Proposed regulations for these two pieces of legislation are found in Appendix B.

F. Major Conclusions

Pending adoption of implementing regulations for the Dam Safety and Encroachments Act and the Bluff Recession and Setback Act, as well as designation of bluff recession hazard areas, OCZM has made the preliminary determination that the Commonwealth of Pennsylvania Coastal Zone Management Program has progressed sufficiently and that a Final Environmental Impact Statement will be issued on the program.

Part I
Purpose and Need

PART I

PART I - PURPOSE AND NEED

The Federal Coastal Zone Management Program

In response to the intense pressures upon, and because of the importance of the coastal zone of the United States, Congress passed the Coastal Zone Management Act (P.L. 92-583) which was signed into law on October 27, 1972. The Act authorized a Federal grant-in-aid program to be administered by the Secretary of Commerce, who in turn delegated this responsibility to the National Oceanic and Atmospheric Administration's (NOAA) Office of Coastal Zone Management (OCZM).

The Coastal Zone Management Act of 1972 developed from a series of studies on the coastal zone and its resources. National interest can be traced from the Committee on Oceanography of the National Academy of Sciences (NASCO) 12-volume report "Oceanography 1960-1970" (1959), to the report of the Commission on Marine Science, Engineering and Resources (1969), which proposed a Coastal Management Act that would "provide policy objectives for the coastal zone and authorize Federal grants-in-aid to facilitate the establishment of State Coastal Zone Authorities empowered to manage the coastal waters and adjacent land". The National Estuarine Pollution Study (1969), authorized by the Clean Water Restoration Act of 1966 and the National Estuary Study authorized by the Estuarine Areas Study Act of 1968, further documented the importance of and the conflicting demands upon our Nation's coast. These reports stressed the need to protect and wisely use the important national resources contained in the coastal zone and concurred that a program designed to promote the rational protection and management of our coastal zone was necessary.

The Coastal Zone Management Act of 1972 was substantially amended on July 26, 1976 (P.L. 94-370). The Act and the 1976 amendments will be referred to in this statement as the CZMA. The CZMA affirms a national interest in the effective protection and development of the coastal zone, by providing assistance and encouragement to coastal states to develop and implement rational programs for managing their coastal zones. The CZMA opens by stating "there is a national interest in the effective management, beneficial use, protection, and development of the coastal zone" (Section 302(a)). The statement of Congressional findings goes on to describe how competition for the utilization of coastal resources, brought on by the increased demands of population growth and economic expansion, has led to the degradation of the coastal environment, including the "loss of living marine resources, wildlife, nutrient-rich areas, permanent and adverse changes to ecological system, decreasing open space for public use, and shoreline erosion". The CZMA then states "the key to more effective protection and use of the land and water resources of the coastal zone is to encourage states to exercise their full authority over the land and waters in the

coastal zone by assisting states . . . in developing land and water use programs . . . for dealing with (coastal) land and water use decisions of more than local significance" (Section 302(h)).

While local government and Federal agencies are required to cooperate and participate in the development of management programs, the state level of government is given the central role and responsibility for this process. Financial assistance grants are authorized by the CZMA to provide states with the means of achieving these objectives and policies. Under Section 305, 30 coastal states which border on the Atlantic and Pacific Oceans, Gulf of Mexico, and the Great Lakes, and four U.S. Territories are eligible to receive grants from NOAA for 80 percent of the costs of developing coastal management programs. Broad guidelines and the basic requirements of the CZMA provide the necessary direction for developing the programs. The updated guidelines defining the procedures by which states can qualify to receive development grants under Section 305 of the CZMA, and the policies for development of a state management program, were published on March 28, 1979 (15 CFR Part 923), 44 Federal Register (61): 18590-18624). For example, during the program development, each state must address specific issues such as the boundaries of its coastal zone; geographic areas of particular concern; permissible and priority land and water uses including specifically those that are undesirable or of lower priority; and areas for preservation or restoration. During the planning process, the state is directed to consult with local governments, regional agencies and relevant Federal agencies, as well as the general public. Federal support can be provided to states for up to four years for this program development phase.

After developing a management program, the state may submit its coastal management program to the Secretary of Commerce for approval; if approved, the state is then eligible for annual grants under Section 306 to administer its management program. If a program has deficiencies which can be remedied or has not received Secretarial approval by the time the Section 305 grant has expired, the state is eligible for additional funding under Section 305(d).

Section 308 establishes a coastal impact assistance program consisting of:

1. Annual formula grants (100 percent Federal share) to coastal states, based upon specific Outer Continental Shelf (OCS) energy activity criteria (Section 308(b)).

2. Planning grants (80 percent Federal share) to study and plan for economic, social, and environmental consequences resulting from new or expanded energy facilities (Section 308(c)).

3. Loans or bond guarantees to states and local governments to improve public facilities and services required as a result of new or expanded coastal energy activity (Sections 308(d)(1), and (d)(2)).

4. Grants to coastal states or local governments if they are unable to meet obligations under a loan or guarantee because the energy activity and associated employment and population do not generate sufficient tax revenues (Section 308(d)(3)).

5. Grants to coastal states if such states' coastal zone suffers any unavoidable loss of valuable environmental or recreational resources which results from coastal energy activity (Sections 308(b) and (d)(4)).

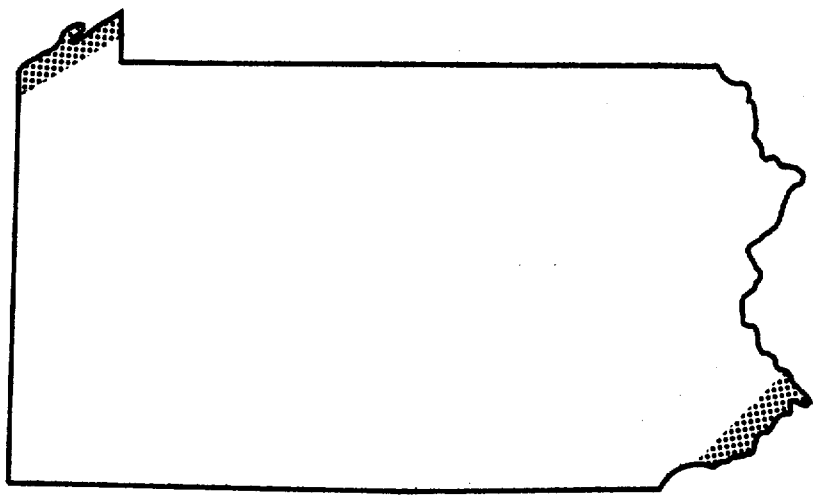
In order to be eligible for assistance under Section 308, coastal states must be receiving Section 305 or 306 grants, or in the Secretary's view be making satisfactory progress toward the development of a management program which is consistent with the policies of Section 303 of the Coastal Zone Management Act.

Part II

Description of the Proposed Action: The Pennsylvania Coastal Zone Management Program

PART II

Chapter 1



Introduction and Overview

COASTAL ZONE MANAGEMENT IN PENNSYLVANIA

According to the definition in the Coastal Zone Management Act, Pennsylvania qualifies as a "coastal state" because of two widely separated areas. The 63-mile long Lake Erie shoreline and the 57-mile segment of the tidal Delaware River in Pennsylvania are both eligible for coastal zone management. Interestingly, Pennsylvania is the only state in the country, other than New York, with two such widely separated coastal zones. The regional location map (Figure i-1) indicates the position of Pennsylvania's two coastal zones relative to those of nearby Great Lakes, New England, and Mid-Atlantic states.

Although the Coastal Zone Management Act was passed by Congress and signed into law October 27, 1972, funding was not available until 1974. In June, 1974, the Governor designated the Department of Environmental Resources as the lead agency for Pennsylvania's Coastal Zone Management Program.

During the next three years, the Department of Environmental Resources worked with other state agencies, local study area consultants, elected officials, shorefront industries, and interested citizens to produce the Coastal Zone Management Program, which is described in this document.

Pennsylvania made special efforts to coordinate its Coastal Zone Management Program with adjacent states such as: New Jersey, Delaware, New York, and Ohio. Efforts to achieve consistency had to overcome widely different laws and regulations, as well as separate timetables and schedules.

The first year of the program was devoted exclusively to inventory work and data gathering. During the second year, work progressed on resource analysis and the development of working papers and technical memoranda on elements required by the Act and by Federal guidelines. The third year of the program was spent in preparing a 500-page Draft Technical Record including more than 50 accompanying maps. This document represented the first and most comprehensive statement prepared by the Commonwealth of Pennsylvania, which concerns both the protection and development of coastal resources. The Draft Technical Record has been distributed to local municipalities and governmental agencies throughout the coastal zones as a reference document, and used to assist in the preparation of a final and approved management program.

Efforts during the fourth year of the program focused on the refinement and finalization of policies, management authorities and implementation mechanisms for carrying out the goals and objectives of Pennsylvania's Coastal Zone Management Program. These critical elements, along with other technical requirements of the Federal Coastal Zone Management Act, are contained in this

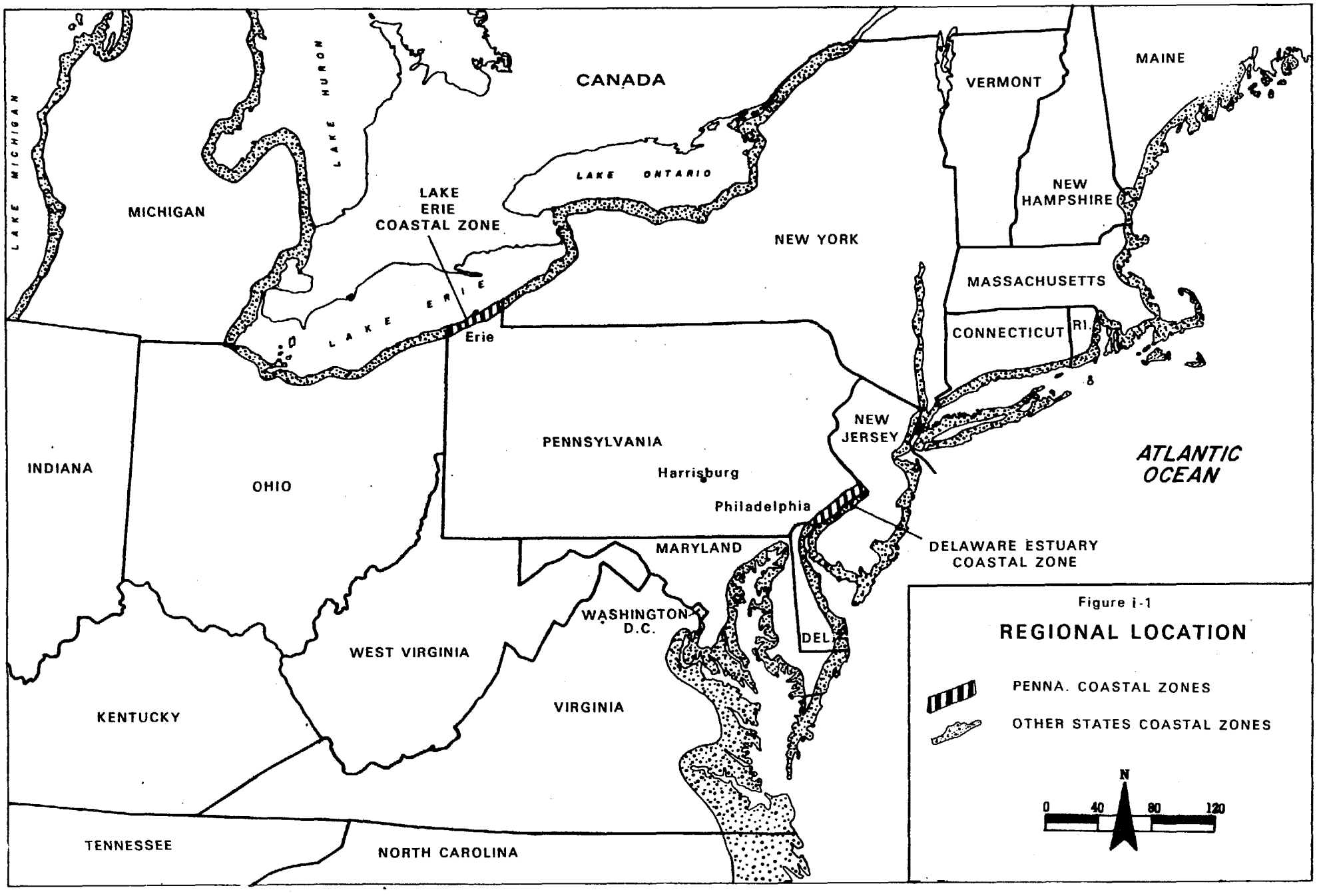


Figure i-1

REGIONAL LOCATION

COASTAL CHARACTER - DELAWARE ESTUARY

Physical and Socio-Economic Characteristics

The Delaware River stretches 330 miles from its headwaters in the Catskill Mountains of New York to the Atlantic Ocean. At Trenton, 134 miles from the sea, the river drops through its last series of rapids and becomes an estuary, subject to the ebb and flow of daily tides. The estuary is where the major ports and industrial centers of Philadelphia, Camden, Wilmington and Chester are located. Oil refineries, chemical plants, steel mills, warehouses, power plants, container terminals, railroads, highways, and bridges dominate the waterfront.

Of the 52 square miles of land area within the coastal zone, about two-thirds is developed, mostly as manufacturing or transportation facilities. There is a notable absence of recreational, cultural, and residential areas. About 33,000 people reside in the coastal zone; and in spite of the nearly 14 square miles of industrial and commercial lands, there are less than 80,000 employees.

Philadelphia County has the most completely developed waterfront with more extensive transportation facilities than the other two counties. A diverse mix of land uses occupies the rest of Philadelphia's riverfront, including manufacturing, utilities and military facilities. Philadelphia has the largest employment base of the coastal counties with 68 percent of the 78,486 workers in the Delaware Estuary coastal zone. Over half of Philadelphia's workers are in the finance, service, military and government sector, approximately double the number of workers in the manufacturing and construction category. In contrast, over 85 percent of all workers in Bucks and Delaware Counties are in the manufacturing and construction category. Philadelphia also contributes over 85 percent of coastal jobs in the transportation, communication and utilities sector.

Delaware County has the highest population within the boundaries of the coastal zone, with about 50 percent more residents than either Philadelphia or Bucks Counties. Unlike communities in Bucks County, residential areas in Delaware County do not extend right up to the riverfront. In Delaware County, a larger share of waterfront is devoted to manufacturing than in either Philadelphia or Bucks Counties. Tinicum Marsh, covering approximately 500 acres, is all that remains of the tidal wetlands which originally encompassed at least 13,000 acres between the Chester Creek in Delaware County and the Frankford

Creek in Philadelphia. Still, Tinicum Marsh contains Pennsylvania's largest tidal wetland area.

Notable features of the coastal zone in Bucks County include the 4,000 acre U.S. Steel site, which employes more than 8,000 workers, and the 2,300 acre man-made lakes created by sand and gravel extraction on property owned by the Warner Company. The shoreline of Bucks County includes a wide variety of uses; and about five miles of riverfront are occupied by residential, recreational, or cultural uses, which are unusual in the other counties.

Uses and Development

Ports and Navigation - The collective "Ports of Philadelphia" (including berths in Pennsylvania, New Jersey, and Wilmington, Delaware) comprise the largest freshwater port in the world. Philadelphia is the second largest U.S. port in number of vessels handled and the third busiest seaport in the world. Commercial shipping, both international and domestic, is a key ingredient of the region's economy. Over 9,000 manufacturing concerns and at least 100,000 job opportunities are dependent on port activities.

Water Supply - Electric generating stations withdraw twice as much water as all municipal and self-supplied industrial uses combined. In 1976, the six Philadelphia Electric Company stations in the coastal zone withdrew 1.084 billion gallons per day from the Delaware and Schuylkill Rivers. (The consumptive loss was estimated at only 8 million gallons per day.)

The Delaware River is the primary water resource for municipal and industrial use. Most municipal water in the coastal zone is sold domestically. There are a few cases in which industry buys a large portion of a municipal supply. The Bristol Borough and Philadelphia Water Departments are two municipal suppliers which sell a substantial portion of their water to industry.

Waste Disposal - The three large Philadelphia plants, six smaller ones in Bucks County and thirteen plants of varying size in Delaware County, constitute the municipal dischargers in the coastal zone. Background pollution loadings from upstream tributaries and the river's main stem will, in the natural course of events, be carried into the tidal Delaware. In addition to these municipal dischargers, the coastal zone has numerous industrial waste dischargers. Because water is used for a wide range of industrial processes, industrial waste products often differ greatly from domestic wastes, thereby requiring special treatment processes. Although municipal facilities often treat industrial wastes, many industries must employ their own

pretreatment technology in order to comply with State and Federal regulations.

Recreation - In spite of the intensity of development along the Delaware River, numerous recreational areas and opportunities exist. Pressures for additional recreational sites are expected to increase in the future as travel becomes increasingly expensive and as water quality in the estuary improves in response to Federal, State, and local programs and investments.

Due to the highly developed nature of the Delaware Estuary, multiple use concepts will be encouraged to provide additional recreational opportunities in the coastal zone. These concepts stress the incorporation of recreation and public access into industrial, commercial, or residential development or redevelopment plans and proposals.

Fish and Wildlife Habitat - The estuary is extremely important to migratory fish by providing a place for spawning and rearing. Twenty-five indigenous and migratory species are known to frequent the estuary but at different times and in different locations during the year. Only the upper portion of the estuary is capable of supporting the full range of life functions for fish propagation, maintenance, and growth year round.

Over 250 species of birds are known to nest or migrate through the Delaware Valley. Tinicum Marsh is the main stopover and nesting coastal zone site for waterfowl.

COASTAL CHARACTER-LAKE ERIE

Physical and Socio-Economic Characteristics

Lake Erie, which covers 9,940 square miles, is the smallest of the Great Lakes except for Lake Ontario. Sixty-three miles of the southern shore of Lake Erie are in the "chimney" of Pennsylvania, between the state boundaries of Ohio and New York.

The most outstanding feature of the Pennsylvania shoreline is the seven-mile long Presque Isle Peninsula which attracts three to four million recreational visitors each year. This 3,200 acre sand spit curves out into the lake forming Presque Isle Bay and sheltering Pennsylvania's only Great Lakes port.

The beaches, dunes and lagoons of Presque Isle contrast sharply with the system of bluffs ranging in height from 10 to 170 feet which separates Lake Erie from the rest of Erie County. There are no major river systems flowing into Lake Erie in Pennsylvania; but there are 50 minor streams, some of which have cut deep gorges into the landscape.

The urban and suburban portions of the City of Erie occupy the central third of the Lake Erie shoreline. The remaining land is sparsely developed with a more rural character.

The coastal zone is strongly influenced by its proximity to the lake. In addition to the recreational activities centered at Presque Isle and a few other public and private access areas, Lake Erie provides a major source of water for both household and industrial use. Recent proposals include an electric generation station and a modern steel plant.

The climatic effect of Lake Erie extends the growing season, and moderates temperature variations which permit the production of specialty crops such as grapes and other orchard products. In the eastern portion of the Lake Erie coastal zone, almost one-third of the land is devoted to fruit production.

A total of ten municipalities and Presque Isle State Park encompass the Lake Erie coastal zone. Together this area totals approximately 52,800 acres or about 83 square miles. The population of the final coastal zone area in 1970 was 22,898. By 1975, it was estimated at 23,569 people, an increase of 2.9 percent. The projected Lake Erie coastal zone population by the year 2000 is 28,337 people, an increase of 23.8 percent over the 1970 figure.

Uses and Development

Ports and Navigation - The Erie harbor is completely surrounded by the Presque Isle Peninsula except for the channel entrance. The harbor is currently not used to capacity. The principle shipping and docking facility in the port is the Erie International Marine Terminal. Shipbuilding and repair services are a major activity of the Erie harbor. The most modern shipbuilding facility on the Great Lakes is located immediately north of German Street.

Water Supply - The Pennsylvania Electric Company (Penelec) is by far the largest water withdrawer in the Lake Erie coastal zone. It withdraws approximately 300 million gallons per day from Presque Isle Bay for use in cooling steam generators. There are four other water withdrawal systems in the study area which use Lake Erie as a water source. Two of these are municipal systems and two are industrial systems.

Waste Disposal - A total of 56 permitted sewage discharges are located in watershed tributaries to Lake Erie. Six discharge directly into Lake Erie and the remainder discharge into streams which flow into Lake Erie and Presque Isle Bay. Included within the total number are eight municipally owned facilities, 20

industrial facilities, 27 privately owned wastewater facilities, and one power generating facility.

Recreation - Recreation is by far the greatest use of coastal waters in Erie County. All types of recreation associated with water are to be found along the shore of Lake Erie and Presque Isle Bay. Some of these include: swimming, sail and power boating, water skiing, fishing, ice fishing, skating and ice boating.

Public boat launching sites include the following: Raccoon Creek County Park, Springfield Township; Pennsylvania Fish Commission site at the mouth of Walnut Creek, Fairview Township; several sites on the bay side of Presque Isle State Park; two ramps operated by the City of Erie; Shades Beach County Park, Harborcreek Township; and Dalrymple Beach operated by the Pennsylvania Fish Commission in North East Township.

Sport fishing is a year-round activity in the waters of the Erie County coastal zone. Presque Isle and Misery Bays are particularly active spots where fish are caught throughout the year.

Fish and Wildlife Habitat - There are about 40 fish species found in Pennsylvania's portion of Lake Erie coastal waters. These fish can be broken down into three main classes; rough fish (carp, suckers, etc.), forage fish (shiners, alewife, etc.), and sport fish. Sport fish includes yellow perch, smallmouth bass, walleye, trout, and salmon. Fish which live close to the shoreline closely resemble the open-lake fishery.

Presque Isle Bay and the lagoons of Presque Isle provide various fishing opportunities. The Presque Isle sport fishery includes the following species: muskellunge, northern pike, smallmouth and largemouth bass, yellow perch, catfishes, crappie, bluegill, and other sunfishes.

A large variety of birds exist in the coastal area. A total of 237 species of birds have been counted on Presque Isle and its immediate vicinity; a larger number than have been identified in any other area of comparable size in Western Pennsylvania.

COASTAL ZONE PROBLEMS AND ISSUES

During the four year period in which Pennsylvania's Coastal Zone Management Program was being developed, many different problems and issues affecting Lake Erie and the Delaware Estuary were identified, discussed, and researched. Elected officials, governmental agencies, citizens, scientists, shorefront

industries, and previously prepared studies were consulted, and a long and comprehensive list of problems and issues was identified.

After a good deal of debate and discussion, the large, comprehensive list of problems was selectively narrowed to allow the Coastal Zone Management Program to focus on ten major problem areas. These problems and issues are either concentrated in coastal areas or are so important that it was determined that they must be immediately addressed by the management program.

Other problems, identified and discussed during the planning process, may be addressed at some time in the future if they become major coastal issues and have direct and significant impacts on coastal waters.

The problems and issues briefly identified below are the central focus of Pennsylvania's Coastal Zone Management Program. Additional detail appears in Chapter 2 which describes the coastal policies and Pennsylvania's regulatory and administrative authorities.

1. Coastal Hazards: Historically, development that has been permitted to occur too near the edge of the bluffs along Lake Erie has suffered major damage from erosion. Man-made structures constructed at the foot of the bluff to provide protection from erosion often interfere with water currents, thus aggravating shorefront problems. In addition, many of the State's coastal areas have experienced recurring, predictable flooding problems because of a lack of awareness or concern with the extent of the floodplain.

2. Dredging and Spoil Disposal Activities: Dredging is an activity vital to the economic health of Pennsylvania's ports. However, areas suitable for disposal of dredged materials are extremely limited and disposal may prohibit other coastal activities.

3. Coastal Fisheries: Both of Pennsylvania's coastal areas once had significant commercial fisheries. In 1896, the Delaware River produced 20 million tons of shad and 21 million tons of oysters. Commercial fishing in Pennsylvania's portion of the Delaware is nonexistent today.

   In the early 1900's, Lake Erie's commercial fishing industry produced 800,000 pounds per year. The catch declined to less than 90,000 pounds per year in the 1960's, but has since improved to about 110,000 pounds annually. Recreational fishing in Pennsylvania will continue to grow as water quality improves; however, anglers and boaters have limited access to both Lake Erie and the Delaware River.

4. Wetlands: Wetlands constitute a critical natural resource of national and statewide significance, providing fish and wildlife habitats, natural flood control, improved water quality, groundwater recharge, and environmental diversity. However, the environmental value of wetlands has not been appreciated until recently. Many coastal wetland areas have been lost to bulkheading, spoil disposal, and development. Thus, effective management and protection of the remaining wetlands is vital.

5. Public Access for Recreation: In Pennsylvania, there is a growing demand for access to Lake Erie and the Delaware River to provide both active and passive recreational activities. These demands will increase as water quality improves. Along the shores of Lake Erie, many potential areas are in private ownership while the state-owned Presque Isle Peninsula is overcrowded on busy summer weekends. Few public areas exist along the Delaware River because much of the shorefront is intensively used by industry, port facilities, and utilities.

6. Historic Sites and Structures: The Pennsylvania coastal zones possess a large concentration of historic sites; yet, there has been little conscious effort to preserve historic resources. Potentially, valuable buildings are lost each year because of lack of interest, insufficient knowledge, and the absence of timely intervention.

7. Port Activities: Pennsylvania's ports represent a vital link between water and the inland transportation systems. Changing vessels and cargo handling techniques have made certain existing port facilities obsolete. Some port areas on Lake Erie and along the Delaware River are underutilized and have fallen into disrepair. These areas are no longer economically competitive and are visually unattractive.

8. Energy Resources: There is a great deal of interest at the national, State and local levels, in the potential of the Commonwealth's coastal areas to meet future energy needs. Pertinent activities include the siting of energy facilities in both coastal zones, the development of natural gas resources in Lake Erie, and Outer Continental Shelf oil and gas development affecting the Delaware Estuary. However, two major problems have been hampering the full realization of potential energy development in the coastal areas. The first being that many citizens and special interest groups are concerned that energy resources may be developed at the expense of the environment. The second problem is the fragmented Federal, regional, interstate, State, and local permitting process, which currently makes obtaining final authorization for the siting of an energy facility in the Commonwealth a poorly defined, unpredictable process.

9. Intergovernmental Coordination: The coastal zones are affected by many regulatory programs administered by various State agencies with differing mandates and regulations. Uniform, enforceable policies are needed to prevent unnecessary delays and resolve potential conflicts. Moreover, it is a requirement of the Federal Coastal Zone Management Act that all coastal management programs must adopt, at a minimum, the requirements of the Clean Water and Clean Air Acts. The achievement of these standards is critical to the overall economic and environmental health of the State's two coastal zones. Of particular importance to these areas is the need for clean water. Clean water is important to various manufacturing processes, residential homes, fish and wildlife habitat, and certain recreational activities. Without a continuous supply of clean water, serious problems will develop which may limit manufacturing, cause health problems, reduce or imperil aquatic and terrestrial ecosystems and prohibit water related recreation.

10. Public Involvement: There is a lack of public awareness and understanding of coastal issues and problems. Most people are unaware of recent improvements in the quality of Pennsylvania's waterfront environments or the potential of the coastal zones to accommodate the compatible goals of economic growth, recreation, and aesthetics. There is a need for the provision of adequate information on these issues and opportunities for getting the public involved in seeking solutions.

DEFINING THE COASTAL ZONE BOUNDARY

Methodology

The Coastal Zone Management Act defines the coastal zone as; coastal waters . . . and the adjacent shorelands . . . including transitional and intertidal areas, salt marshes, wetlands and beaches. The zone extends inland from the shoreline only to the extent necessary to control shorelands, the uses of which have a direct and significant impact on the coastal waters.

Pennsylvania determined its coastal zone boundaries in accordance with the regulations of the Federal Coastal Zone Management Act and utilizing the expertise of State, county and local planners, as well as local officials and citizens.

During the development of the Coastal Zone Management Program, discussions were held with the neighboring states of Ohio and New York (for the Erie area) and with Delaware and New Jersey (for the Delaware Estuary) to coordinate the designation of Pennsylvania's coastal boundaries.

The lateral and "seaward" boundaries were based on obvious criteria such as international and interstate boundaries, and extent of tidal influence. The inland boundaries were not based on such obvious phenonmena but were developed to include all uses with direct and significant impacts on the coastal waters.

Direct and Significant Impacts

Through meetings with the Coastal Zone Management Subcommittee and local Coastal Zone Steering Committees, the Coastal Zone Management Branch developed a definition of direct and significant impact.

- The term Direct is defined as a causal relationship in which the consequence of an action or use exerts an impact upon the coastal zone through an identifiable link or process, and

- The term Significant Impact is defined as a result of any activity which has a more than negligible effect on the coast or on coastal resources.

By using this definition and incorporating the needs and desires of the coastal residents, businesses, industries, and interest groups, and realizing the need to address national priorities such as energy development, wetland preservation, and port revitalization, it was determined that the following uses of the coastal areas constitute direct and significant impacts and would, therefore, be subject to management by the coastal zone program.

1. Activities associated with the placement and design of structures in coastal erosion and flood hazard areas, including the expenditure of State funds for public infrastructure in flood hazard areas.

2. Dredging and spoil disposal activities which could negatively impact navigation, flood flow capacity, wetlands, environmental quality, and public interest.

3. Activities which cause both positive and negative impacts upon coastal fishery populations and their aquatic habitat.

4. Activities, such as the placement of water obstructions and encroachments, that could result in the degradation or destruction of tidal or freshwater wetlands, or impact the beds of Lake Erie or the Delaware River.

5. Activities which possess the potential for providing public access sites for both passive and active forms of recreation.

6. Activities which enhance the restoration and/or preservation of historic sites and structures.

7. Activities in port areas which directly affect overall port planning development, enhancement, and revitalization.

8. Activities related to energy production and energy facility siting that have the potential to cause adverse environmental impacts to sensitive ecological areas.

9. Activities which affect air quality and water quality in the coastal zone.

In accordance with the Coastal Zone Management Act, the Commonwealth's boundaries were then established to include these uses, as they relate to coastal waters. Figure i-2 is a schematic which graphically depicts the boundary determination.

Excluded Federal Lands

In accordance with an August, 1976, ruling of the United States Department of Justice, all lands owned, leased, held in trust, or whose use is otherwise by law subject solely to the discretion of the Federal government, its officers or agents, are excluded from the coastal zone.

The exclusion of Federal lands does not remove Federal agencies from the obligation of complying with the consistency provisions of the Act when Federal actions on these excluded lands have spillover impacts that directly affect coastal zone areas, uses or resources.

An evaluation of Federal coastal properties was conducted during the development phase of the management program, and several key sites were identified as important coastal resources. In the event such lands are declared surplus, the Commonwealth would have an interest in helping to determine the future use of these sites. Certain Federal properties are currently undergoing changes in ownership. A list of excluded Federal lands is found in Chapter 3.

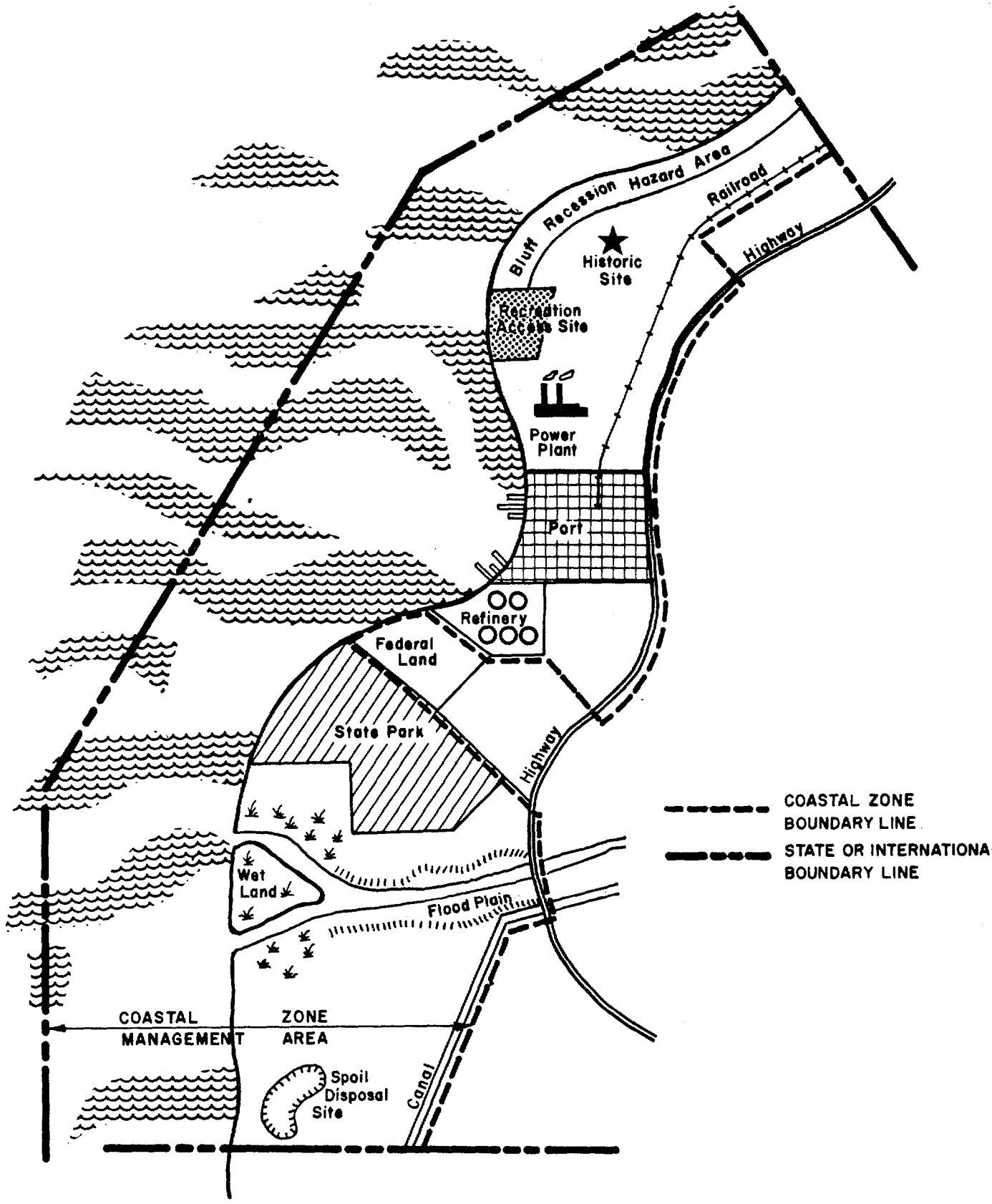
Description of the Final Coastal Zone Boundary

In each coastal zone, the boundary includes the areas over which the Commonwealth has regulatory control, either directly or through the process of networking described in Chapter 4. These areas include:

1. Floodplains of the Delaware and Schuylkill Rivers and their tidal tributaries, and the floodplains of Lake Erie and tributary streams.

FIGURE i-2

SCHEMATIC DIAGRAM OF THE
PENNSYLVANIA COASTAL ZONE BOUNDARY



2. Tidal and freshwater wetlands.

3. Erosion hazard areas along Lake Erie.

4. Riparian lands where permits for structures or fill constituting encroachments are required.

For administrative purposes, the inland boundary in each coastal zone has been extended to convenient physical and cultural features and public rights-of-way, such as highways, canals, railroads, and municipal boundaries.

Delaware Estuary

The coastal zone boundary:

1. Extends eastward to the New Jersey state boundary which is the middle of the Delaware River.

2. Extends southward to the Delaware state boundary.

3. Extends northward to the falls at Morrisville where the tidal influence on the Delaware River ends.

4. Extends westward inland varying in width from 1/8 mile in urban areas like Philadelphia, Bristol and Chester to over 3-1/2 miles in Falls Township, Bucks County, to include floodplains of the Delaware and Schuylkill Rivers and the upper limit of tidal influence on their tributaries and tidal and freshwater coastal wetlands.

The 57-mile long Delaware Estuary coastal zone contains 33,042 acres with a 1970 population of 33,472 residents, and encompasses all or parts of the following municipalities:

Delaware County:
- Upper Chichester Township
- Lower Chichester Township
- Ridley Township
- Tinicum Township
- Marcus Hook Borough
- Trainer Borough
- Eddystone Borough
- Ridley Park Borough
- Prospect Park Borough
- Norwood Borough
- Folcroft Borough
- Darby Township
- Chester City

City of Philadelphia

Bucks County:
- Bensalem Township
- Bristol Township
- Falls Township
- Bristol Borough
- Tulleytown Borough
- Morrisville Borough

Figure i-3 is a map which graphically depicts the Delaware Estuary coastal zone boundary.

Lake Erie

The coastal zone boundary:

1. Extends northward in Lake Erie to the international boundary with Canada.

2. Extends eastward to the New York state border.

3. Extends westward to the Ohio state boundary.

4. Extends southward inland varying in width from 900 feet within places in Erie City to more than three miles in Harborcreek and North East Townships, to include the floodplains of Lake Erie and tributary streams within the coastal zone, bluff hazard recession areas, and coastal wetlands.

The 63-mile long Lake Erie coastal zone contains 52,844 acres with a 1970 population of 12,898 residents and encompasses all or parts of the following municipalities:

Springfield Township	Erie City
Girard Township	Lawrence Park Township
Lake City Borough	Harborcreek Township
Fairview Township	North East Township
Millcreek Township	North East Borough

Figure i-4 is a map which graphically depicts the Lake Erie coastal zone boundary. Detailed maps can be reviewed at the Department of Environmental Resources Harrisburg, Pennsylvania, office during working house, Monday through Friday.

PROGRAM OVERVIEW AND BENEFITS

This section summarizes the most significant features and benefits of the Pennsylvania Coastal Zone Management Program. Later chapters should be consulted for additional detail.

- Policy Framework: The Coastal Zone Management Program (in Chapter 2) outlines specific regulatory and nonregulatory policies designed to address each of the coastal problems and issues outlined in the preceding section. Some of the policies are new and have been developed in response to the coastal zone planning process. Other policies have existed for some time but are being given increased strength and emphasis as a result of the Coastal Zone Management Program.

- Legal Basis for Program Implementation: The policies will be carried out through a "network" of existing

Figure I-3
DELAWARE ESTUARY COASTAL ZONE

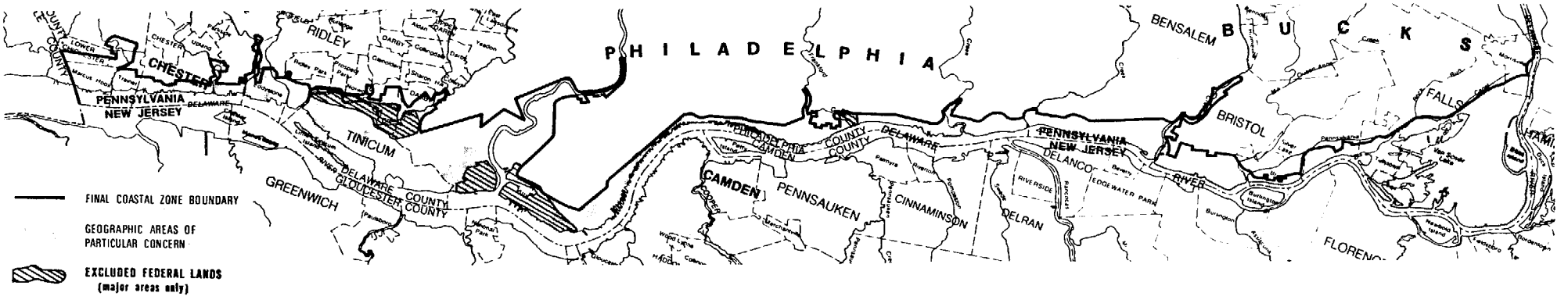
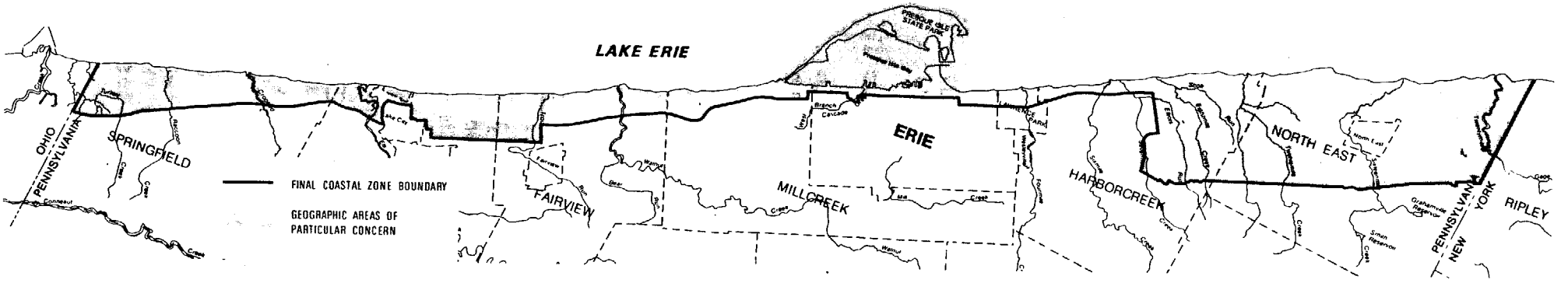


Figure I-4
LAKE ERIE COASTAL ZONE



State laws and regulations. While much of the regulatory authority existed before Pennsylvania became involved in the Coastal Zone Management Program, some statutes and regulations were specifically developed to "fill gaps" and correct deficiencies identified during the development of the Coastal Zone Management Program.

- State-Local Partnership: While all of the coastal policies will be implemented with existing State authorities, two policies will be carried out by local governments through a "State-Local Partnership". Floodplain controls and bluff setback requirements (along Lake Erie) will be enforced by local governments which will adopt State criteria and standards. Also, coastal municipalities will be encouraged to prepare stormwater management plans, based upon provisions of the Stormwater Management Act of 1978. The Program's reliance on existing legislation and the "State-Local Partnership" will eliminate the need to establish a new bureaucracy to implement the Coastal Zone Management Program. (This concept was reiterated frequently during the planning process.) The Pennsylvania Department of Environmental Resources will continue to be the lead agency to receive and administer Federal grants and to coordinate program activities.

- State Consistency: Pennsylvania's Coastal Zone Management Program relies on the coordinated implementation of various authorities administered by several State agencies. To ensure a coordinated, timely response from appropriate State agencies on decisions affecting the coastal zone, a system of "State Consistency" has been developed. Chapter 4 describes the concept, and the Executive Order that has been issued by the Governor to direct all State agencies under his administrative jurisdiction to comply with the policies of the Pennsylvania Coastal Zone Management Program. In addition, the Coastal Zone Management Branch of the Department of Environmental Resources may enter into Memoranda of Understanding (MOU) with those State agencies affecting the coastal zones. The purpose of the MOU is to make explicit the agencies' responsibilities for carrying out the policies of the management program.

- Federal Consistency: According to the Coastal Zone Management Act, Federal licenses or permits and Federal assistance to State and local governments must be consistent with the Pennsylvania Coastal Zone Management Program. Federal activities and development projects must be consistent "to the maximum extent practicable". This will ensure compatibility of Federal action with State and local management of coastal resources.

- National Interest: Consideration of the national interest will ensure that national concerns related to energy facility siting and resource protection are expressed and dealt with in the implementation of the Commonwealth's Coastal Zone Management Program.

- Public Involvement: The Coastal Zone Management Program will continue and it will expand active citizen involvement in coastal issues as the Program moves from the development to the implementation phase. The existing Coastal Zone Steering Committees which have been operating in each coastal zone will be retained and strengthened. The Committees will provide coordination between the Pennsylvania Department of Environmental Resources (the lead State agency), and local officials, county, and regional agencies. The Committees will assist in the development of the continuing planning process, the formulation of the products and review of work programs.

  In addition, the Committees will make recommendations to the Department of Environmental Resources on the distribution of Federal funds available to municipalities. (see "Financial Incentives" below.)

  Local elected officials will meet annually (or more often) in each coastal zone to review progress and address issues of concern in the coming year.

  Citizens will have access to the Coastal Zone Management Program in several ways, including:

  1. Personal attendance at meetings of the local steering committees and the State level advisory committee.

  2. Attendance at annual public meetings held in the coastal zone as part of the continuing program review process.

  3. Public hearings and meetings on regulations, amendments to the Program, permitting decisions, judicial and administrative apeals, etc.

  4. Local elected officials and county planning staffs may transmit citizens views to appropriate representatives on the local steering committees or to the staff of the Coastal Zone Management Branch.

- Financial Incentives: States which are able to successfully develop a Coastal Zone Management Program, which is approved by the Governor and the Secretary of the U.S. Department of Commerce, are eligible to receive Federal matching funds to carry out the Program. These

funds are authorized by Section 306 of the Coastal Zone Management Act.

Pennsylvania can expect to receive approximately $1,300,000 per year in program implementation funds. Some of this money will be made available to local communities in the coastal zones, on a voluntary basis, to update comprehensive plans, zoning ordinances, or subdivision regulations to support the goals, objectives, and policies of the Coastal Zone Management Program. Municipalities may use planning grants and technical assistance to address such local concerns as: flooding, bluff erosion, or economic development. Special attention will be directed to problems and issues of greater-than-local concern such as the siting of large-scale energy facilities, recreation access, and port development.

Pennsylvania is also eligible to receive funds from the Coastal Energy Impact Program (CEIP). These funds are to be used for energy related planning and construction of public facilities required as a result of energy development, and amelioration of environmental damage that has resulted from coastal energy activity. Grants and loans may be used for land acquisition and for construction of public recreational, transportation, and harbor facilities, etc., required as a result of energy development. These funds will be administered by the Pennsylvania Department of Community Affairs.

To be eligible for CEIP funds, a state must be participating in Section 305 or 306 of the Federal Coastal Zone Management Program, or be making adequate progress toward achieving Federal approval of its coastal management program pursuant to Section 303 of the Coastal Zone Management Act.

In addition, Section 315 of the Coastal Zone Management Act could eventually make funds available for the development of public access areas and recreation facilities along Lake Erie and the Delaware River. To date, no funds have been appropriated by Congress.

With the advent of an approved Coastal Zone Management Program, Pennsylvania can anticipate wiser and more efficient use of coastal resources and better coordination on coastal issues.

Figure i-5

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305(b)(4): Means of control	923.41	II-2-1, II-4-
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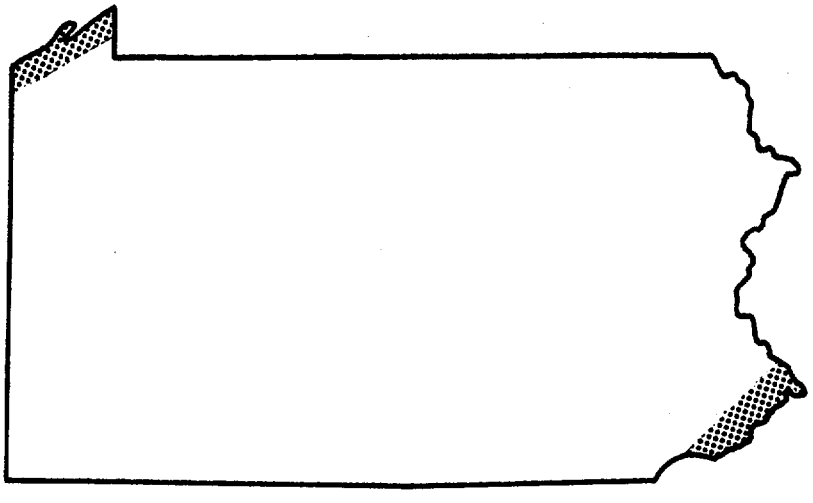
307(f): Incorporation of air and water quality requirements	923.45	II-5-14

Chapter 2



Coastal Zone Policy Framework

INTRODUCTION

The resource and legal inventories, prepared during the early phases of the Coastal Zone Management Program, have provided extensive background information on environmental, social, and economic characteristics; past and present problems; future expectations; and existing legal and institutional arrangements in Pennsylvania's two coastal areas, the Delaware Estuary and Lake Erie. This background information, as well as information concerning areas of national interest establishes overall State coastal policies and forms the keystone of the Pennsylvania Coastal Zone Management Program.

The first step in the policy development process was the identification of issues and problems. General concerns and specific local issues and problems were compiled from many sources, including local governments, waterfront industries, county planning commissions, interested citizens, members of the Coastal Zone Steering Committees, and State and Federal agencies.

The second step involved the formulation of general goal statements as a response to these coastal problems and as a source of guidance for the development of the Pennsylvania Coastal Zone Management Program. Since these goals are very general and only describe desirable end results or targets, the formulation of policies was necessary to stimulate State and local commitment to effective management of coastal resources.

The third step involved developing very specific policies to guide local and State actions. The program's policies are divided into three classifications based on the method that will be used to execute the policy as follows:

<u>Enforceable/Regulatory Policies</u>: These policies are based on enforceable legislative authorities which regulate specific activities through direct State authorities or locally administered State authorities.

<u>Direct Action Policies</u>: These policies are based on nonregulatory legislative authorities which allow a certain State agency to conduct a specific activity such as the purchase of land for public access. The agency delegated these authorities will utilize them in the attainment of the policies to the maximum extent feasible dependent on the availability of funds and/or other pertinent resources. In instances where coastal zone management funding is used for the furtherance of these policies, the Coastal Zone Management Branch will enter into agreements with the agency to ensure the furtherance of the policies. These agreements will be executed when it is mutually agreed by both parties that a particular project or activity is necessary to help carry out one or more of the coastal zone management policies.

Encouragement Policies: These policies are not based on legislative authorities. Implementing these policies relies on the provision of funding, technical assistance or other resources of the appropriate agency or entity. An example of an activity undertaken to carry out an encouragement policy is the provision of funds in port planning activities.

The policies constitute the keystone of the Coastal Zone Management Program and are required to be specific enough to provide:

- A clear understanding of the program, including the identification of who will be affected and how, and

- A clear sense of direction and predictability for decision-making.

The policy framework is organized under 10 major functional headings. Under each heading there is a general problem statement. In those sections where there is more than one policy, each policy is accompanied by a specific problem statement titled "Problems Addressed". The format for each policy under a functional heading is then as follows:

- The "policy" section, which defines that policy.

- The "authorities" section, depending on the type of policy, contains either the regulations or the authorities, which will be used to implement the policy.

- The "Policy Actions" section, which defines the actions that will be precipitated as a result of the implementation of the specific policy.

The policies will be used to guide the implementation of a functional Coastal Zone Management Program. The main objective of the Coastal Zone Management Branch will be to implement the goals and policies at the local level, while at the same time ensuring a necessary degree of State involvement in addressing key issues of regional or national concern. As part of this process, the Coastal Zone Management Program will use Federal and State funds to guide and assist local and State efforts in improving coastal conditions, accommodating planned growth, and wisely utilizing valuable coastal resources.

I. COASTAL HAZARD AREAS (CHA)

Bluff erosion and coastal flooding has caused serious property damage, endangered public safety, and degraded environmental quality in the Nation's coastal areas. While flooding in Pennsylvania is common to both of Pennsylvania's coastal areas, bluff erosion is peculiar only to Lake Erie municipalities.

In Pennsylvania, fiscal constraints and lack of sufficient technical expertise have resulted in the affected municipalities addressing the problems in an uncoordinated and noncomprehensive manner, which has resulted in differing degrees of success.

POLICY I-A.1: CHA/Bluff Setback and Erosion Control/Setback

PROBLEMS ADDRESSED/Policy I-A.1

The bluff recession problem along Lake Erie has been documented and spatially delineated in a study developed by the Coastal Zone Management Program titled "Shoreline Erosion and Flooding - Erie County". Development that has occurred in bluff recession hazard areas has not only been subject to damage by bluff recession but has at times accelerated the rate of recession by increasing the static pressure on the bluffs and increasing surface runoff and groundwater seepage.

POLICY I-A.1: Enforcement/Regulations

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO REQUIRE MUNICIPALITIES WITH BLUFF RECESSION HAZARD AREAS ALONG THE LAKE ERIE SHORELINE AS DETERMINED IN THE "SHORELINE EROSION AND FLOODING - ERIE COUNTY" REPORT OF 1975 TO ENACT SETBACK ORDINANCES AFFECTING STATIONARY STRUCTURES. THESE ORDINANCES WILL REGULATE CONSTRUCTION WITHIN A SPECIFIED DISTANCE FROM THE EDGE OF THE BLUFF. AT A MINIMUM, THE SETBACK DISTANCE IS COMPUTED AS THE ECONOMIC LIFE OF THE STRUCTURE TIMES THE LOCAL BLUFF RECESSION RATE PER YEAR (IN FEET).

AUTHORITY(S)/Policy I-A.1

Bluff Recession and Setback Act, Act of May 13, 1980, which mandates coastal communities in recession hazard areas to adopt setback ordinances affecting stationary structures.

Regulation(s): Title 25 Chapter 85.1 *et seq.*, which requires certain local municipalities, under the Department of Environmental Resources oversight, to develop and administer a permitting system that regulates construction activities in bluff recession hazard areas. Provisions are

also made for: actions in mandamus, calculation of erosion rates, interim controls, State/local joint review, and time limits for compliance with the Act and variances to the permit requirements.

POLICY ACTIONS/Policy I-A.1

This policy regulates the construction of stationary structures in areas where they will likely be damaged by bluff recession during their projected life time and/or exacerbate the bluff recession problem through increased pressure, runoff, groundwater seepage, etc.

Coastal zone management funds will be used to assist municipalities in developing and administering new setback ordinances and amending comprehensive plans to reflect these changes.

POLICY I-A.2: CHA/Bluff Setback and Erosion Control/Structures

PROBLEMS ADDRESSED/Policy I-A.2

Proper design, placement, construction and maintenance of shoreline protection devices is critical for ensuring that the structure protects the shoreline and does not aggravate the erosion problem. Shoreline protection structures in Pennsylvania have not always been properly designed, located or constructed in a manner that allows the structures to function as intended. Recent analysis indicates that some improperly placed structures have aggravated erosion, and that due to improper design and construction are in the process of failing.

POLICY I-A.2: Enforcement/Regulations

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO REGULATE, THROUGH PERMIT, THE SITING OF ANY WATER OBSTRUCTION OR ENCROACHMENTS ALONG LAKE ERIE, TO ASSURE PROPER PLANNING, DESIGN, CONSTRUCTION, MAINTENANCE AND MONITORING, IN ORDER TO PREVENT UNREASONABLE INTERFERENCE WITH WATER FLOW (WHICH INCLUDES SEDIMENT LADEN BEACH ENRICHING LITTORAL CURRENTS) AND TO PROTECT NAVIGATION.

AUTHORITY(S)/Policy I-A.2

Pennsylvania Constitution, Article I, Section 27. Enforcement authority is found under the provisions of The Dam Safety Act, Act of November 26, 1978, P.L. 1375, as amended (32 P.S. Sections 693.1 et seq.), and Administrative Code, Act of April 9, 1929, P.L. 177, as amended (71 P.S. Sections 194, 510-1, 510-8, 510-17, and 510-20).

Regulation(s): Title 25 Chapter 105, which requires that the proposed project or action be in compliance with the standards and criteria of that chapter and title and with all other laws administered by the Department, and that the proposed project or action will adequately protect public health, safety and the environment through the issuance of permits.

POLICY ACTIONS/Policy I-A.2

By ensuring that no person engages in activities concerning the construction, operation, maintenance, modification, enlargement or abandonment of any dam, water obstruction or encroachment without a written permit from the Department of Environmental Resources potential adverse impacts to normal shoreline erosion processes can be mitigated. Also, unwise expenditures of money may be reduced. Technical assistance will be available from the Coastal Zone Management Branch to local governments and citizens to help ensure that future structures are properly designed, placed, constructed and maintained in the coastal waters of the Commonwealth.

POLICY I-A.3: CHA/Bluff Setback and Erosion Control /Stormwater Management

PROBLEMS ADDRESSED/Policy I-A.3

Development occurring along Lake Erie has led to increased stormwater runoff rates through an increase in impervious surfaces, removal of vegetation and changes in drainage patterns. The resultant increased runoff rate may lead to an acceleration of the bluff recession rate, thereby threatening existing development.

POLICY I-A.3: Direct Action

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO ASSIST ERIE COUNTY AND AFFECTED COASTAL MUNICIPALITIES IN THE PREPARATION (INDIVIDUALLY OR JOINTLY ON A WATERSHED BASIS) OF STORMWATER MANAGEMENT PLANS AND IN THE IMPLEMENTATION OF THE PLANS BY ASSISTING THEM IN ADOPTING OR AMENDING CODES, RGULATIONS, AND ORDINANCES TO REGULATE DEVELOPMENT IN SUCH A MANNER AS TO MITIGATE THE ADVERSE IMPACTS TO LAKE ERIE BLUFFS DUE TO INCREASED RATES OF STORMWATER RUNOFF. (Also see Policies I-A.4, I-B, IV).

AUTHORITY(S)/Policy I-A.3

Stormwater Management Act, Act of October 4, 1978, P.L. 864 (32 P.S. Sections 680.1 et seq.). Under the provisions of this Act and through technical assistance, the Department of Environmental Resources will encourage the immediate preparation of stormwater management plans which include,

among other things, the development of urban sediment control strategies.

POLICY ACTIONS/Policy I-A.3

Erie County and affected Erie coastal communities will be assisted in the development of stormwater management plans in those areas where increased stormwater runoff may aggravate bluff recession problems. Coastal zone management funds and technical assistance will be provided to facilitate the development of stormwater management plans in these areas.

POLICY I-A.4: CHA/Bluff Setback and Erosion Control/Technical Assistance

PROBLEMS ADDRESSED/Policy I-A.4

The presence of high lake water levels, removal of protective vegetative cover, and the seasonal freezing and thawing of Erie County's highly erodable bluffs has generated a severe threat to many coastal properties. Solutions to protect these properties have often proved to be extremely costly and usually have had little success in reducing erosion rates. In some instances the placement of shoreline protection structures has actually caused an increase in erosion to adjacent areas.

Furthermore, attempts at shore protection by property owners have revealed that they are not fully informed of the potential cost and damage that can be associated with bluff erosion, or the potential adverse effects of the improper installation of protection structures on shoreline erosion.

POLICY I-A.4: Direct Action

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO PROVIDE TECHNICAL ASSISTANCE AND ADVICE CONCERNING THE DESIGN OF STRUCTURAL AND NONSTRUCTURAL METHODS FOR SHORE PROTECTION AND BLUFF STABILIZATION.

IN ADDITION, IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO CONTINUE TO SUPPORT SCIENTIFIC RESEARCH ON SHORE PROTECTION, RECESSION RATES, LITTORAL TRANSPORT AND OTHER ASPECTS OF THE COASTAL ENVIRONMENT OF LAKE ERIE. (Also see Policies I-A.1, I-A.2, I-A.3 X-2).

AUTHORITY(S)/Policy I-A.4

Soil Conservation Law, Act of May 15, 1945, P.L. 547, as amended (3 P.S. Sections 849 et seq.). This act provides for the creation of Conservation Districts in the Commonwealth and provides the Districts with the authority to administer technical assistance programs.

POLICY ACTIONS/Policy I-A.4

The Erie County Conservation District covering the Erie coastal area will be assisted, with Coastal Zone Management funds and expertise, in the development of programs to solicit cooperative agreements with the individual coastal land owners. These agreements may cover the development of facility design and the use of vegetative plantings to mitigate bluff erosion.

POLICY I-B: CHA/Floodplains

PROBLEMS ADDRESSED/Policy I-B and I-B.1

There is a great deal of national interest in mitigating flood damage. About 90 percent of the damage caused by natural disasters in the United States is due to floods, with annual losses averaging about $1.5 billion. When floods occur human life is endangered; the public must pay for rescue and cleanup efforts, factories and businesses are closed and/or damaged, transportation routes are disrupted, public services curtailed, soils eroded and homes destroyed. Unfortunately, floodplains are popular construction locations because of aesthetic attractiveness and innately level terrain.

Many of the Commonwealth's coastal municipalities have experienced reoccurring, predictable flooding problems because of a lack of awareness or concern with the extent of natural flooding.

POLICY I-B: Enforcement/Regulations

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM ACTING THROUGH THE DEPARTMENT OF ENVIRONMENTAL RESOURCES AND IN CONCERT WITH THE DEPARTMENT OF COMMUNITY AFFAIRS TO ACTIVELY ASSIST AND TO HELP ENSURE THAT IDENTIFIED FLOOD PRONE COASTAL MUNICIPALITIES DEVELOP STATE APPROVED FLOODPLAIN MANAGEMENT REGULATIONS THAT INCORPORATE AT A MINIMUM THE REQUIREMENTS OF THE NATIONAL FLOOD INSURANCE PROGRAM AND THE REQUIREMENTS OF THE STATE FLOODPLAIN MANAGEMENT ACT. IN ADDITION, IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO REGULATE THE CONSTRUCTION OF OR SUBSTANTIAL IMPROVEMENT TO VARIOUS TYPES OF STRUCTURES AND OBSTRUCTIONS IN THE DESIGNATED FLOODPLAINS IN ORDER TO: (i) ENCOURAGE PLANNING AND DEVELOPMENT IN FLOODPLAINS WHICH ARE CONSISTENT WITH SOUND LAND USE PRACTICES, (ii) PROTECT PEOPLE AND PROPERTY IN FLOODPLAINS FROM THE DANGERS AND DAMAGE OF FLOODWATERS AND FROM MATERIALS CARRIED BY SUCH FLOODWATERS, (iii) PREVENT AND ELIMINATE URBAN AND RURAL BLIGHT WHICH RESULTS FROM THE DAMAGES OF FLOODING, (iv) IMPLEMENT A COMPREHENSIVE AND COORDINATED PROGRAM OF FLOODPLAIN MANAGEMENT, BASED UPON THE NATIONAL FLOOD

INSURANCE PROGRAM, DESIGNED TO PRESERVE AND RESTORE THE EFFICIENCY AND CARRYING CAPACITY OF THE STREAMS AND FLOODPLAINS OF THE COMMONWEALTH, (v) ASSIST MUNICIPALITIES IN QUALIFYING FOR THE NATIONAL FLOOD INSURANCE PROGRAM, (vi) PROVIDE FOR AND ENCOURAGE LOCAL ADMINISTRATION AND MANAGEMENT OF FLOODPLAINS, AND (vii) MINIMIZE THE EXPENDITURE OF PUBLIC AND PRIVATE FUNDS FOR FLOOD CONTROL PROJECTS AND FOR RELIEF, RESCUE AND RECOVERY EFFORTS.

POLICY I-B.1: Direct Action

FURTHERMORE, IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO ASSIST LOCAL MUNICIPALITIES IN THE AMELIORATION OF PERIODIC FLOODING DUE TO INCREASED SURFACE RUNOFF FROM AREAS ADJACENT TO THE FLOODWAY BY ENCOURAGING THE DEVELOPMENT, ON A WATERSHED BASIS, OF COMPREHENSIVE STORMWATER MANAGEMENT PLANS THAT PREVENT INCREASED RATES OF RUNOFF. (Also see Policies I-A.2, I-A.4).

AUTHORITY(S)/Policy I-B

The Floodplain Management Act of October 4, 1978, P.L. 851, No. 1978-166 (32 P.S. Sections 679.101 et seq., provides for the regulation of land and water uses for flood control purposes and imposes duties and confers powers on the Department of Community Affairs, the Department of Environmental Resources, and identified municipalities. Stormwater Management Act, Act of October 4, 1978, P.L. 864 (32 P.S. Sections 680.1 et seq.) The Dam Safety Act, Act of November 26, 1978, P.L. 1375, as amended, (32 P.S. Sections 693.1 et seq.)

Regulation(s): Title 16, Chapter 38, which confer powers on the Department of Community Affairs, the Department of Environmental Resources, and municipalities to develop floodplain management programs. Title 25, Chapter 105, by which the Department of Environmental Resources regulates dams, waters obstructions, and encroachments in waters of the Commonwealth.

POLICY ACTIONS/Policies I-B and I-B.1

Through the implementation of these two policies, the Commonwealth of Pennsylvania shall reduce risks of flood loss, minimize the impact of floods on human safety, health and welfare, and preserve the natural and beneficial values associated with floodplains such as: producers of forest products, and open space, recreation and wildlife habitat areas.

Flood prone municipalities are required to participate in the National Flood Insurance Program. In addition, the Department of Community Affairs has published a list of obstructions which it determined present a special hazard to the health and safety of the public or occupants or which

may result in significant pollution, increased flood levels or flows or debris endangering life and property if such obstructions are located in a designated portion of the floodplain. These obstructions are: hospitals, nursing homes, jails, new mobile home parks, subdivisions or additions to mobile home parks and subdivisions.

Construction of any structure or commencement of any activity listed as a special hazard by the Department of Community Affairs's regulations in a portion of the floodplain designed by the regulations, shall be prohibited except in accordance with a special exception issued by the municipality.

In addition, the Department of Environmental Resources has maintained exclusive jurisdiction to regulate:

1. Any obstruction otherwise regulated under the Dam Safety and Encroachments Act;

2. Any flood control project constructed, owned or maintained by a governmental unit;

3. Any highway or other obstruction, constructed, owned or maintained by the Commonwealth or a political subdivision thereof; and

4. Any obstruction owned or maintained by a person engaged in the rendering of a public utility service.

No person shall construct, modify, remove, abandon or destroy any structure or engage in any activity specified in (1) through (4) above in the 100-year floodplain unless such person has first applied for and obtained a permit from the Department of Environmental Resources.

The Department of Environmental Resources shall regulate those obstructions specified in (1) through (4) above in a manner consistent to the maximum extent possible with the standards and criteria established in municipal floodplain management regulations.

For those obstructions specified in (1) through (4) above, located in floodways or waters of the Commonwealth including wetlands, the Department of Environmental Resources must evaluate the permit applications pursuant to the requirements of the Dam Safety and Encroachments regulations (Title 25, Chapter 105, of the Pennsylvania Code of Regulations) before construction, operation, maintenance, modification enlargement or abandonment of the obstruction.

In addition, Executive Order 1978-4 states that:

Any development of new construction of, or substantial improvements to state-owned properties and facilities in areas designated as special hazard areas by the FIA shall comply with minimum requirements for special hazard areas. These minimum requirements are set forth in the FIA's flood insurance regulations.

The Department of Environmental Resources is ordered by the Governor to comply with this Executive Order. In order to comply, the Department of Environmental Resources evaluates all applicable permit applications for compliance with these FIA regulations.

II. DREDGING AND SPOIL DISPOSAL (DSD)

Dredging is an activity that is important to the economic vitality of Pennsylvania's ports and for the recovery of commercially valuable sand and gravel. To attract and encourage the retention of economically viable port industry, it is necessary to maintain an open channel to a depth of 40 feet in the Delaware Estuary and 29 feet in the channel entrance of the Erie Harbor area. Nevertheless, improper dredging, spoils disposal, and related activities can adversely impact navigation, flood flow capacity, public interest, and environmental quality.

POLICY II-1: DSD/Regulation

PROBLEMS ADDRESSED/Policy II-1

Improper dredging and spoils disposal activities can result in detrimental impacts to navigation, flood flow capacity, and the environment.

POLICY II-1: Enforcement/Regulation

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO ENSURE THAT DREDGING AND SPOIL DISPOSAL AND RELATED ACTIVITIES INCLUDING THE RECOVERY OF COMMERCIALLY VALUABLE SAND AND GRAVEL IN THE COASTAL ZONES WILL BE REGULATED TO PROTECT AGAINST OBSTRUCTION TO NAVIGATION, REDUCTIONS IN FLOOD FLOW CAPACITY, AND DAMAGES TO THE PUBLIC INTEREST, AS WELL AS MINIMIZE HARMFUL IMPACTS TO FISH AND WILDLIFE HABITATS. (Also see Policies II-2, III-1, IV, IX-A, IX-B.1, IX C).

AUTHORITY(S)/Policy II-1

Pennsylvania Constitution, Article I, Section 27. The Dam Safety Act, Act of November 26, 1978, P.L. 1375, as amended

(32 P.S. Sections 693.1 et seq.); and Administrative Code, Act of April 9, 1929, P.L. 177 (71 P.S. Sections 194, 510-1, 510-8, 510-17, and 510-20, provide authority to regulate dredging and spoil disposal in the coastal zones. Additional authorities available include Schuylkill River Pollution/Siltation Law, Act of June 4, 1945, P.L. 1383, as amended (32 P.S. Sections 751.1 et seq.); Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended (35 P.S. Sections 691.1 et seq.)

Regulation(s): 25 Pa. Code Chapter 105, which provides for the comprehensive regulation and supervision of the construction, operation, and maintenance of dams, reservoirs, water obstructions, encroachments and other actions which may affect the course, current, or cross section of any body of water in the Commonwealth.

POLICY ACTIONS/Policy II-1

This policy protects navigation, the public interest, and the environment in coastal areas from adverse impacts due to commercial and channel maintenance dredging and spoils disposal, by ensuring, through increased monitoring by the Coastal Zone Management Program, that all permits issued for these activities meet existing Department of Environmental Resources criteria. In addition, the Coastal Zone Management Branch will explore measures to resolve the problem of determining proper means for disposal of spoils in coastal ports resulting from vital channel dredging activities. Dredging activities are subject to all pertinent State and Federal (Corps of Engineers Section 404) permits.

POLICY II-2: DSD/Hydraulic Dredging

PROBLEMS ADDRESSED/Policy II-2

Mechanical dredging has greater harmful environmental impacts than hydraulic dredging. Hydraulic dredging is not used in all cases, however, because of site location, availability of dredging equipment, options for dredged material disposal, and related economic factors.

POLICY II-2: Encouragement

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO RECOMMEND THAT HYDRAULIC DREDGING BE USED INSTEAD OF MECHANICAL DREDGING, WHENEVER FEASIBLE. (Also see Policies II-1, III-1, IV, IX-A, IX-B.1, IX-C).

AUTHORITY(S)/Policy II-2

Pennsylvania Constitution, Article I, Section 27. The Dam Safety Act, Act of November 26, 1978, P.L. 1375, as amended (32 P.S. Sections 693.1 et seq.).

POLICY ACTIONS/Policy II-2

This policy ensures that in the permitting of dredging in coastal zones consideration is given to the fact that hydraulic dredging is less environmentally damaging than mechanical dredging; and therefore, when feasible hydraulic methods will be encouraged. Principally, hydraulic dredging is recommended in the Pennsylvania coastal zones because it generates less turbidity and silt movement than does mechanical dredging. Increased sediment movement in Presque Isle Bay or the Delaware Estuary is a highly undesirable event. Hydraulic dredging, however, may not be appropriate in all cases. Site location, availability of dredging options for dredged material disposal, biological resources which may be adversely affected, and related economic factors, will be used to recommend the most suitable method of dredging.

III. FISHERIES MANAGEMENT (FM)

Both of Pennsylvania's coastal areas once had significant commercial fisheries. In 1896, the Delaware River system, including the estuary, produced 20 million tons of shad and 21 million tons of oysters. Commercial fishing in Pennsylvania's Delaware waters is nonexistent today. Erie's commercial fishing industry reached its peak between 1910 and 1920 with catches averaging 800,000 pounds per year. The catch declined to less than 90,000 pounds per year in the 1960's but thus far in the 1970's has improved to 110,000 pounds annually.

Recreational fishing, meantime, has been increasing at a rapid rate in the past decades. This has led to increased demand for management programs designed to increase native stocks and introduce appropriate species in the coastal waters, as well as for additional access sites.

Pennsylvania waters of Lake Erie, except Presque Isle Bay, are most significantly affected by activities outside Pennsylvania's boundaries. The Delaware Estuary is a manifestation of the characteristics and activities throughout the Delaware River drainage basin, not just influences adjacent to or in the estuary. The managing of fisheries in Pennsylvania's coastal waters represents a very complex task requiring cooperation and coordination among all the various levels of governments and agencies.

POLICY III-1: FM/Support Fish Life

PROBLEMS ADDRESSED/Policy III-1

The coastal waters of the Commonwealth have experienced severe water quality problems over the past decades. These water problems have been generated from a multitude of sources, which include inadequately treated industrial, municipal and domestic wastes; increased turbidity due to improper dredging and spoil disposal practices; and water withdrawals for industrial, residential and electric generation use. These activities have caused severe periodic dissolved oxygen depletions, and have introduced toxic and hazardous wastes into the waters, thereby decreasing the amount of clean water for industrial and domestic purposes. In addition, the lack of dissolved oxygen and the presence of toxic and hazardous substances have decreased the ecological carrying capacity of the coastal waters and severely impaired the opportunities for water dependent activities.

POLICY III-1: Enforcement/Regulations

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO ENSURE THAT, TO THE EXTENT OF INTRASTATE CONTROL, THAT COASTAL WATERS SHALL NOT CONTAIN SUBSTANCES ATTRIBUTABLE TO POINT OR NONPOINT SOURCE WASTE DISCHARGES IN CONCENTRATION OR AMOUNTS SUFFICIENT TO BE INIMICAL OR HARMFUL TO THE WATER USES TO BE PROTECTED OR TO HUMAN, ANIMAL, PLANT OR AQUATIC LIFE INCLUDING COLD-WATER FISH, WARM-WATER FISH, OR MIGRATORY FISH. (Also see Policies I-A.2, II-1, IV, IX-A, IX-B.1).

AUTHORITY(S)/Policy III-1

Pennsylvania Constitution, Article I, Section 27. The Fish Law of 1959, Act of December 15, 1959, P.L. 1779, as amended (30 P.S. Sections 200 et seq.). The Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended (35 P.S. Sections 691.1 et seq.).

Regulation(s): 25 Pa. Code Chapters 92, 93.

POLICY ACTION/Policy III-1

This policy ensures that pertinent authorities, funds, and resources will be utilized in a manner to improve fish populations and aquatic habitats in the coastal waters of the Commonwealth.

POLICY III-2: FM/Stocking

PROBLEMS ADDRESSED/Policy III-2

Native fish populations in the coastal areas have been depleted by pollution, loss of habitat, overfishing, and other adverse activities. At the same time, greater demand is being placed on the coastal water by recreational anglers to provide diversified, unique, and bountiful catches.

POLICY III-2: Direct Action

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO MANAGE THE COMMONWEALTH'S COASTAL WATERS IN SUCH A MANNER AS TO AUGMENT NATIVE STOCKS AND INTRODUCE APPROPRIATE SPECIES, ONLY AFTER CAREFUL EVALUATION, SUCH AS MUSKELLUNGE IN THE DELAWARE ESTUARY AND SALMONIDS IN LAKE ERIE IN ORDER TO PROVIDE DIVERSE, UNIQUE, AND BOUNTIFUL CATCHES FOR THE COMMONWEALTH'S COASTAL FISHERMEN.

AUTHORITY(S)/Policy III-2

Fish Laws of 1959, Act of December 15, 1959, P.L. 1779, as amended (30 P.S. Section 2073).

POLICY ACTIONS/Policy III-2

This policy ensures that stocking will take place in the Commonwealth's coastal waters in such a manner that populations of the native species can be augmented, and when appropriate new species can be introduced to provide increased recreational fishing opportunities.

POLICY III-3: FM/Access

PROBLEMS ADDRESSED/Policy III-3

Recreation fishing constitutes a major use of Pennsylvania's coastal waters. Sport fishing generates more dollars per fish harvested than does commercial fishing. Existing access sites in the coastal areas are not sufficient to meet current and anticipated demands of sport anglers and boaters.

POLICY III-3: Direct Action

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO IMPROVE ACCESS TO THE DELAWARE ESTUARY AND THE LAKE ERIE WATERFRONTS THROUGH THE ACQUISITION OF NEW SITES AND/OR THE EXPANSION OF EXISTING SITES. (Also see Policies V-1, V-2, IX-A.1, X-1).

AUTHORITY(S)/Policy III-3:

The Fish Law of 1959, Act of December 15, 1959, P.L. 1779, as amended (30 P.S. Sections 292-295); Open Space Lands, Act of January 19, 1968, P.L. (1967) 992, (32 P.S. Sections 5001 et seq.).

POLICY ACTIONS/Policy III-3

This policy focuses State agencies attention and resources on the problem of limited boating and fishing access in the Commonwealth's coastal areas. Funding from Coastal Zone Management, Coastal Energy Impact Program, and other sources available to the Pennsylvania Fish Commission may be used to help meet current and future demands for access sites for fishing and boating activities in the Commonwealth's coastal waters.

POLICY III-4: FM/Studies

PROBLEMS ADDRESSED/Policy III-4

Coastal fisheries management decisions are hindered in Pennsylvania by a severe lack of base line data and effective methods to monitor the stability of the fish stocks. The lack of adequate information has often resulted in proposals and decision-making that have had adverse impacts on fish populations and recreational and commercial fishermen. Technical information is needed concerning long-term and short-term effects of dissolved oxygen depletion on fishes, effect of toxic wastes on fish stocks, the effects on humans who consume these fishes, commercial and recreational harvest data, and additional information to aid in determining the optimum harvest that can be permitted in coastal waters while ensuring the continued reproductive viability of the fish stocks.

POLICY III-4: Encouragement

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO UNDERTAKE DETAILED TECHNICAL STUDIES OF COASTAL FISHERIES, THEIR AQUATIC HABITATS AND ASSOCIATED ISSUES THAT IMPACT THEIR MANAGEMENT.

AUTHORITY(S)/Policy III-4:

No authority required.

POLICY ACTIONS/Policy III-4

This policy provides encouragement and will make Coastal Zone Management funds available to the Pennsylvania Fish Commission for the purpose of developing monitoring

capabilities to acquire baseline information for making effective management decisions and to monitor stability of coastal fishing stocks.

IV. WETLANDS

Wetlands represent a vital national resource of critical importance to the coastal areas of the Nation. In addition to providing habitat areas for fish and wildlife, wetlands provide natural flood control, improved water quality, flow stabilization and environmental diversity. In spite of these benefits, the environmental value of these sensitive areas has only recently been publicized.

In the past, Pennsylvania has lost tremendous amounts of tidal and freshwater wetlands to filling, bulkheading and development.

Additionally, the remaining wetlands are being threatened by the cumulative impacts of development that is occurring in adjacent areas.

POLICY IV-1, IV-1.1: Wetlands

POLICY IV-1: Enforcement/Regulations

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO PRESERVE, PROTECT AND, WHERE POSSIBLE, ENHANCE OR RESTORE THE REMAINING TIDAL AND FRESHWATER WETLANDS WITHIN THE COMMONWEALTH'S COASTAL AREAS BY REGULATING THROUGH PERMIT: DRAINING, DREDGING, FILLING, AND OTHER ACTIVITIES THAT AFFECT WATER QUALITY COURSE, CURRENT OR CROSS SECTION OF ANY WATER COURSE, FLOODWAY OR BODY OF WATER. THIS INCLUDES REGULATED ACTIVITIES IN OR OTHERWISE AFFECTING ANY IMPORTANT WETLAND. THIS WILL ENSURE THE CONSIDERATION OF THE WETLANDS' PUBLIC VALUES SUCH AS; AREAS OF FISH AND WILDLIFE HABITAT, INCLUDING ENDANGERED SPECIES AS IDENTIFIED IN THE FEDERAL ENDANGERED SPECIES ACT OF 1973, STORAGE AREAS FOR FLOOD WATERS, BUFFERS AGAINST SHORELINE EROSION, AND WATER PURIFICATION AREAS.

POLICY IV-1.1: Direct Action

FURTHERMORE, IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO PROTECT WETLANDS FROM CUMULATIVE IMPACTS ASSOCIATED WITH INCREASED RUNOFF FROM DEVELOPMENT AND OTHER ACTIVITIES OCCURRING IN ADJACENT AREAS BY ENCOURAGING THE DEVELOPMENT OF COMPREHENSIVE STORMWATER MANAGEMENT PLANS, THAT REGULATE SURFACE RUNOFF AND THE RESULTANT INTRODUCTION OF SEDIMENT, PESTICIDES, SALTS, AND TOXIC MATERIALS INTO WETLANDS. (Also see Policies I-A.3, II-2, III-1, IX-A.1, IX-B.1, X-3).

AUTHORITY(S)/Policy IV-1, IV-1.1

Pennsylvania Constitution, Article I, Section 27. The Dam Safety Act, Act of November 26, 1978, P.L. 1375, as amended (32 P.S. Sections 693.1 et seq.); Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended (35 P.S. Sections 691.1 et seq.); Storm Water Management Act, Act of October 4, 1978, P.L. 864 (32 P.S. Sections 680.1 et seq.); Soil Conservation Law, Act of May 15, 1945, P.L. 547, as amended (3 P.S. Sections 849 et seq.).

Regulation(s): 25 Pa. Code, Chapters 91, 92, 93, 94, 95, 97, 99, 100, 101, 102, 105, 106, 107 and 109.

POLICY ACTIONS/Policy IV-1.1

This policy ensures through regulations, permit requirements, and financial assistance from the Coastal Zone Management Program that wetlands in the Commonwealth's coastal areas will be regulated in a manner to protect them from adverse impacts. Furthermore, the policy may protect wetlands from cumulative impacts in adjacent areas, by providing encouragement and Coastal Zone Management funding for the development of comprehensive stormwater management plans that help protect wetlands from damage due to increased amounts of sediments, salts, pesticides, and other toxic materials. Any activity impacting wetlands must receive all pertinent State and Federal Corps of Engineers Section 404) permits before it may occur.

V. PUBLIC ACCESS FOR RECREATION (PAR)

Both nationally and within Pennsylvania there is a growing demand for access to the shorefront of Lake Erie and the waterfront of the Delaware River. People seek access not only for traditional recreational pursuits such as boating and fishing, but increasingly for more passive forms of recreation such as walking, picnicking, or just viewing the water. In both Erie and the Philadelphia area, waterfront visitors are increasingly interested in observing the activities of a "working" port, such as vessels of many descriptions unloading cargo from around the world.

Currently, however, due to physical, fiscal, and legal constraints the demand for recreation access in the Commonwealth's coastal areas is not being adequately accommodated.

POLICY V-1: PAR/Additional Access

PROBLEMS ADDRESSED/Policy V-1

There is a severe lack of available and accessible areas suitable for active and/or passive public recreation opportunities in both coastal zones. In the Lake Erie area, private ownership of lakefront properties and physical constraints; ie., bluffs, are the principal impediments to public access. In the Delaware Estuary, intensive development and private ownership constitute the major constraints to public access.

Furthermore, with the increasing costs of acquiring properties for recreational development, alternative sources of funding as well as means other than fee simple acquisition must be fully utilized to meet increasing recreation demands.

POLICY V-1: Direct Action

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO PROVIDE ADDITIONAL PUBLIC ACCESS OPPORTUNITIES ALONG THE WATERFRONTS OF LAKE ERIE AND THE DELAWARE RIVER FOR ACTIVE RECREATION SUCH AS SWIMMING, FISHING, AND BOAT LAUNCHING, AS WELL AS FOR MORE PASSIVE ACTIVITIES SUCH AS SIGHTSEEING AND PICNICKING. (Also see Policies III-3, V-2, IX-A).

AUTHORITY(S)/Policy V-1

Pennsylvania Constitution, Article I, Section 27. Interagency agreement through a Memorandum of Understanding (DATE) between the Department of Environmental Resources and the Department of Community Affairs, places high priority on the development of access areas within the Commonwealth's two coastal zones. Agency authority to acquire land through purchase, gift, lease, or condemnation is conferred on the Department of Environmental Resources and the Department of Community Affairs respectively, through the Administrative Code of 1929, Act of April 9, 1929, P.L. 177, as amended, (71 P.S. Sections 510-1, 510-2, 510-4, 510-5, 510-6); and the Administrative Code of 1929, Act of April 9, 1929, P.L. 177, (71 P.S. Section 670.101).

Additionally, authority is conferred on the State through the Open Space Lands, Act of January 19, 1968, P.L. (1967) 992 (32 P.S. Sections 5001 et seq.).

POLICY ACTIONS/Policy V-1

Access sites will be acquired through the utilization of fee simple purchase, leaseback, saleback, and other less than fee simple arrangements. Traditional sources of funds will be utilized and supplemented whenever possible with funds from the Coastal Energy Impact Program, and such other

sources as may be available to State agencies and local governments. Additionally, Coastal Zone Management Program funds may be utilized for the design of recreational facilities. Furthermore, efforts will be made to coordinate with the Commonwealth's Scenic Rivers and Trails Programs, which may lead to enhanced water quality and increased recreational opportunities.

POLICY V-2: PAR/Geographic Areas of Particular Concern (GAPC'S)

PROBLEMS ADDRESSED/Policy V-2

There are two types of Geographic Areas of Particular Concern (GAPC) identified for the Lake Erie and Delaware Estuary coastal zones: designated GAPC and monimated GAPC. Designated GAPC are those over which the Commonwealth has control through ownership or regulation. Nominated GAPC includes areas of significant natural value; development opportunity areas; areas of significant recreational, historic, or cultural value; and overlap areas. Although they are considered under the same general heading (GAPC), these areas exhibit different characteristics, represent different concerns, and are suited for different types of activities.

Those GAPC's nominated as having significant natural value or significant recreational, historic, or cultural value have been determined by the Coastal Zone Management Program as having high potential for offering active and/or passive forms of recreation. Efforts should be made to develop these areas in a manner that enhances this innate potential.

POLICY V-2: Encouragement

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO GIVE HIGH PRIORITY TO ACQUISITION AND/OR DEVELOPMENT OF GAPC'S, NOMINATED AS AREAS OF SIGNIFICANT NATURAL VALUE, AND AREAS OF HISTORICAL, CULTURAL OR RECREATIONAL SIGNIFICANCE, TO PROVIDE PUBLIC ACCESS OPPORTUNITIES FOR ACTIVE AND/OR PASSIVE FORMS OF RECREATION. (Also see Policies III-3, V-1, IX-A).

AUTHORITY(S)/Policy V-2

Pennsylvania Constitution, Article I, Section 27. Authorities providing acquisitionary powers to the Department of Environmental Resources and the authorities providing power to the Department of Community Affairs to make grants to municipalities for the purpose of developing recreational sites are reviewed in the authority section for Policy V-1: PAR/Additional Access.

POLICY ACTIONS/Policy V-2

As a result of this policy, pertinent State and Federal program funds will be actively solicited to promote and encourage the development of public recreation opportunities in GAPC's designated as Areas of Significant Natural Value and Areas of Historic, Cultural or Recreational Significance.

VI. HISTORIC SITES AND STRUCTURES (HSS)

Historic preservation is a concern at the national, state and local level. There are many reasons that justify historic preservation, including economic, cultural, aesthetic and educational benefits. Yet, attempts to preserve valuable reminders and monuments of the past have been sporadic and unpredictable. By making history more real and less abstract, historic buildings foster an appreciation and understanding of the past. Techniques of construction and popular architectural styles can be observed first hand.

In many cases, valuable historic resources have not been consciously preserved, but instead have been spared only through benign, temporary neglect. Unless government and private citizens begin to plan immediately for preservation and protection of significant sites and structures, they may eventually come to be viewed as "stumbling blocks" in the way of "progress".

Potentially, valuable buildings are lost each year in Pennsylvania through lack of interest, insufficient knowledge, or the absence of timely intervention.

The Commonwealth's coastal areas contain some of the State's oldest communities, with large concentrations of historic sites. Unfortunately, many of these structures are sited in such a manner as to be extremely vulnerable to future development. Local governments and historical societies find it difficult to raise the 50 percent "local share" required for Federal aid programs. In addition, maintenance of historic properties becomes expensive and is the responsibility of the government or historical society if sites are purchased for preservation.

There is a limit to the number of "home museums" that any area, no matter how historic, can support. Over-reliance on public purchase removes valuable properties from the tax roles. For this reason, the concept of "adaptive reuse" of historic structures is now well known and widely utilized. The idea involves "recycling" old buildings that are no longer suited to their original purpose. Through the use of this technique mills,

barns, churches, and industrial buildings are converted to stores and shops, residences, offices, art galleries, antique centers, and community buildings.

POLICY VI: Historic Preservation

POLICY VI: Encouragement

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO ASSIST THE PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION IN THE IDENTIFICATION, RESTORATION, AND PRESERVATION OF ARCHAEOLOGICALLY, ARCHITECTURALLY AND HISTORICALLY SIGNIFICANT SITES AND STRUCTURES IN THE COMMONWEALTH'S COASTAL ZONES. (Also see Policies IV, X-2).

AUTHORITY(S)/Policy VI

Pennsylvania Constitution, Article I, Section 27. Historic Preservation Act, the Act of November 22, 1978, P.L. 1160 (71 P.S. Sections 1047.1(a) et seq.), imposing powers and duties on the Pennsylvania Historical and Museum Commission; and requiring interagency and interdepartmental coordination with the Commission. Executive Order, Number 1975-6, Preservation of Historic Resources, May 6, 1975.

POLICY ACTIONS/Policy VI

This policy provides focus to and resources for the implementation of the State Historic Preservation Plan in the Commonwealth's coastal zones. Actions which will be undertaken by the Coastal Zone Management Program are: the provision of funding, dissemination of information, technical assistance, and other actions deemed appropriate to ensure that the historic resources of the coastal zones are preserved and maintained for this and future generations.

VII. PORT ACTIVITIES

Pennsylvania's ports represent a vital link between the water and the inland transportation systems and constitute a national as well as a regional resource.

The ports in the Delaware Estuary coastal zone are particularly well equipped to handle bulk cargo, with the petroleum industry accounting for much of the port's import tonnage. Exports of Pennsylvania coal to foreign countries are expected to increase markedly in the future and upgraded port facilities will be required in the coastal zone to augment throughput capacity. The

port and petroleum industries, in turn, support related activities such as warehousing, trucking, chemical industries, and primary metals. The Port of Erie is one of the finest natural harbors on the Great Lakes by providing excellent storm protection and winter layover areas. The Port's marine terminal boasts the largest capacity crane facilities on the U.S. side of the Great Lakes.

While the coastal ports do have their strong points, both are marked by underutilized areas that have fallen into disrepair - areas that are uneconomic as well as visually unattractive. Changing vessels and cargo handling technology have made and will continue to make various port facilities obsolete, necessitating the provision of modern port facilities, served by adequate support activities and an adequately dredged channel. Marine terminals for the handling of "containerized" cargo require vast amounts of land and superior rail and highway linkages. These problems are further accentuated in the Erie port by the lack of adequate highway access to the interstate highway system two miles to the southwest.

POLICY VII-1: Port Activities/Development

PROBLEMS ADDRESSED/Policy VII-1

Pennsylvania's port facilities along Lake Erie and the Delaware Estuary are marked by underutilized areas that have fallen into disrepair - areas that are uneconomic as well as visually unattractive. The failure to adapt to changing port technologies, natural competitive advantages held by neighboring ports, and poor inland transportation networks are part of the reason for the decline of Pennsylvania's ports.

POLICY VII-1: Encouragement

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO ACTIVELY ATTRACT AND ENCOURAGE THE SITING OF PORT DEPENDENT ECONOMIC ACTIVITIES IN THE COMMONWEALTH'S COASTAL PORTS. (Also see Policies IX-A, X-3).

AUTHORITY(S)/Policy VII-1

No specific authorities required.

POLICY ACTIONS/Policy VII-1

This policy focuses the ongoing attention and resources of pertinent State agencies toward the problems of preserving and enhancing the economic viability of the Commonwealth's coastal ports.

POLICY VII-2: Port Activities/Planning

PROBLEMS ADDRESSED/Policy VII-2

Traditionally, it has been difficult to establish cooperative planning efforts in either of Pennsylvania's coastal ports. This lack of regional cooperation among the ports, makes long-range comprehensive planning for the upgrading of port facilities difficult. In addition, institutional, financial and political problems relating to Pennsylvania's ports, remains largely unresolved.

POLICY VII-2: Encouragement

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO UTILIZE ITS FISCAL AND OTHER PERTINENT RESOURCES TO SUPPORT LONG-RANGE, COMPREHENSIVE PLANNING FOR THE FUTURE DEVELOPMENT AND GROWTH OF THE PORT OF ERIE AND THE PENNSYLVANIA PORTS OF THE DELAWARE ESTUARY, WHICH ENCOURAGES THE ATTRACTION, ENHANCEMENT, AND DEVELOPMENT OF WATER DEPENDENT ECONOMIC ACTIVITIES. (Also see Policy V-1, IX-A, IX-C).

AUTHORITY(S)/Policy VII-2

No specific authorities required.

POLICY ACTIONS/Policy VII-2

This policy commits Coastal Zone Management funds and other pertinent resources which may become available to support long-range, comprehensive planning on an ongoing basis for the future development and growth of the Port of Erie and the ports of the Delaware Estuary. Upon completion and favorable review of these plans and studies by the Coastal Zone Management Branch, the findings and goals of these studies will be incorporated into the Pennsylvania Coastal Zone Management Program. In addition, the Coastal Zone Management Branch will work more closely with the port interests and engage in further studies aimed at improving permitting and coordinating activities.

POLICY VII-3: Port Activities/Urban Base Enhancement

PROBLEMS ADDRESSED/Policy VII-3

Urbanized areas of the Commonwealth's coastal zones serve as valuable residential, commercial, and industrial centers. The economic base in many of these areas is weakening, however, due to aging of facilities, changing technology and lack of modern infrastructure. This determination has created both economic and

social problems, which in turn contribute to the general deterioration of the Commonwealth's urban coastal environment.

In order to stem and reverse such deterioration, it is imperative that: existing viable economic activities be aided and enhanced, that new economic activities which are adaptable to new technologies and changing needs be encouraged and aided in locating in these areas, and improvements be made to the infrastructure (i.e., roads, terminals, etc.) to facilitate these activities.

POLICY VII-3: Encouragement

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO UTILIZE FISCAL AND OTHER AVAILABLE MANAGEMENT RESOURCES TO: ENCOURAGE THE ENHANCEMENT OF CURRENT VIABLE ECONOMIC ACTIVITIES, ENCOURAGE THE ATTRACTION OF NEW ECONOMIC ACTIVITIES WHICH ADAPT TO THE AREAS' CHANGING NEEDS, AND ENCOURAGE IMPROVEMENTS IN THE AREAS' INFRASTRUCTURE TO PROVIDE A STRONG ECONOMIC BASE FOR THE URBANIZED SECTIONS OF THE COMMONWEALTH'S COASTAL ZONES.

AUTHORITY(S)/Policy VII-3

No specific authorities required.

POLICY ACTIONS/Policy VII-3

The Coastal Zone Management Program will provide funds, stimulate coordination, and utilize management expertise for the development of plans and programs designed to enhance current economic activities in, attract new economic activities to, and improve the infrastructure of the Commonwealth's urbanized coastal areas.

VIII. ENERGY FACILITY SITING (EFS)

Energy production is a problem of national as well as state and regional significance. Pennsylvania's coastal zones are no exception. The increasing demand for energy coupled with the inherent locational advantages the coastal zones offer to the siting of many energy facilities, makes it inevitable that additional facilities will be located in the Commonwealth's coastal areas in the future. Although these facilities are vital to the coastal areas, as well as the Commonwealth's continued economic viability, improper siting of facilities can damage fragile coastal ecosystems.

POLICY VIII-1: EFS/Permitting

PROBLEMS ADDRESSED/Policy VIII-1

The Commonwealth has an energy facility permitting process which has the ability, through the issuance of permits covering air discharges, water discharges and withdrawals, solid waste disposal, shoreline erosion control, wetlands protection and control of water obstructions and encroachments in the bed of Lake Erie and the Delaware River, to ensure that all facilities are sited in an environmentally responsible manner.

POLICY VIII-1: Enforcement/Regulations

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO ENSURE THROUGH REGULATIONS, BY PERMIT, THAT ENERGY FACILITIES SUCH AS OIL AND GAS REFINERIES, ELECTRIC GENERATING STATIONS (COAL, HYDRO, OIL AND GAS), ELECTRIC GENERATING SUBSTATIONS, GAS DRILLING, AND LIQUIFICATION OF NATURAL GAS OPERATIONS LOCATING IN THE COASTAL AREAS ARE SITED IN SUCH A MANNER THAT THE COASTAL AREAS ECOSYSTEMS ARE NOT UNREASONABLY ADVERSELY AFFECTED. (Also see Policies I-B, II-1, IV-1, VIII-2, IX-A, IX-B.1, IX-B.2).

AUTHORITY(S)/Policy VIII-1

Pennsylvania Constitution, Article I, Section 27. The Solid Waste Management Act, Act of July 31, 1968, P.L. 788, as amended (35 P.S. Sections 6001 et seq.); The Air Pollution Control Act, Act of January 8, 1960, P.L. (1959) 2119, as amended (35 P.S. Sections 4001 et seq.); The Clean Streams Law, Act of June 22, 1937, P.L. 1987 (35 P.S. Sections 691.1 et seq.); The Dam Safety Act, Act of November 26, 1978, P.L. 1375, as amended (32 P.S. Sections 693.1 et seq.); Soil Conservation Law, Act of May 15, 1945, P.L. 547, as amended (3 P.S. Sections 849 et seq.); The Administrative Code, Act of April 9, 1929, P.L. 177, as amended (71 P.S. Section 510-20); Radiation Control, Act of January 28, 1966, P.L. (1965) 1625 (73 P.S. Sections 1301 et seq.); Act of July 1, 1978, P.L. 598 (66 PA. C.S. Sections 1101 et seq.).

Regulation(s): 25 Pa. Code Chapters 75, 91, 92, 93, 95, 97, 101, 102, 105, 121, 123, 124, 127, 129, 131, 133, 135, 6 Pa. Code Chapter V et seq.

POLICY ACTIONS/Policy VIII-1

The Coastal Zone Management Branch will monitor permit applications for the development of energy facilities in the Commonwealth's coastal areas to ensure these facilities are sited in an environmentally responsible manner. Additionally, coastal zone management funds and expertise

will be utilized in developing studies and siting procedures designed to improve the current site selection process.

POLICY VIII-2: Energy Facilities/Natural Gas

PROBLEMS ADDRESSED/Policy VIII-2

The increasing dependence on foreign energy supplies is a problem of national concern. The coastal areas of Pennsylvania contain supplies of natural gas that could address this problem at the local level. To date, however, the development of these supplies has been delayed.

POLICY VIII-2: Enforcement/Regulations

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO FACILITATE THE PRODUCTION OF NATURAL GAS SUPPLIES IN LAKE ERIE USING PROPER ENVIRONMENTAL SAFEGUARDS THAT ARE DESIGNED TO MINIMIZE ADVERSE AIR AND WATER QUALITY IMPACTS ASSOCIATED WITH RESOURCE EXPLORATION AND DEVELOPMENT. (Also see Policies II-1, IV, VIII-1, IX-A, IX-B.1, IX-B.2).

AUTHORITY(S)/Policy VIII-2

Pennsylvania Constitution, Article I, Section 27. The Administrative Code, the Act of April 9, 1929, P.L. 177, as amended, (71 P.S. Sections 510-2); These acts provide the Department of Environmental Resources with the authority to regulate oil and gas exploration and development. The Dam Safety Act, Act of November 26, 1978, P.L. 1375, as amended, (32 P.S. Sections 693.1 et seq.); Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended (35 P.S. Sections 691.1 et seq.); Act of July 1, 1978, P.L. 598 (66 PA. C.S. Sections 1101 et seq.).

Regulation(s): 25 Pa. Code Chapters 79, 80, 105; 66 Pa. Code Chapter 1 et seq.

POLICY ACTIONS/Policy VIII-2

This policy focuses coastal zone management funds and resources on addressing the problems currently existing in the development of energy resources in the Commonwealth's coastal areas. In addition to improving the monitoring of the current permitting system, efforts will be made to educate the public as to what the ramifications of developing these energy resources entails in the coastal zones.

POLICY VIII-3: EFS/Site Selection

PROBLEMS ADDRESSED/Policy VIII-3

Currently, the Commonwealth's coastal municipalities comprehensive plans do not contain any recommendations as to appropriate sites or a site selection process, to accommodate new energy facility development. Therefore, a key step, necessary for ensuring that energy facility siting is done in a timely and responsible manner, is missing from the site selection process.

POLICY VIII-3: Encouragement

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO UTILIZE COASTAL ZONE MANAGEMENT FUNDS AND PROVIDE OTHER PERTINENT ASSISTANCE, TO ENCOURAGE COASTAL MUNICIPALITIES TO AMEND THEIR COMPREHENSIVE PLANS TO REFLECT THE RECOMMENDATIONS CONTAINED IN THE ENERGY FACILITY SITING PLANNING PROCESS DEVELOPED BY THE COASTAL ZONE MANAGEMENT PROGRAM, WHICH AMONG OTHER THINGS RECOMMENDS THAT WHENEVER FEASIBLE, NEW ENERGY FACILITIES ARE LOCATED ADJACENT TO EXISTING ONES. (Also see Policy X-2).

AUTHORITY(S)/Policy VIII-3

No specific authority is required.

POLICY ACTIONS/Policy VIII-3

This policy improves the energy facility site selection process in coast areas by providing a rationale for accommodating potential energy facilities development. Local Municipalities will be encouraged to incorporate the findings of the Coastal Zone Management Program's energy facility planning process into their comprehensive plans. Coastal Zone Management funds and technical advise will be available to assist in incorporating the planning process into the comprehensive plans.

POLICY VIII-4: Energy Resources/Outer Continental Shelf

PROBLEMS ADDRESSED/Policy VIII-4

Significant economic benefits may accrue to the Commonwealth, particularly the southeastern portion, if gas and oil reserves in the Baltimore Canyon prove significant and are developed. However, unless this development occurs in an environmentally responsible manner, the environment could be seriously degraded.

POLICY VIII-4: Encouragement

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO SUPPORT THE DEVELOPMENT OF OUTER CONTINENTAL SHELF OIL AND GAS RESOURCES THROUGH ALL AVAILABLE MEANS, PROVIDED THAT THE NECESSARY ENVIRONMENTAL SAFEGUARDS ARE ENFORCED THROUGH REGULATION BY THE APPROPRIATE FEDERAL AND STATE AGENCIES TO ENSURE THAT THE INTEGRITY OF THE ADJACENT FISH AND WILDLIFE HABITAT IS NOT IRREPARABLY DAMAGED DUE TO DRILLING AND OTHER DEVELOPMENT ACTIVITIES. (Also see Policies III-1, IX-B.1, IX-B.2).

AUTHORITY(S)/Policy VIII-4

No specific authority is required.

POLICY ACTIONS/Policy VIII-4

Utilizing the A-95 review process and the procedure explained in Chapter 5 for ensuring Federal consistency for OCS activities, the Coastal Zone Management Program will support all Outer Continental Shelf oil and gas development that observes pertinent environmental standards.

IX. INTERGOVERNMENTAL COORDINATION(IC)

The Pennsylvania Coastal Zone Management Program is based on a networking principle. Therefore, it is vitally important that mechanisms are developed that ensure that all departments, commissions, and other agencies which administer programs or issue permits in the Commonwealth's coastal zones, do so in a clear, concise and coordinated manner to ensure program consistency. Additionally, two areas of national importance, air and water quality standards, need to be adopted by the Program and administered in a manner consistent with national goals.

POLICY IX-A: IC/Consistency

PROBLEMS ADDRESSED/Policy IX-A

Presently, actions within the coastal zones are regulated by a variety of State agencies with varying mandates. Mechanisms need to be developed to ensure that all State actions in the coastal zones are consistent with Coastal Zone Management enforceable policies.

POLICY IX-A: Enforcement/Regulations

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO INITIATE A PROGRAM OF "STATE CONSISTENCY" TO ENSURE THAT ALL STATE ADMINISTRATIVE DEPARTMENTS AND INDEPENDENT ADMINISTRATIVE BOARDS AND COMMISSIONS AND OTHER STATE AGENCIES SHALL ENFORCE AND ACT CONSISTENTLY WITH THE ENFORCEABLE POLICIES OF THE PENNSYLVANIA COASTAL ZONE MANAGEMENT PROGRAM.

AUTHORITY(S)/Policy IX-A

Pennsylvania Constitution, Article I, Section 27. Pennsylvania Constitution Article IV, Section 2; Administrative Code of 1929, Act of April 9, 1929, P.L. 177, as amended (71 P.S. Sections 510-20, 241, 181). Executive Order (Number and Date).

POLICY ACTIONS/Policy IX-A

All administrative departments and independent administrative boards and commissions and other State agencies shall enforce and act consistently with the enforceable policies of the Coastal Zone Management Program. These actions are achieved by using an Executive Order and Memoranda of Understanding to ensure State consistency on the Commonwealth's coastal areas activities covered by the Coastal Zone Management policies.

POLICY IX-B.1: IC/Water Quality

PROBLEMS ADDRESSED/Policy IX-B.1

Improvement of water quality is a prime concern in the Commonwealth's coastal areas. Specific water quality problems include poorly or inadequately treated waste discharges from municipal, nonmunicipal, and industrial sewage treatment plants, failure of on-site disposal systems, leachate from solid waste and sanitary land fills, runoff from agricultural land and animal feed lots, poor stormwater management, and salt water intrusion of the groundwater and surface water.

POLICY IX-B.1: Enforcement/Regulations

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO ADOPT BY REFERENCE, THE REQUIREMENTS OF THE FEDERAL CLEAN WATER ACT (P.L. 95-217, AS AMENDED) AND TO INCORPORATE THESE REQUIREMENTS INTO THE COMMONWEALTH'S COASTAL ZONE MANAGEMENT PROGRAM.

AUTHORITY(S)/Policy IX-B.1

The Sewage Facilities Act of January 24, 1966, P.L. (1965) 1535, as amended (35 P.S. Sections 750.1 et seq.); the Clean Streams Law, Act of Jun 22, 1937, P.L. 1987, as amended (35 P.S. Sections 691.1 et seq.).

Regulations: 25 Pa. Code Chapters 91, 92, 93, 94, 95, 97, 99, 100, 101.

POLICY ACTIONS/Policy IX-B.1

By adopting the goals of the Clean Water Act (which incorporates the Federal National Pollution Discharge Elimination System Program delegated to the Commonwealth), the Commonwealth agrees to monitor present stream, river, and coastal water quality, and set standards and objectives for future water quality; regulate present and future point source discharges through issuance of permits which establish compliance schedules based on effluent limitations and receiving water standards; plan for future waste treatment needs and construct or upgrade municipal sewer systems and treatment plants to attain a level of treatment equivalent to secondary treatment; identify waste treatment facility needs, priorities and schedules; establish a regulatory program to provide for waste treatment management on an areawide basis, the creation of new discharges, and pretreatment of industrial and commercial wastes; identify other means necessary to carry out the above; and establish a process to identify and control nonpoint sources, disposal of wastes, and the salt water intrusion of groundwater and surface water regimens.

POLICY IX-B.2: IC/Air Quality

PROBLEMS ADDRESSED/Policy IX-B.2

Improvement of air quality is a prime concern in the Commonwealth's coastal areas. The major air quality problems in EPA air quality regions, Northwest Pennsylvania, Youngstown Interstate and Metropolitan Philadelphia Interstate Control Regions, are that both experience periodic violations of the National Ambient Air Quality Standards for carbon monoxide and photochemical oxidants: violation of the National Ambient Air Quality Standards are experienced for carbon monoxide and photochemical oxidants in the Delaware Estuary coastal zone; and violation of the standards for particulates in oxidants in the Lake Erie coastal zone.

Pennsylvania's State Implementation Plan (SIP) prepared for metropolitan areas of more than 200,000 population, is consistent with the Coastal Zone Management Program because the State plan was adopted by the Program. In addition, the SIP indicates that

reduced emissions from existing industries, coupled with "offset" required by EPA, will allow room for new industries consistent with coastal zone goals and policies.

Stationary sources of pollution such as power plants, steel mills, manufacturing and painting facilities currently require State permits. In areas that currently meet standards, permits are required to prevent significant deterioration (PSD) of air quality. This Coastal Zone Management Program will not alter this existing regulatory authority. Agencies involved in air quality planning for mobil sources of pollution will continue to examine opportunities for emission reduction both inside and outside of the coastal zones. Transportation facilities and improvement which reduce traffic volumes or decrease emission, will be supported and endorsed by the Coastal Zone Management Program.

POLICY IX-B.2: Enforcement/Regulations

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO ADOPT BY REFERENCE, THE REQUIREMENTS OF THE FEDERAL CLEAN AIR ACT AND TO INCORPORATE THESE REQUIREMENTS INTO THE COMMONWEALTH'S COASTAL ZONE MANAGEMENT PROGRAM.

AUTHORITY(S)/Policy IX-B.2

Air Pollution Control Act of January 8, 1960, P.L. (1959) 2119, as amended (35 P.S. Sections 4001 et seq.); The Administrative Code of 1929, Act of April 9, 1929, P.L. 177, as amended (71 P.S. Section 510-1).

Regulation(s): 25 Pa. Code Chapters 121, 123, 124, 127, 129, 131, 133, 135, 137, 141.

POLICY ACTIONS/Policy IX-B.2

The Coastal Zone Management Program will support, with funds and technical expertise, the State Air Quality Implementation Plan (SIP) for stationary and mobil sources of pollution in the Commonwealth's coastal areas; as the means by which to achieve the goals of the Clean Air Act.

POLICY IX-C: IC/Permit Improvement

PROBLEMS ADDRESSED/Policy IX-C

Presently, the Commonwealth's regulatory permitting system has two major drawbacks. The first being a need for improved coordination both within and between the various agencies with permitting authorities. The second problem deals with a lack of public understanding of the permitting process which may manifest itself in the following ways: a person engaging in an action may

not know a permit is required, a person may know a permit is required but not how to acquire one, a person may not know if an action requires more than one permit and if it does, how to acquire the additional permits.

POLICY IX-C: Encouragement

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO PERIODICALLY INITIATE, COORDINATE, AND PARTICIPATE IN COMPREHENSIVE STUDIES AIMED AT IMPROVING THE REGULATORY PERMITTING PROCESS IN THE COMMONWEALTH'S COASTAL ZONES. (Also see Policies IX-A, X-3).

AUTHORITY(S)/Policy IX-C

Pennsylvania Constitution, Article I, Section 27. No other specific authority needed.

POLICY ACTIONS/Policy IX-C

This policy commits coastal zone management funds and resources to the development of recommendations aimed at correcting current problems existing in the permitting systems operating in the coastal zones. Furthermore, affected agencies and their staff will be encouraged to participate in the studies and assist in making recommended changes to their permitting procedures.

POLICY IX-D.: IC/Choices for Pennsylvanians

PROBLEMS ADDRESSED/Policy IX-D

In the past problems facing the Commonwealth such as a deteriorating economic base, a deteriorating housing stock, urban decay, aging infrastructure, unwise utilization of natural resources, destruction or degradation of key natural resources, and at times cumbersome permitting systems, were being addressed for the most part unilaterally by individual State agencies. Recently, however, the Commonwealth has realized the need to address these interrelated problems in a comprehensive and coordinated manner and has developed a unified strategy to accomplish this as presented in "Choices for Pennsylvanians" (Toward an Economic Development and Community Conservation Strategy); as prepared by the Governor's Office of Policy and Planning.

POLICY IX-D: Encouragement

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO EMBRACE THE CONCEPTS SET FORTH BY "CHOCIES" AND TO PROMOTE THE POLICY OBJECTIVES AND POLICIES OF "CHOICES" IN THE COMMONWEALTH'S COASTAL ZONES; TO THE EXTENT PERMITTED BY THE

COASTAL ZONE MANAGEMENT PROGRAM'S COORDINATIVE MECHANISMS AND IMPLEMENTATION RESOURCES.

AUTHORITY(S)/Policy IX-D

No authority required.

POLICY ACTIONS/Policy IX-D

Commonwealth agencies' actions will be coordinated and integrated (as advocated by "Choices") in the Commonwealth's coastal zones via the Coastal Zone Advisory Committee and the Coastal Zone Steering Committees. Coastal zone management funds will be utilized to promote permit simplification, to promote wise local planning which embraces the concepts of "Choices" and to assist in the development of local economic and natural resource oriented studies which reflect the policies of "Choices". Coastal zone management funds will not be utilized for any project or activity which is contrary to the policies of "Choices".

X. PUBLIC INVOLVEMENT (PI)

While there has been an increasing awareness of coastal issues and problems, much more needs to be done in this area. There is a need for providing adequate information and opportunities to the public so that they can be involved in helping to solve the problems associated with these coastal issues.

POLICY X-1: PI/Sunshine Law

PROBLEMS ADDRESSED/Policy X-1

The fair and adequate representation of the public interest in all decision-making activities affecting the public is in the best interests of the Commonwealth. When formal decisions are to be undertaken, the public must have adequate opportunity to provide information and comment on the proposed actions. This provision for public comment helps ensure that final decisions on the action will truly reflect the public attitude.

POLICY X-1: Direct Action

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO ENSURE THAT ALL MEETINGS, WHERE FORMAL ACTION IS TO BE TAKEN, BE OPEN TO THE PUBLIC, PRECEEDED BY PUBLIC NOTICE AND HELD IN REASONABLY ACCESSIBLE LOCATIONS.

AUTHORITY(S)/Policy X-1

Open Meeting Law, Act of July 19, 1974, P.L. 486 (65 P.S. Sections 261 et seq.).

POLICY ACTIONS/Policy X-1

This policy requires the Coastal Zone Management Program to provide public notice and hold meetings in accessible places when "formal action" is to be taken. The Act defines "formal action" as the taking of any vote on any resolution, rule, order, motion, regulation, ordinance or the setting of any official policy, 65 P.S. Section 261.

POLICY X-2: PI/Participation

PROBLEMS ADDRESSED/Policy X-2

If the public is not made aware of and not brought into the decision-making process concerning coastal issues then a valuable resource will not be utilized and the Coastal Zone Management Program will not reflect the public interest, neither will it be able to function effectively.

POLICY X-2: Encouragement

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO PROVIDE CITIZENS, SPECIAL INTEREST GROUPS, AND ALL OTHER SEGMENTS OF THE PUBLIC WITH OPPORTUNITIES FOR EARLY AND CONTINUOUS INVOLVEMENT AND PARTICIPATION IN THE COMMONWEALTH'S COASTAL ZONE MANAGEMENT PROGRAM, THROUGH THE DEVELOPMENT OF EFFECTIVE COMMUNICATION AND PARTICIPATION MEASURES. (Also see Policy X-1).

AUTHORITY(S)/Policy X-2

No specific authority is needed.

POLICY ACTIONS/Policy X-2

This policy encourages the development and use of appropriate forums to involve and educate citizens regarding projects and programs which have a significant or controversial impact on coastal resources; subject those projects and programs to public scrutiny and discussion; and encourage the submittal of recommendations concerning such projects and programs to appropriate governmental agencies.

Furthermore, the policy will encourage program participants to hold public informational meetings and involve citizens and technical members in issue study, problem identification, proposal development, and decision-making.

POLICY X-3: PI/Coastal Zone Advisory Committee

PROBLEMS ADDRESSED/Policy X-3

Presently, no formal mechanism exists at the State level to address State and local coordination on coastal issues, to review the Coastal Zone Management Program with respect to public responsiveness and fulfilling the needs of the Commonwealth, and to review the effectiveness of regulations pertaining to coastal resources.

POLICY X-3: Encouragement

IT IS THE POLICY OF THE COASTAL ZONE MANAGEMENT PROGRAM TO ESTABLISH A COASTAL ZONE ADVISORY COMMITTEE WHOSE PURPOSE WILL BE TO: PROVIDE A FORUM FROM WHICH TO ADDRESS STATE AND LOCAL COORDINATION ON COASTAL ISSUES, PERIODICALLY REVIEW THE COASTAL ZONE MANAGEMENT PROGRAM WITH RESPECT TO PUBLIC RESPONSIVENESS AND MEETING THE NEEDS OF THE COMMONWEALTH, AND TO ADVISE THE ENVIRONMENTAL QUALITY BOARD ON REGULATIONS AFFECTING COASTAL RESOURCES.

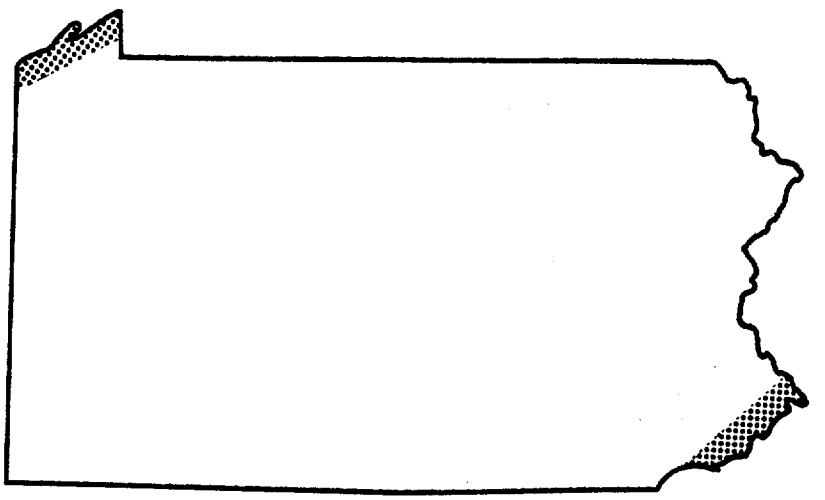
AUTHORITY(S)/Policy X-3

No specific authority is needed.

POLICY ACTIONS/Policy X-3

Pursuant to this policy, a Coastal Zone Advisory Committee comprised of all affected State agencies and representatives from coastal areas has been established. The Committee provides a forum from which to address State and local coordination regarding coastal issues, periodically reviews the Coastal Zone Management Program with respect to public responsiveness and meeting the needs of the Commonwealth, and makes recommendations for program improvements to the Coastal Zone Management Branch and advises the Environmental Quality Board on the effectiveness of regulations affecting coastal resources.

Chapter 3



Special Management Concerns

GEOGRAPHIC AREAS OF PARTICULAR CONCERN (GAPC)

Purpose of Designated and Nominated GAPC

The National Coastal Zone Management Act, while noting the importance of the entire coastal zone, declares that certain areas are of greater significance. As a requirement for program approval, the Act requires "an inventory and designation of areas of particular concern within the coastal zone" (Section 305(b)(3)).

There are two types of Geographic Areas of Particular Concern (GAPC) identified for the Lake Erie and Delaware Estuary coastal zones. These are designated GAPC and nominated GAPC. High and low priorities of use for both types of GAPC have been recommended by the Coastal Zone Management Program.

Designated GAPC - GAPC may be designated by virtue of:

1. State ownership of GAPC
2. State regulation of GAPC
3. Contractual agreement with agency or entity responsible for management of GAPC

Designated GAPC and the guidelines on priorities of use, including uses of lowest priority, are as follows:

1. State owned lands which include all State parks, major fish access areas, and key historical sites in the coastal zones are managed by State agencies which have been delegated the necessary legislative authority to ensure sound management. The Department of Environmental Resources manages parks under the Administrative Code of 1929. Masterplans have been developed for each State park. These plans are designed to ensure proper development, management and protection of the parks.

   The Pennsylvania Fish Commission manages fish access areas under the Fish Laws of 1959. The Fish Commission has developed a Statewide Outdoor Recreation Plan which presents the Commission plans for providing additional fishing and boating access in the Commonwealth.

   The Historical and Museum Commission manages historical sites under the Historic Preservation Act. Commission Directives and Site Programs determine development priorities for their properties.

Therefore, high priorities for these designated GAPC will be activities advocated by the respective management agency and low priority uses would be activities which conflict with or exclude the high priority uses.

2. The Bluff Hazard Recession Area along Lake Erie is managed by the authority of the Bluff Recession and Setback Act. This area is a natural value area which has an even greater than normal degree of sensitivity caused by the bluff recession problem. Highest priority uses are to protect the natural values of the bluffs by requiring a minimum setback distance for all structures built within bluff recession hazard areas. The results will prevent and eliminate urban and rural blight which results from the damages from bluff recession, and protect people and property in bluff areas from the damages of bluff recession. Low priority uses are any activities that would disrupt the natural dynamics in a way that would lead to increased bluff recession rates.

3. Presque Isle Bay which is managed under the authorities of the Dam Safety and Encroachments Act and the Clean Streams Law, is a unique area offering a climate conducive to the development of both port and recreational activities. High priority uses include: development of coal loading and off loading facilities, increasing the port's import and export grain handling capacity, increasing the ports warehousing capacity and cability, providing better road access between the port and the local interstate highway system, improving port facilities used in support of the growing commercial fishing fleet, expanding the marina capacity of the harbor and providing better recreational access to the harbor area via the development of access roads, parking lots and service docks. Low priority uses are any used which exclude or conflict with high priority uses.

4. Coastal floodplains are managed under the authority of the Floodplain Management Act and the Clean Streams Law. These areas are managed in a manner that enhances or maintains their natural function of handling flood flow. High priority uses are recreational or development activities, which meet the requirements of the National Flood Insurance Program and the State Act, and does not adversely impact the areas function as a floodplain. Low priority uses are any uses which would exacerbate flooding by impacting the areas natural function as a floodplain. Bluff recession leads to a loss of public investment as a

result of flooding. Regulations governing activities in these areas are found in Appendix B.

5. Coastal wetlands are managed under the authorities of the Dam Safety Act and the Clean Stream Law. Wetlands have high public values as a result of the natural function they perform such as; areas of fish and wildlife habitat, storage area for flood waters, buffers against shoreline erosion, areas of aquifer recharge and water purification areas. Therefore, high priority uses are those which benefit from the areas natural qualities while enhancing, restoring, or preserving them, such as; nature study, hiking, and passive recreation. Low priority uses are any uses which adversely impact or limit the areas natural and public values. Regulations governing activities in these areas are found in Appendix B.

Nominated GAPC - Nominated GAPC are those areas which the public, State, and Federal agencies, interest groups, and other affected parties identified as deserving special management attention during implementation of the Pennsylvania Coastal Zone Management Program. Priority recommendations, which are listed in a following section, Priorities for Uses in Nominated GAPC, are not binding, because the State does not control them through direct ownership or regulation of specified resources areas such as bluff hazard areas, coastal floodplains and coastal wetlands. Most GAPC in Pennsylvania's coastal zones are of the nominated type. "Nominated" GAPC will be eligible to receive coastal zone management funds when they qualify for "designation" or address one of the program's principal policy areas.

In order to qualify for designation, municipalities or responsible agencies may enter into contractual agreements with the Coastal Zone Management Branch to develop technical or feasibility studies and new or revised plans and ordinances. Through the contractual process, the State will be able to require adherence to coastal management goals, policies and recommended use priorities.

Criteria for Nominated GAPC

There are four categories of nominated GAPC for the Lake Erie and Delaware Estuary coastal zones: areas of significant natural value, development opportunity areas, areas of significant recreational, historic, or cultural value, and overlap areas. Although they are considered under the same general heading, nominated GAPC, these categories exhibit different characteristics, represent different concerns, and are subject to different kinds of management problems.

Areas of significant natural value are determined according to the concentration of natural characteristics that are either

valuable as amenities or unique to the coastal environment. These land-based characteristics include woodlands, uplands, wildlife habitats, and prime agricultural and erodible soils.

Development opportunity areas are those especially suited to more intensive use through development or redevelopment. The purpose for highlighting these areas is to stimulate the economic use of the river or lake and certain related waterfront properties. In particular, some of these opportunity areas could be considered as potential locations for waterfront facilities serving the regional, State or national economic interests. These uses may include port facilities, energy facilities, or other commercial and industrial activities.

Areas of significant recreational, historic, or cultural value are areas where reclamation, restoration, public access and other remedial actions may be needed. Because of the wide range of activities and uses included in this group, criteria establishing them is flexible and responsive to individual conditions. They include the following types of areas:

Areas of reclamation or restoration include those which have experienced serious detrimental modification, but which possess potential for recovery or reuse.

Areas of existing open space that have been identified where recreational needs can be served, and public access to the water's edge exists. Other areas, that are not in their natural state, but which seem appropriate for future public access have also been identified.

Overlap Areas: In some cases, the distinction between a natural area, a recreational area, and a development opportunity area is not as easily defined. For example, many undeveloped sites are appropriate for development and also possess either natural amenities or recreational opportunities. Future economic development of these overlap areas by current or future owners should consider the natural features and/or potential access opportunities. The Van Sciver Lake area, in Falls Township, Delaware Estuary, is a prime example of such an area. In this privately owned overlap area, the land use plan of Falls Township indicates an appropriate open space area surrounding a central area which is earmarked for industrial development. The Penn's Landing area in Philadelphia and the Presque Isle Bay area and waterfront district in Erie represent areas that already combine economic development with recreational opportunities.

Priorities for Uses in Nominated GAPC

In addition to highlighting critical areas within each coastal zone, recommended priorities for future use have been developed for the first three types of nominated GAPC. More detailed study will be encouraged to determine priority uses within overlap

areas. Priorities presented range from the most desirable to least desirable from the perspective of the entire coastal zone. These priorities for future use of GAPC are designed to serve as guidelines to local governments who are responsible for land use decisions within the coastal zone. State agencies will consider the priorities and guidelines as they carry out their administrative responsibilities and exercise authorities throughout the coastal zone.

Priorities for Uses in Areas of Significant Natural Value - The wildlife and vegetation communities existing in these GAPC constitute a significant natural resource, which in many instances provide a greater than local benefit. The major goals of the management program are the protection and enhancement of these areas and the encouragement of only those uses which will not interfere with the areas natural functions.

- High Priority Activities

  1. Uses that protect, maintain or enhance natural resource functions. The protection of these areas as open space, passive recreation and wildlife preserves, restoration of natural plant communities and the removal of trash are examples of high priority activities.

  2. Uses, such as bird watching, hiking, and scientific or educational study, that take advantage of the natural amenities without destroying them.

  3. Agricultural activities which occur within prime and unique soil areas (Lake Erie coastal zone only).

- Medium Priority Activities

  1. Uses that cause minimal disturbance of ecosystems but which are supported by natural settings; for example, parks with picnic areas, ponds, trails, and limited parking.

  2. Limited development activity, such as boat launches and other recreation facilities in cases where the developed portions are on those margins of the natural area most suited to development.

  3. Utility and communication rights-of-way are acceptable only in cases where restoration of land to natural conditions can be successfully carried out, or where rights-of-way incorporate active recreation activities such as trails.

4. Agricultural activities which occur in areas not characterized by prime and unique soils (Lake Erie coastal zone only).

- Low Priority Activities

1. Any intensive development activity which will cause widepsread, irreversible destruction of natural ecosystems. This includes any development activity which involves the removal or alteration of wildlife habitat and terrain, the draining, dredging, or filling of wetland areas, and the deterioration of stream or coastal water quality.

Priority of Uses in Development Opportunity Areas - Developable lands, fully served with urban infrastructure, can be used to satisfy many essential purposes, development of new manufacturing plants, siting facilities of regional benefit and national interest, and considering, when appropriate, public access to the coastal waters. The goal is to attract uses to these areas that create jobs and enlarge the tax base, while at the same time improving the visual character of the shoreline by upgrading vacant and under-utilized lands. High priority should be given to those uses requiring large volumes of water or access to the marine channel.

- High Priority Activities

1. Development, expansion, or upgrading of the ports cargo handling capabilities to meet both current and future demands.

2. Such high impact uses as energy production and transfer and dredge spoil disposal may be located in pertinent development opportunity GAPC continguous with existing energy activities or disposal sites, provided a permit is received from the Department of Environmental Resources. Special care should be exercised to ensure that spoil disposal areas can be reclaimed and used for necessary, river-related activities (Development Estuary coastal zone).

3. Activities that upgrade the efficiency of highways and railroads that are conduits for goods delivered to the port.

4. Development of new manufacturing facilities considering, when appropriate, public access to the coastal waters. The public access use in industrial areas could occur during nonworking hours.

5. Provision of expanded government services to manufacturers already located within Development Opportunity Areas to make the area more attractive to manfacturing and stop the trend of relocations outside of the coastal zone.

6. Development activities which occur a safe distance back from critically eroding shorefront areas (Lake Erie coastal zone only).

- Medium Priority Activities

1. Development of commercial, warehousing, and wholesale activities, preferably designed to offer public access to the waterfront on weekends.

2. Residential or "mixed use" developments at the waterfront especially when public access is provided.

3. Development of marinas, boat launches and fishing piers and safe viewing areas. These facilities can be successfully incorporated into the "working waterfront" without increasing use conflicts.

- Low Priority Activities

1. Solid waste disposal on public and nonindustrial private lands is low priority. Such disposal is acceptable on industrial lands when strict environmental safeguards are used.

2. Any development which jeopardizes the quality of life in adjacent communities by increasing noise, traffic, and odor should be carefully scrutinized.

3. Construction of shorefront facilities within erosion hazard areas.

<u>Priority of Uses in Areas of Significant Recreational, Historic, or Cultural Value</u> - These areas have significant social value to citizens as a resource for recreational and cultural activities associated with the river and port. The goal of the coastal program should be to protect, maintain, or restore these areas, which include several existing State, county and local parks.

- High Priority Activities

1. Activities that maintain or increase the resource value of these GAPC such as better access and walkways, increased parking, improved

security, new park equipment, public boat launches, landscaping, etc.

2. Activities which provide financial support; e.g., subsidies, public acquisition, or fund raising.

3. For lands in private ownership, acquisition of easements that permit access to the shoreline should be encouraged.

- Medium Priority Activities

1. Commercial activities of limited extent supporting recreational activities.

2. Residential development which helps to upgrade the character of these GAPC and which furnishes recreational opportunities otherwise not provided to residents in adjacent neighborhoods.

3. Seasonal residential development which does not degrade the aesthetic appeal of the coastline, and which does not preclude recreation access to the lake waters (Lake Erie coastal zone).

- Low Priority Activities

1. Development, public or private, which fails to contribute to the cultural, recreational or historic activities in the area.

Overlap Areas Constitute a Special Case - They contain valuable natural amenities as well as offer a good climate for development. Since they offer the opportunity for different types of uses and their ultimate use will be largely determined by ownership, a listing of priority of uses would be of little utility. Therefore, the management program encourages uses which recognize the dual potential of the area and are not mutually exclusive of either.

Inventory of GAPC

The following section contains a list of the 65 GAPC identified during the development of the Coastal Zone Management Program. Maps indicating the approximate locations of the GAPC are included in Part II, Chapter 1 of this document. Designated GAPC appear with one asterisk (*) to denote State ownership and two asterisk (**) to denote State regulation. Currently, no GAPC have been designated by virtue of contractual agreement.

Delaware Estuary Coastal Zone

Delaware County GAPC

Identification No.	Natural Value Areas	Approx. Size (Acres)
NV-1	Little Tinicum Island	103
	Development Opportunity Areas	
DO-1	Chester Terminal Area	77
DO-2	Chester Waterfront	227
DO-3	Baldwin Industrial Park	64
DO-4	Eddystone Waterfront	85
DO-5	Airport Area	250
	Recreational, Cultural, Historic Value Areas	
R-1	McClure Park	.5
R-2	Commodore Barry Bridge Area	10
R-3	Chester Creek Mouth	5
R-4	Essington Waterfront	84
R-5	Folcroft Landfill	41

Philadelphia County GAPC

	Natural Value Areas	
NV-2	Pennypack Creek	50
NV-3	Poquessing Creek	14
	Development Opportunity Areas	
DO-6	Walt Whitman Bridge Area	400
DO-7	Washington Avenue Area	170
DO-8	North Center City Area	70
DO-9	Port Richmond	245
DO-10	Cottman Avenue Area	145
	Recreational, Cultural, Historic Value Areas	
R-6	Fort Mifflin	25
R-7	Schuylkill River Park	50
R-8	Penn Treaty Park	2
R-9	Mouth of Pennypack Creek	180
R-10	Pleasant Hill Park	27
	Overlap Areas	
OV-1	Penn's Landing	38

Bucks County GAPC

Identification No.	Natural Value Areas	Approx. Size (Acres)
NV-4	Biddle-Andalusia Area	140
NV-5	Street Road Area	16
NV-6	Biles Island (perimeter)	50 (100' riverfront setback)
	Development Opportunity Areas	
DO-11	Burlington-Bristol Bridge Area	340
DO-12	Turkey Hill - Van Sciver Area	2,046
DO-13	Fairless Works Area	511
DO-14	Money Island Area	566
DO-15	Biles Island (central area)	550
	Recreation, Cultural, Historic Value Areas	
R-11	Biddle Estate	88
R-12	Bucks County Delaware River Access Area	8
R-13	Columbus County Club	19
R-14	Philadelphia Gun Club	18
* R-15	Neshaminy State Park	356
R-16	Creekroad-South	26
R-17	Riverside Avenue Redevelopment Area	
R-18	Radcliff Street	78
* R-19	Pennsylvania Canal	80
R-20	Bordentown Road Causeway	62
* R-21	Pennsbury Manor State Park	40
R-22	Falls Township River Access Area	16
	Overlap Areas	
OV-2	Linton Avenue - River Road	82
OV-3	Martins Creek - Van Sciver	116
OV-4	Money Island	448
OV-5	Fordmill Road	90

Lake Erie Coastal Zone

Western Study Area GAPC

Identification No.	Natural Value Areas	Approx. Size (Acres)

** NV-1	Lake Erie Bluff	-
NV-2	Crooked Creek Stream Corridor	275
NV-3	Girard And Fairview Township Prime Agricultural Lands	1,400
NV-4	Trout Run Stream Corridor	90
	Development Opportunity Areas	
DO-1	United States Steel Site	2,100
DO-2	Pennsylvania Electric Site	550
	Recreational, Cultural and Historic Value Areas	
R-1	Raccoon Creek Stream Corridor	300
R-2	Elk Creek Estuary Site	320
R-3	Lake Erie Community Park	111
* R-4	Walnut Creek Access Area	40

Central Study Area GAPC

	Natural Value Areas	
** NV-1	Lake Erie - Presque Isle Bay Bluff	-
	Recreational, Cultural and Historic Value Areas	
R-5	Scott Park, Sommerheim Park	108
* R-6	Presque Isle State Park	3,250
	Overlap Area	
** OV-1	Presque Isle Bay	400
OV-2	Port of Erie and Waterfront Area	825

Eastern Study Area GAPC

Identification No.	Natural Value Areas	Approx. Size (Acres)
** NV-1	Lake Erie Bluff	-
NV-5	Harborcreek and North East Township Prime and Unique Agricultural Land	21,000
	Recreational, Cultural and Historic Value Areas	
R-7	Sixmile Access Area	75

R-8	Shades Beach County Park	50
R-9	Twentymile Creek Access Area	75

Process for Future Nomination of GAPC

During the development phase of the Coastal Zone Management Program, the local steering committees and consultants assisted the Pennsylvania Department of Environmental Resources in the identification of GAPC. Proposals were reviewed by citizens, local officials and shorefront property owners at public meetings. Many modifications and changes were made to GAPC, in both coastal zones, based on input received from interested participants.

In the future, GAPC may be nominated by any individual, group, or agency. Nominations will be accepted by each coastal zone steering committee throughout the year.

Areas nominated should be identified as:

1. Areas of significant natural value,

2. Development opportunity areas,

3. Areas of significant recreational, historic, or cultural value, or

4. Overlap areas.

Each nomination should include information on location, size, ownership and particular significance. If possible, nominations should be accompanied by recommended priorities for future use, although this may not always be possible.

Following discussion, the local coastal zone steering committee will transmit nominations, along with recommendations and documentation of support or nonsupport, to the Coastal Zone Management Branch, in Harrisburg. Once each year nominations will be reviewed by the statewide Coastal Zone Advisory Committee; and if approved, the nominated GAPC will be added to (or removed from) from the State Coastal Zone Management Program.

Areas for Preservation or Restoration

The Coastal Zone Management Act requires that procedures be devised to designate specific areas "for the purpose of preserving or restoring them for their conservation, recreational, ecological or aesthetic values" (Section 306(c)(9)). The management program must establish criteria for designating these "Areas for Preservation or

Restoration", so that as the program is implemented "special attention" can be focused on these areas.

Areas for Preservation or Restoration (APR) are a special type of GAPC. All areas designated as GAPC for purpose of meeting requirements for Program approval are considered APR. They will receive special management attention because of their natural resource value. Nomination and designation of APR will occur simultaneously with nomination and designation of GAPC. To qualify as an APR, two conditions must be met:

1. **The site must be currently available or capable of being made available for public use, recognizing that use restrictions or regulations may be necessary to preserve the natural character of the site. Private lands without public access cannot be designated as APR.**

2. **The site must have value, or potential value when restored, as a natural resource area supporting viable plant and animal communities. APR are intended to serve primarily as wildlife preserves, as waterfowl nesting and breeding grounds, and for such passive recreation as hiking, bird-watching and scientific study.**

In the future, additional APR may be "designated" or "nominated" through the process described previously for GAPC. Local proposals will be forwarded by the steering committee to the State with recommendations. APR will only be added (or removed) once each year.

The degree of special attention that can be devoted to APR will depend in part on the amount of financial support that Pennsylvania receives from the U.S. Department of Commerce during the implementation phase of the Coastal Zone Management Program. Other funding agencies should consider adjusting priorities and capital improvement programs to assist in the support of the areas identified as APR.

Excluded Federal Lands of Potential State Interest

Tinicum March (Delaware and Philadelphia Counties) - 1,200 acres

Fort Mifflin Disposal Area (Philadelphia County) - 420 acres

Mustin Field (Philadelphia County) - 175 acres

Frankford Arsenal (Philadelphia County) - 150 acres

A map identifying these major excluded Federal lands is located in Chapter 1 (see Figure i-3).

These areas will have a major influence on surrounding coastal uses. Although significant, these areas cannot be nominated or designated as GAPC because of the "Excluded Federal Lands" provision of the Coastal Zone Management Act. Further discussion of Excluded Federal Lands is found in Chapter 1.

USES OF REGIONAL BENEFIT

Section 306(e)(2) of the Federal Coastal Zone Management Act of 1972, as amended, requires that a state make provision within its Coastal Zone Management Program for a method to assure that local government regulations do not unreasonably restrict or exclude land and water uses of regional benefit. The initial step of this requirement is identification of those uses which are determined to be of regional benefit. Once determined, each state's Coastal Zone Management Program must demonstrate the state's legal authority which will assure that these activities are not unreasonably excluded from locating in the coastal zone by local government actions.

Uses of Regional Benefit are defined as those of "greater-than-local" concern, especially when impacts exhibit "spill over" effects beyond the project boundary or into neighboring jurisdictions, or when the use provides utility, a service, or a commodity to more than one jurisdiction.

In Pennsylvania's coastal zones, uses of regional benefit include energy facilities, water supply, waste water treatment, and coastal recreation facilities.

1. <u>Energy Facilities</u> as uses of regional benefit are defined to include facilities for:

    a. Production, generation, transmission, distribution or supply of natural or artificial gas, electricity, or steam for the production of light, heat, or power to or for the public for compensation;

    b. Transportion or conveyance of natural or artificial gas, crude oil, gasoline, or petroleum products, materials for refrigeration, or oxygen or nitrogen, or other fluid substance

by pipeline or conduit, for the public for compensation.

2. Water Supply and Waste Water Treatment Facilities as uses of regional benefit are defined to include facilities for:

   a. Diverting, developing, pumping, impounding, distributing, or furnishing water to or for the public for compensation;

   b. Sewage collection, treatment, or disposal for the public for compensation.

The State can override arbitrary local exclusion of energy facilities and water supply and waste water treatment facilities through issuance of the Public Utility Commission's certificate of public convenience. Every application for a certificate of public convenience shall be made to the PUC in writing, be verified by oath or affirmation, and be in such form and contain such information, as the PUC may require by its regulations. A certificate of public convenience shall be granted by order of the Commission, only if the Commission shall find or determine that the granting of such certificate is necessary or proper for the service, accommodation, convenience, or safety of the public. The Commission, in granting such certificate, may impose such conditions as it may deem to be just and reasonable. In every case, the Commission shall make a finding or determination in writing, stating whether or not its approval is granted. Any holder of a certificate of public convenience, shall be deemed to have waived any and all objections to the terms and conditions of such certificate.

For the purpose of enabling the Commission to make such finding or determination, it shall hold such hearings, which shall be public, and before or after hearing, it may make such inquiries, physical examinations, valuations, and investigations, and may require such plans, specifications, and estimates of cost, as it may deem necessary or proper in enabling it to reach a finding or determination. Once the Public Utility Commission has issued its Certificate of Public Convenience (Act of October 25, 1970, Public Utilities Code (P.L. 707, No. 230), Pa. Consolidated Statues, Title 66, Chapter 11.1 et seq.), for energy facilities, water supply or waste water treatment facilities, no local jurisdiction may exclude such facility from locating within its jurisdiction.

Finally, it is important to note that a certificate of public convenience does not deprive the Department of Environmental Resources of any jurisdiction, powers, or duties vested in the Department, particularly those under enforceable policies in Section II-2 which provide the Department with a separate and coequal project review authority as that of the Public Utility Commission.

3. Recreational Facilities - Recreational facilities located in the coastal zone are clearly of greater than local concern and as such will not be arbitrarily excluded. The Commonwealth has the ability to assure that the public has sufficient recreational opportunities by acquiring land and locating State recreational facilities where they will provide the greatest public benefit.

   The following is a list of public and quasi-public agencies pertinent to the Coastal Zone Management Program that have legislative authority to acquire land:

   - Department of Environmental Resources
   - Department of Community Affairs
   - Pennsylvania Fish Commission

   By utilizing this power and other means discussed in Chapter 3 of this document, in the section on Shoreline Access, the Commonwealth may acquire any land and locate recreation facilities regardless of local zoning ordinances.

   Through the use of the aforementioned processes, the Coastal Zone Management Branch can assure that recreational facilities will not be arbitrarily excluded from the coastal zone by the action of local governments

ENERGY FACILITY PLANNING

Introduction

Section 305(b)(8) of the 1976 Amendments to the Coastal Zone Management Act of 1972 requires that each state must include in its Coastal Zone Management Program, a planning process for energy facilities likely to be located in, or which may significantly affect the coastal zone, including a process for anticipating and managing the impacts from such facilities. To

meet this requirement, the following four management tasks must be addressed:

1. An identification of energy facilities which are likely to locate in, or which may significantly affect the coastal zone.

2. Procedures for assessing the suitability of sites for such facilities.

3. An articulation and identification of enforceable State policies, authorities and techniques for managing energy facilities and their impacts.

4. An identification of how interested and affected public and private parties may be involved in the planning process. (15 CFR 923.13 (March 28, 1979)

The following sections provide an identification of energy facilities that exist in or are likely to locate in the Commonwealth's Delaware Estuary and Lake Erie coastal zones. These facilities include: electric generating plants and transmission facilities; petroleum refining, distribution and related facilities; natural gas production and distribution facilities; OCS support facilities; and finally, coal transport and port facilities.

Existing Energy Facilities and Future Needs in the Delaware Estuary Coastal Zone

Electric Generating Plants and Transmission Facilities

Existing and Proposed Facilities - The Philadelphia Electric Company (PECO) provides electric service to the entire Delaware Estuary coastal zone. The utility's service area extends inland from the coastal zone to serve nearly all of Philadelphia and its Pennsylvania suburbs, and also runs southwestward into parts of northeastern Maryland and York County. Utility reports show a variety of generating technologies now being used to meet normal levels of demand.[1]

PECO currently operates six fossil-fueled steam generating plants in the coastal zone. Oil is the principal fuel for converting water to steam at coastal zone plants, although coal is used at

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[1]Mid-Atlantic Area Council, Regional Reliability Council Coordinated Bulk Power Supply Program, April, 1980, P. II-A-18 to II-A-21.

two units of the Eddystone plant. PECO also operates a nuclear generating plant located outside the coastal zone.

Eight combustion turbine and internal combustion facilities, provide supplemental capacity for peak demand periods, in the coastal zone. A number of proposed actions significantly affecting PECO's generating capacity are included in utility plans.[2] These plans indicate that retirement of oil-fired intermediate load facilities is anticipated for the Richmond, Schuylkill, and Chester stations by 1985, due in part to additional nuclear capacity at Salem, New Jersey, and at the new Limerick station near Pottstown. An additional 800 MW of capacity from unassigned oil units operated by PECO is scheduled for retirement in 1987.

The existing facilities and generating capabilities for the Delaware Estuary coastal zone are summarized in the following table. While the coastal zone's contribution to PECO's capacity is considerable, it is heavily dependent on increasingly expensive and decreasingly reliable oil sources. (See Primary Fuel type in Figure iii-1). In the future, the coastal zone will provide a smaller share of PECO's capacity, and undergo some shifting from oil to coal as a fuel source. Nevertheless, coastal zone facilities will continue to provide the predominant share of peaking capacity for the PECO service area.

Electric transmission lines in the coastal zone generally follow rail and road rights-of-way, with design voltages up to 230 KV. Major Transmission lines (230 KV) cross the Delaware River in three locations, at the Richmond and the Croydon power stations, and in the Marcus Hook area.[3]

Utilities located in Pennsylvania, and tied into regional networks, have increased cooperation in recent years in programming major transmission facilities (230 KV or more) within and between their service areas. While numerous 500 KV corridors surround the coastal zone, these corridors do not bisect the study area. Furthermore, utility plans indicate that major transmission line development (230 KV or more) is not anticipated to occur in the coastal zone during the next ten years.[4]

Future Facility Needs and Constraints - Based on the current programming of facilities through 1988, generating capacity is expected to increase slightly faster than demand, increasing the

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[2]Ibid, P. II-B-8; and Electric Utility Companies of Pennsylvania, Pennsylvania Master Siting Study, Major Electric Generating Projects, 1979-1993, Report to Pennsylvania Department of Environmental Resources, June, 1979, p. 21-22.
[3]Mid-Atlantic Area Council, op cit., Section V-A.
[4]Ibid, Section V-A.

FIGURE iii-1
ELECTRIC GENERATING FACILITIES AND CAPABILITIES
IN THE DELAWARE ESTUARY COASTAL ZONE
(As of January 1, 1980)

System	Location - Station Name	Unit No.	In-Service Date	Unit Type	Net Capability-MW Summer	Net Capability-MW Winter	Primary Fuel Fuel Type	Primary Fuel Transp. Method
PJM	Chester	5,6	1941,42	ST	124	130	F06	WA
	Chester City	7	1969	GT	13	18	F02	TK
	Delaware Cty.	8	1969	GT	13	18	F02	TK
		9	1969	GT	13	18	F02	TK
		D	1967	IC	2.7	2.7	F02	TK
PJM	Croydon	11	1974	GT	49	63	F02	WA
	Bristol Twp.	12	"	GT	49	63	F02	WA
	Bucks Cty.	21	"	GT	49	63	F02	WA
		22	"	GT	49	63	F02	WA
		31	"	GT	49	63	F02	WA
		32	"	GT	49	63	F02	WA
		41	"	GT	49	63	F02	WA
		42	"	GT	49	63	F02	WA
PJM	Delaware	7	1953	ST	126	128	F06	WA
	Philadelphia,	8	1953	ST	124	128	F06	WA
	Pennsylvania	9	1970	GT	15	20	F02	TK
		10	1969	GT	13	18	F02	TK
		11	1969	GT	13	18	F02	TK
		12	1969	GT	13	18	F02	TK
		D	1967	IC	2.7	2.7	F02	TK
PJM	Eddystone	1	1960	ST	301	321	BIT	RR
	Eddystone Boro	2	1960	ST	334	343	BIT	RR
	Delaware Cty.	3	1974	ST	380	380	F06	WA
		4	1976	ST	380	380	F06	WA
		10	1967	GT	13	18	F02	TK
		20	1967	GT	13	18	F02	TK
		30	1970	GT	15	20	F02	TK
		40	1970	GT	15	20	F02	TK

Notes

Unit #5 is presently mothballed.
Units #5 and 6 to be retired, Dec., 1980.

Symbol Codes

Unit Type:

ST - Steam Turbine nonnuclear
GT - Combustion Turbi
IC - Internal Combust
IC & GT generally use for peak demand

Fuel Type:

F06 - No. 6 Fuel Oil
F02 - No. 2 Fuel Oil
BIT - Bituminous Coal

Transportation Method

WA - Water
TK - Truck
RR - Rail
PL - Pipeline

Source: See Footnote

FIGURE iii-1 (Cont.)
ELECTRIC GENERATING FACILITIES AND CAPABILITIES
IN THE DELAWARE ESTUARY COASTAL ZONE
(As of January 1, 1980)

System	Location - Station Name	Unit No.	In-Service Date	Unit Type	Net Capability-MW Summer	Net Capability-MW Winter	Primary Fuel Fuel Type	Primary Fuel Transp. Method	Notes
PJM	Falls	1	1970	GT	15	20	F02	TK	
	Falls Twp.	2	"	GT	15	20	F02	TK	
	Bucks Cty.	3	"	GT	15	20	F02	TK	
PJM	Richmond	9	1950	ST	166	175	F06	WA	Unit #9 to be retired 1985.
	Philadelphia	12	1935	ST	108	115	F06	WA	
	Pennsylvania	21	1971	GT	30	39	F02	WA	Unit #12 presently mothballed.
		22	"	GT	30	39	F02	WA	
		31	"	GT	30	39	F02	WA	
		32	"	GT	30	39	F02	WA	
		41	"	GT	20	29	F02	WA	
		42	"	GT	20	29	F02	WA	
		43	"	GT	20	29	F02	WA	
		44	"	GT	20	29	F02	WA	
		51	"	GT	30	39	F02	WA	
		52	"	GT	30	39	F02	WA	
		61	"	GT	30	39	F02	WA	
		62	"	GT	30	39	F02	WA	
		71	"	GT	20	29	F02	WA	
		72	"	GT	20	29	F02	WA	
		73	1970	GT	20	29	F02	WA	
		74	1970	GT	20	29	F02	WA	
		81	1973	GT	48	66	F02	WA	
		91	1973	GT	48	66	F02	WA	
		92	1973	GT	48	66	F02	WA	
		D	1967	IC	2.7	2.7	F02	WA	
PJM	Schuylkill	1	1958	ST	166	175	F06	PL	"Topping Unit"
	Philadelphia	3	1938	ST	47	54	F06	PL	
	Pennsylvania	9	1916	ST	30	35	F06	PL	Unit #9 to be retired in 1981
		10	1969	GT	13	18	F02	TK	
		11	1971	GR	15	20	F02	TK	
		D	1967	IC	2.8	2.8	F02	TK	

FIGURE iii-1 (Cont.)
ELECTRIC GENERATING FACILITIES AND CAPABILITIES
IN THE DELAWARE ESTUARY COASTAL ZONE
(As of January 1, 1980)

System	Location - Station Name	Unit No.	In-Service Date	Unit Type	Net Capability-MW Summer	Net Capability-MW Winter	Primary Fuel Fuel Type	Primary Fuel Transp. Method	Notes
PJM	Southwark	1	1947	ST	178	188	F06	WA	
	Philadelphia	2	1948	ST	178	188	F06	WA	
	Pennsylvania	3	1967	GT	13	18	F02	TK	
		4	1967	GT	13	18	F02	TK	
		5	1967	GT	13	18	F02	TK	
		6	1968	GT	13	18	F02	TK	
		D	1967	IC	2.7	2.7	F02	TK	

margin of surplus capacity over demand from about 36 percent to 38 percent.

PECO participates with ten other Mid-Atlantic region utilities in a coordinated power pool known as the Pennsylvania-New Jersey-Maryland Interconnection (PJM). Based on data provided by the Mid-Atlantic Area Council (MAAC), the PJM margin is projected to drop from the current 34 percent to 32 percent in 1989[5], potentially placing more reliance on interconnection capabilities within the pool and with neighboring pools.

Meanwhile, the PECO margin, now lower than that of the PJM, will be in a somewhat better-than-average position relative to the overall pool by 1988. Furthermore, due to the substitution of nuclear and coal-fired base-load facilities for oil-fired equipment, PECO will reduce the amount of power purchased.

The prospective retirements of oil-fired equipment at the Chester #5, #6, Schuylkill #9 and the Richmond #9 in Philadelphia raises the issue of possible additional sitings of new coal-fired facilities in the area. However, the use of coal at such locations has been discouraged in recent years due to air emissions limitations. While there are now indications that emission constraints may be modified to accommodate national energy goals, three of these four Philadelphia stations are further constrained by insufficient storage space for coal. PECO officials have further indicated that, based on transportation economics, it would probably be preferable to locate any future coal-fired facilities near coal sources, such as exist in central and western Pennsylvania.[6] Thus, the likelihood that coal-fired plants would be developed in the Delaware Estuary coastal zone is further diminished.

Although no hydroelectric facilities currently exist in Pennsylvania's coastal zones, one has been proposed at the Schuylkill River's Fairmount Dam on the inland border of the Delaware Estuary coastal zone. Therefore, the possibility does exist that in the future, hydroelectric power may become a part of Pennsylvania's coastal zone energy base.

There are no existing or proposed nuclear generating facilities in the coastal zone, although one was once planned nearby at Newbold Island, New Jersey. The nearest existing and proposed plants are now twenty or more miles from the coastal zone. Issues of proximity to population and, secondarily, limited availability of cooling water have virtually removed the possibility of new nuclear plants in the coastal zone.

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[5] Ibid, p. III-A-1
[6] See #5.

Petroleum Refining, Distribution and Related Facilities

Existing and Proposed Facilities - Four major refineries, with a total through-put capacity of 722,000 barrels per calendar day (b/cd), are located in Pennsylvania's Delaware Estuary coastal zone.[7] The refineries and related facilities are concentrated in two areas; the Marcus Hook riverfront (Sun Oil and BP Oil Companies), and the Schuylkill River area between downtown Philadelphia and Philadelphia International Airport (Gulf Oil and Atlantic Richfield Companies). A number of (liquid/gas) bulk storage facility operators, largely handling petroleum-related products, are also concentrated in the Schuylkill River area (west bank). Additional bulk storage facilities are scattered at other coastal zone locations, both along the Philadelphia waterfront and in various suburban municipalities, such as Darby, Upper Chichester and Tullytown.

Petrochemicals production represents an important oil-related industry in the study area.[8] Two coastal zone refinery operators (Sun Oil and Gulf Oil) produce a variety of petrochemicals on-site. These chemicals include benzene, toluene and propylene, important "primary" petrochemicals from which numerous products are eventually derived. In addition to these two multinational companies, a number of independent chemical companies also produce both primary and other petrochemicals.[9]

Petroleum pipelines in the coastal zone are operated by individual oil companies, including local refinery operators, and by separate pipeline companies set up by groups of oil companies. Most of the area's pipelines carry finished products among the refineries, marine-import facilities, and principal storage-distribution depots within the Delaware Valley, as well as from such locations to more dispersed distribution points in the larger Mid-Atlantic states market area. Crude oil pipelines are generally confined to the individual refinery properties, although the ARCO refinery is linked to a separate marine facility near the airport. Pipeline alignments are most prevalent in the Schuylkill River refinery area, they parallel the Delaware River to Ridley and Crum Creeks, and then extend inland to tank farm depots at Twin Oaks (on coastal zone boundary in Upper Chichester Township) and Chelsea. Delaware River

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[7] Oil and Gas Journal, March 26, 1979; Note: "calendar day" figures indicate average daily volume which can be sustained over a year, with occasional shutdowns, and "throughput capacity" indicates the volume of crude oil entering the facility to develop, often in conjunction with other inputs, the various product outputs.

[8] See New England River Basin's Commission, Factbook - Onshore Facilities Related to Offshore Oil and Gas Development, Chapter 7, "Petrochemicals" (1978 update), 1976 with updates.

[9] Worldwide Petroleum Directory, 1978, Petroleum Publishing Company, Tulsa, 1977.

crossings occur in the vicinity of the airport, with landfalls in Philadelphia and Tinicum Township. There are no pipelines along the Delaware River upstream from the Schuylkill River area.[10]

Due to uncertainties in future crude oil supplies and related transportation/marketing needs, there are few announced plans for the siting of significant new oil-related facilities. Three of the four refineries have announced construction projects to modify their facilities, but the modifications will occur on existing sites and through-put capacity will be increased in only one case (Gulf Oil).[11] [12] [13]

Future Facility Needs and Constraints - The Pennsylvania coastal zone refinery capacity of 722,000 b/cd represents about 70 percent of the overall (seven-refinery) capability in the Delaware Valley, and nearly half the total capacity in the Northeastern United States.[14] Crude oil generally arrives in the area by tanker. Importation of finished products, however, has been increasing in recent years, and there are indications that oil-exporting nations would like to refine more crude oil at home in order to strengthen their own economies.[15] Offsetting that factor is the prospect of new supplies of crude oil which may result from Outer Continental Shelf (OCS) drilling in the Baltimore Canyon (discussed in another section of this chapter).

Pennsylvania coastal zone refineries have indicated that future facilities will generally incorporate on-site modifications including expansion of through-put capabilities as warranted.[16] It can be noted that not all refineries would appear to have space for any significant expansion. However, one refinery operator has indicated that its modernization program, which features production of fewer, more essential products using newer, more efficient equipment, is actually freeing up space for possible through-put expansion.[17]

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[10]Delaware River Basin Commission, Petroleum Pipelines in the Delaware River Basin (maps), 1973 with 1974 update.
[11]The Philadelphia Inquirer, "ARCO Begins Construction . . .," May 22, 1979.
[12]Ibid., "Regional: Sun Company Announced . . .," July 21, 1979.
[13]The Philadelphia Bulletin, "Gulf Slates . . .," July 26, 1979.
[14]Oil and Gas Journal, op cit., (see #1).
[15]Platt's Oilgram News, "PIRINC Criticizes (Import) Quota Plan," September 19, 1979, p. 5.
[16]Meeting with oil company representatives (Sun Oil, BP Oil, Exxon Oil), October 31, 1979; written solicitations for input, and telephone conversations pursuant thereto, covering the four refinery operators.
[17]Merril Colmery, Plant Manager, Atlantic Richfield Company, telephone conversation October 5, 1979.

Available literature cites land requirements of 1,000 acres or more for the siting of major new refineries (250,000 + b/d).[18] However, some industry officials indicate that the commonly cited land requirements generally apply to "integrated" refineries, having relatively diverse but interrelated product capabilities (i.e., both petrochemicals and fuels). They further note that simpler "fuel" refineries, which concentrate on gasoline and distillates, can be sited on smaller properties.[19] A recently publicized conceptualization concerning a 175,000 b/d refinery on a 150 acre site in Camden, New Jersey, is perhaps indicative of the latter perspective.[20]

Natural Gas Production and Distribution Facilities

Existing and Proposed Facilities - Natural gas service in the coastal zone is provided by two utilities. The Philadelphia Gas Works (PGW), owned by the City of Philadelphia, serves all customers in the city. The Philadelphia Electric Company (PECO) provides natural gas in coastal zone portions of Bucks and Delaware Counties, as well as in most inland areas of Philadelphia's Pennsylvania suburbs.

Major facilities related to natural gas are located at three coastal zone sites. PGW operates oil and gas manufacturing facilities, involving enrichment of inputs such as diesel oil or propane, at a Passyunk Avenue site near the Schuylkill River. The utility also uses natural gas delivered by pipeline from the Gulf states, and operates liquefaction and vaporization facilities to allow storage of fuel in liquid form (LNG) for reconversion and use during peak demand periods. This process is termed peak shaving. While PGW liquefaction equipment is located at Passyunk Avenue, most of its storage (four billion cubic feet) and vaporization (500 million cubic feet per day) capabilities are located at its Richmond site, near the Delaware River. The LNG is transported from Passyunk avenue to Richmond by truck.[21]

The principal PECO facility in the coastal zone, located at Tilghman Street in Chester, blends pipeline natural gas with a locally purchased supplemental input (methane-modulated refinery off-gas). The utility also contracts with a refinery operator in the area for underground storage of natural gas. PECO's LNG peak shaving facilities are located outside the coastal zone at West

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[18]New England River Basin Commission, op cit., p. G.12.
[19]Meeting of October 31, 1979 (see #10).
[20]Camden Courier Post, September 9, 1979; the article indicated the refinery was being planned by a "Houston, Texas-based consortium of four oil companies" (they were unnamed).
[21]Frederick T. Blancard, Assistant Manager--Rates, Philadelphia Gas Works, letter dated September 18, 1979.

Conshohocken, in Montgomery County.[22] PGW has one additional gas production facility in the coastal zone. This facility is designed for the production of synthetic natural gas (SNG). This plant is nearing completion and is located at Passyunk Avenue. The SNG facility will manufacture natural gas from naphtha, which will be delivered by tanker, and piped to on-site storage tanks. The new plant will replace the existing oil, and gas generating facilities.[23]

The principle interstate pipeline facilities in the Philadelphia area, which bring natural gas from the Gulf states and other domestic production areas, are operated by Texas Eastern Transmission Corporation and Transcontinental Gas Pipe Line Corporation. Each coastal zone utility uses both suppliers. The Texas Eastern lines are located on the inland side of the coastal zone, while the Transcontinental lines loop the study area and are connected with the utilities on the riverfront and inland sides. Transcontinental's coastal zone river crossings occur at Marcus Hook, Chester, the Walt Whitman Bridge area, and Richmond.[24]

There are no known proposals for significant new gas lines in the coastal zone. Texas Eastern is, however, planning a relocation of its existing line in the vicinity of Philadelphia National Airport.[25]

Future Facility Needs and Constraints - Since 1973, PECO and PGW have experienced zero-to-negative gas sales volume growth as a result of supply limitations. However, former sales levels are now being partially restored, and the prospect of sales to new customers is returning.[26] [27]

While the outlook for gas availability has improved, there are as yet no indications that growth rates will recover to levels requiring significant new facilities in the coastal zone. As the utility providing service to faster growing suburban areas, PECO is the more likely to experience increases in demand. PECO plans call for a continued reliance on pipeline deliveries of natural

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[22]Philadelphia Electric Company, "The Organization and Operation of Gas Operations," July, 1979.
[23]Eugene L. Cliett, Jr., Philadelphia City Controller, letter to R.J. Buckley, Chairman, Philadelphia Gas Commission (cover letter for review of operations, 1976-78), dated October 8, 1979.
[24]Philadelphia Gas Works "Natural Gas Lines Philadelphia and Vicinity", revised April 12, 1977; and Philadelphia Electric Company, "Gas Service Area", N.J.
[25]Philadelphia City Council, Bill No. 2148, concerning an easement agreement with Texas Eastern Transmission Corporation, introduced August 2, 1979.
[26]F.T. Blanchard, letter, op cit., (see #1).
[27]Philadelphia Electric Council, Annual Report, 1978, p. 31.

gas, and would strengthen the utility's access to such supplies through participation in joint venture drilling operations in Appalachia and the Southwest.[28]

PGW gas sales fell to 75 percent of 1971 levels in 1976, and are projected to recover to 83 percent of 1971 levels by 1984. PGW has no plans for new facilities, beyond the completion of its SNG plant.

There has, however, been some concern as to long-term availability of naphtha for PGW's SNG facility. As noted in recent analysis, it was originally assumed that naphtha would be available from a local refinery.[29] However, naphtha is also used as a base for gasoline and is now more in demand as a result of oil shortages and price increases. PGW has been forced to contract for imported naptha at a unspecified price, and there are no assurances that the raw material will be available in the future at a reasonable cost. Thus, while additional manufacturing facilities do not appear necessary, facility alterations or replacements may again become appropriate.

Gas production activities, such as those which are a factor in the coastal zone, are frequently of concern from a safety viewpoint. Energy-related materials such as naptha and LNG, as well as natural gas itself, are highly volatile. LNG is considered particularly dangerous, although it should be noted that LNG peak shaving and truck transport activities do not entail the scale of risk associated with an LNG tanker import facility. (On the other hand, these lower risk activities are not dependent on their present coastal zone locations.) Given the population densities in the Pennsylvania coastal zone, safety concerns will continue to be important for any future siting of gas production activities.

Outer Continental Shelf Support Facilities

The discovery of oil or gas in the Baltimore Canyon in commercially developable quantities could require new facilities in the Mid-Atlantic states capable of supporting oil and gas development. Because such resource development would be in the national interest, the 1976 Coastal Zone Management Act Amendments stress the importance of considering related support facility needs. Outer Continental Shelf activities require on-shore bases for the fabrication, installation, maintenance and repair of off-shore drilling platforms and pipelines, as well as for ancillary industries, which provide items such as cement, drilling mud, and well-head equipment, and other various products

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[28] Ibid, p. 9-11.
[29] E.L. Cliett, letter, op cit., (see #3).

and services necessary for platform personnel.[30]

During 1977, a special study, focusing on the Baltimore Canyon, was conducted by the Pennsylvania Governor's Energy Council as a supplement to the Pennsylvania Coastal Zone Management Program.[31] The study was designed to assess the economic, political and environmental impacts which might occur in the Delaware Estuary coastal zone as a result of exploration or production of Outer Continental Shelf oil and gas resources. The study was completed early in the exploration phase, and as a result, estimating impacts was difficult.

It is likely that future Outer Continental Shelf oil and gas development support base needs, will be provided by East Coast cities. The most competitive Mid-Atlantic sites for additional bases would be on the Atlantic coast or in the Lower Delaware Bay. Navigational, distance and on-shore space considerations do not make Pennsylvania locations favorable.[32]

While not a likely choice for an Outer Continental Shelf support base, the Pennsylvania coastal zone possesses the resources to provide important ancillary industry support. Existing Delaware Valley industries are capable of providing numerous materials such as component parts, equipment and supplies necessary to Outer Continental Shelf development.

Coal Related Facilities

Coal is an abundant energy resource both nationally and in the State of Pennsylvania, and is thus being emphasized in energy and overall economic planning at Federal and State levels. Important coal-related facilities in the Delaware Estuary coastal zone involve coal transportation and port activities, and coke manufacturing.

Philadelphia has historically been an important coal exporting

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[30]Various support facilities are discussed in New England River Basin Commission, Factbook - Outshore Facilities Related to Offshore Oil and Gas Development, November, 1976, with periodic updates.

[31]Governor's Energy Council, Outer Continental Shelf Impact Study, Supplement to Pennsylvania's Coastal Zone Management Plan, November 30, 1977, 165 pp.

[32]Ibid, Chapter 1. Also see U.S. Department of Commerce, Delaware Coastal Management Program, Energy Facilities, n.d., p. 30-33; and New Jersey Department of Environmental Protection, Energy Facility Study Issues in New Jersey's Coastal Zone; staff working paper by Helga Busemann, 1977, p. 40-61; p. 78-84.

port, although annual shipments have dropped below one million tons in recent years.[33] Coal is also used as fuel by several local industries[34] and is beginning to gain importance as a fuel for electric power generation (see previous section). Whether for export or local use, coal arrives in the Philadelphia area by rail and is reasonably accessible to many riverfront areas. Principal port facilities for coal are located at the Penn Central Terminal Yard and at the Port Richmond Yard, both on the Philadelphia waterfront. Exports of Pennsylvania coal to foreign countries, especially to Asia, are expected to increase markedly in the future. Facility improvements and new equipment will become necessary as coal handling needs in the region increase.[35]

An additional coal-related activity in the coastal zone is coke manufacturing, which is currently conducted at the Philadelphia Coke Company site in Bridesburg, near the Betsy Ross Bridge and at the Fairless Works of U.S. Steel. The coastal zone has become a less suitable location for continued or new operations of this type due to air quality restrictions. Coke production has, however, been dropping nationally, forcing steel manufacturers to begin importing coke in recent years.[36] While a new national interest in restoring economically viable coke production capabilities may thus emerge, it is reasonable to expect that modern facilities should be constructed, in less urbanized settings than the City of Philadelphia, possibly in coal producing regions.

Existing Energy Facilities and Future Needs in the Lake Erie Coastal Zone

Electric Generating Plants and Transmission Facilities

Existing and Proposed Facilities - Electrical generation and transmission facilities within the Lake Erie coastal zone and the region immediately impacted by the coastal zone are almost wholly provided by the Pennsylvania Electric Company (Penelec). Penelec, a PJM pool member, is an operating subsidiary of General Public Utilities Corporation, located in Parsippany, New Jersey, which also owns the Metropolitan Edison Company and the Jersey

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[33]U.S. Army Corps of Engineers, Waterborne Commerce of the United States, Part 1, Waterways and Harbors Atlantic Coast, annually published, most recent available data for 1977.
[34]Delaware Valley Regional Planning Commission, Petroleum for Conversion to Coal as a Fuel in its Pennsylvania Counties of the Philadelphia Region, Technical Report No. 15, 1974.
[35]Philadelphia City Planning Commission, letter dated April 9, 1980 and follow-up telephone conversation, April 11, 1980.
[36]"Coking Shortages Forcing Up Imports, Researchers Say", The Philadelphia Inquirer, November 2, 1979, p. 11-C.

Central Power & Light Company. The Erie area is part of the Pennsylvania-New Jersey-Maryland Interconnection (PJM) region which, in turn, is directly connected to the New York Power Pool, Virginia-Carolinas Pool, Allegheny Power System, and the Central Area Power Coordination Group. Through PJM and MAAC the Erie region is tied to the National Electric Reliability Council (NERC). This consideration is important because additional generating capacity is available within the same corporate structure and network exchange.

Currently, the only utility-owned electrical generation capacity within the Lake Erie coastal region is provided by The Pennsylvania Electric Company. A 118.8 MW (nameplate) coal-fired generating plant is located at Front Street in Erie, Pennsylvania. In addition to producing electrical power, the facility operates a steam heat system extending from the Front Street Station near the foot of French Street, to as far as Eighteenth and State Streets. Spurs radiate from this center city service area. The system, dating back to the 1890's, is currently operating at a loss and reduces the electric output of the Front Street plant by 20 megawatts. The Erie generation system is the last steam system operated by Penelec. Final analyses are under way to determine the feasibility of carrying out Pennelec's desired system phase-out of the steam heating service.

Restoring the Erie plant to only electric generation will not satisfy local electrical energy needs. Transmission facilities are necessary to guarantee an adequate bulk power supply. Two 345 KV transmission lines serve the area. One brings power from the Homer City generating plant in Indiana County, Pennsylvania, and one links the PJM network into a transmission artery running from Cleveland to Erie and with reduced capacity (230 KV) to Buffalo, New York. Voltage lines (230 KV and 115 KV) also extend east to the hydro-electric facility in Warren County and south to other PJM generating capacity. In 1977, the Pennsylvania Office of State Planning and Development expressed concern that the existing high voltage transmission system is a major limiting physical factor within the region defined by Ashtabula County, Ohio, and Erie and Crawford Counties, Pennsylvania. These areas are concurrent with or adjacent to the coastal zone.

Several new transmission and electrical power generation facilities are proposed for development on the Pennsylvania Lake Erie coastal zone. These include an underwater, high voltage, transmission line, a new coal-fired generation facility and a power plant within the proposed, integrated, U.S. Steel facility.

Underwater Cable - Initial economic and technical studies have been completed by the General Public Utilities Corporation for construction of an underwater cable between Canada and the Erie area. The proposed underwater transmission line would carry 1,000 megawatts of electricity. The cable would link the Erie

area to a generating plant owned by Ontario Hydro at Nanticoke. A 1994 operational date is being proposed for this project.

The Coho Generating Station (Girard Township) - The Pennsylvania Electric Company has announced intention to construct a 690 megawatt fossil fuel generation plant one mile west of Lake City in Girard Township, Pennsylvania. Project plans require a 1,015 acre site which is currently under control of Penelec. The plant site is bounded on the north by Lake Erie, on the east by Elk Creek, on the west by a boundary approximately 9,000 feet from the mouth of Elk Creek, and on the south by the existing Erie West Substation. The plant site is divisible into three segments: a 275 acre generation site on the eastern portion of currently held lakefront property, a 545 acre solid waste disposal plant for fly ash accumulation immediately adjacent and south of the generation site, and a 195 acre transmission corridor to widen the existing southward reaching 6.2 mile long corridor to the Erie West Substation.

The Coho I Generating facility will be co-owned by Jersey Central Power and Light Company (40 percent), Metropolitan Edison (20 percent) and Penelec (40 percent). The need for the plant is based upon certain load growth and system reliability considerations as they pertain to the General Public Utilities system obligations to the PJM Interconnection. The Environmental Report for Coho Generating Station Unit I does indicate, however, full retirement of the Erie Front Street generating facility by 1989/1990 making the Coho facility at that time the only primary unit for electrical generation in the Lake Erie coastal zone of Pennsylvania.[37]

It is projected that construction of the Coho I generation facility will begin in the Summer of 1983 and that the plant will be operational by May, 1989. When fully operational, the plant will consume three unit trains of western Pennsylvania bituminous coal per week. Each train will include 100 cars of 100-ton capacity each. Excellent rail accessibility to the site already exists.

Coho is being designed to produce a 690 MW gross capacity, which will be diminished by 65 MW for on-site use, leaving a 625 MW net system resource capability for the 40-year design-life of the facility. Two 345 KV transmission lines will link the generation plant to the existing PJM grid at Erie West substation. During 1979, Penelec provided electric service at wholesale rates for 13 rural electric distribution co-ops, and also supplied six municipalities and two small investor-owned utilities. This wholesale demand accounted for approximately five percent of Penelec's electric revenue.

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[37] Environmental Report for Coho Generating Station Unit I, Volume I, General Public Utilities Corporation, 1979, p. 1-42.

The U.S. Steel Plant (Springfield Township) - To meet plant power demands, an on-site power plant fired by coal, blast furnace gas and recovered Q-BUP off-gas will be built and supplemented by outside energy sources. The system will include two 50 megawatts turbine generators and will provide approximately 25 percent of the electrical energy required by the lakefront plant. First phase development will include a 50 megawatt power station using three coal-fired boilers. A second 50 megawatt power station and two additional boilers are to be added in the second phase. Electrical energy produced by the U.S. Steel power plant will be used as the primary source for the power generation auxiliary equipment, and for the main pumphouse. Also, emergency backup power to the blast furnaces will be provided from this source. The 13.8 kilowatt power output will be stepped up to 138 KV and tied into the plant's sub-transmission system. All additional electrical needs will be purchased from a local electric utility company.[38] A bulk substation located in the southwest corner of the plant site (Conneaut Township, Ashtabula County, Ohio) will receive electrical power from the utility company at 345 KV. Substation transformers will step the voltage down to 138 KV before being linked to the internal sub-transmission of the plant.[39]

The U.S. Steel energy generation will be controlled for particulate and sulfur dioxide emissions. Particulates will be removed by the use of electrostatic precipitators while sulfur dioxide will be controlled either by use of low sulphur content coal or operation of a flue gas desulfurization system. Solid waste including fly ash will be hauled to designated on-site waste disposal areas.

Future Facility Needs and Constraints - In the immediate future, it appears that the forces of energy facility siting will outweigh any considerations for nonsiting in the Lake Erie coastal zone. Siting of any facility will be subject to the process of the Public Utility Commission and performance standards applied by the Department of Environmental Resources executing laws of the Commonwealth.

Petroleum Refining, Distribution and Related Facilities

Except for a very limited storage and transmission capability, the Lake Erie coastal zone of Pennsylvania is void of petroleum related facilities. Currently, two cribs in Fairfield Township allow for off shore unloading of refined petroleum products. The

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[38]"Draft Environmental Impact Statement. Permit Application by United States Steel Corporation Proposed Lake Front Steel Mill", Conneaut, Ohio; Volume I (U.S. Army Corps of Engineers, Buffalo District, 1979), Section 1.223, p. 1-131.
[39]Ibid, Section 1.225, p. 1-132.

docking area at the foot of Cascade Street in Erie similarly contains facilities for unloading and storing refined petroleum products. No plans exist to expand these facilities.

The new U.S. Steel Mill anticipates import of fuel oil for use as a supplemental fuel for the strip mill, plate mill, slab reheating furnances, and as a backup fuel for the lime plant and the sinter plant. The fuel will be stored in diked, above ground, unpressurized, steel tanks on the plant site.

It is not anticipated that petroleum refining, distribution or related activities will constitute significant impacts on Lake Erie coastal zone. Currently, there are no plans to locate or develop offshore oil resources from Lake Erie.

Natural Gas Production and Distribution Facilities

Natural gas is stored in two storage fields in Erie County, one of which is in Summit Township. Small amounts of natural gas have been produced in the vicinity of the coastal area. Gas reserves occur in shallow and deep gas fields throughout the region including beneath the waters of Lake Erie.

Off-Shore Gas Developments - In 1957, the Pennsylvania Department of Forests and Waters (now included within the Department of Environmental Resources) leased for off-shore exploration, two physically separated blocks of submerged land totaling 36,000 acres. The lease holder, New York State Natural Gas (Pittsburgh, Pennsylvania) was unable to identify a commercially productive well on either of their leased tracts. After a decade of sporadic interest, Pennsylvania again in 1967 offered land for lease purchase to Ranger Oil Company (Alberta, Canada) and Pan American Petroleum (Fort Worth, Texas). A total acreage of 20,000 acres adjacent to the Canadian border was involved in the leasing. Actual exploration never got underway. A 1968 moratorium placed on all search activities by Pennsylvania Governor Raymond Shaefer, because of public outcry over the Santa Barbara oil spill in California, prevented any exploration in the lake. Attempts to lift the moratorium faced considerable resistence despite a demonstrated capability of exploration and production on the Canadian side of Lake Erie, in-depth analyses which indicated no significant environmental threat, and recommendations through the Governor's Energy Council to lift the moratorium. During the administration of Governor Shapp, the moratorium on off-shore drilling was allowed to expire. This action was in part due to the decreasing availability of natural gas, increasing costs of natural gas, and the overall national drive towards energy self-sufficiency.

In late 1978, the Argonne National Laboratory submitted to the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency a phase I study of the issues related to U.S.

Lake Erie natural gas development.[40] Before drilling permits will be issued, a Phase II study including a draft environmental impact statement will need to be completed.

Several concerns of immediate coastal zone relevance raised by off-shore drilling include:

1. Development of support services facilities.

2. Disposal of muds containing chemical agents, toxic substances, and cuttings.

3. Shoreline placement of pipelines from wells.

4. Facility failures resultant from maintenance of shipping and fishing activities on the lake.

5. Possible risks to drinking water.

6. Impacts on Lake Erie fisheries.

It is highly probable that off-shore natural gas exploration and production will occur in the future due to the national goal of energy self-sufficiency. Through existing State legislation, the Coastal Energy Impact Program, and the Department of Environmental Resources environmental protection regulations for the prevention of the deterioration of air and water quality by ensuring through permitting and monitoring that the State standards are followed and negative impacts to the coastal zone will be prevented.

On Shore Natural Gas Developments - Considerable on-shore drilling has occurred within the Lake Erie coastal zone. Currently, exploration is most obvious within the eastern study area of the coastal zone. As of the end of 1979, approximately 200 deep gas wells were operating within this area. The National Fuel Gas Company is actively purchasing much of this production. The Columbia Gas Company also has expressed interest in acquiring this gas production. The current production is taking place in conjunction with existing land use with minimal perceived negative impact.

In 1979, an exploratory gas well was drilled on Presque Isle with the backing of the Department of Environmental Resources and the U.S. Department of Energy. The success of this and other private ventures has encouraged numerous businesses to share the cost of a study to determine the best places for drilling wells for

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[40] An Examination of Issues Related to U.S. Lake Erie Natural Gas Development, Prepared by the Argonne National Laboratory (Argonne, Illinois) for the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency (September, 1978), 194 pp.

natural gas along the bay front of the City of Erie. Among those corporations supporting this venture are Erie Sand and Gravel Company, Erie Reduction, the GAF Corporation, Pennsylvania Electric Company, Koppers and Erie Western Pennsylvania Port Authority. The study to be done by the Monsanto Corporation under exclusive contract to the U.S. Department of Energy will, hopefully, result in gas wells for use by some city operations, particularly the water and sewer bureaus.

Although there are no plans for manufacturing oil, gas or snythetic natural gas from naphtha, there are definite plans to expand the exploration of the Oriskany strata for reserves of natural gas. These reserves will be consumed, in part, in situ; and in part, will be linked to the existing supply network. No long term adverse affects on the landscape are anticipated from such operations.

Coal Transport and Port Facilities

Coal remains the principal industrial energy source for the region. Supplies of coal are shipped to the area by rail and truck. Given the relatively high sulphur content of Pennsylvania's bituminous coal supplies, new sources in the western states are being considered. Although no lake shipping of any consequence has been involved in the coal traffic to the area, it is conceivable that water carried coal import could occur in the future. Currently, rail transportation predominates.

The existing facilities include truck transported coal for the Penelec Generator in Erie and rail transported coal for Koppers, Hammermill and other large manufacturers in the coastal zone. The new U.S. Steel mill and the Coho I generating plant will be supplied by rail. Adjacent to the proposed steel facility in the State of Ohio is an existing coal export facility.

The chief drawback to coal use in the Lake Erie coastal zone is the control technology necessary to maintain air quality standards. The cumulative impact of coal-fired emmissions hinders planning for and siting of other energy producing or energy dependent facilities within the coastal zone. Recent relaxation (1979) of the sulfur emmission regulations within the Erie Air Basin could have a deleterious effect on the region, which is more significant than the fuel advantages generated. The Coho I plant will be designed to meet the most stringent Federal New Source Performance Standards rather than the relaxed local standards.[41]

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[41] Environmental Report for COHO Generating Station Unit I, Volume I, General Public Utilities Corporations, 1979, p. 2-52.

Procedures for Assessing Suitability of Sites

Legal Mechanisms - Through the Public Utility Code's Certificate of Public Convenience (Act of October 25, 1970, Public Utilities Code, (P.L. 707, No. 230), Pa. Consolidated Statutes, Title 66, Chapter 11.1 et seq.), an energy facility may be located where there is a demonstrated need for the utility. This process states that the PUC will issue a certificate only when it finds or determines that the granting of such certificate is necessary or proper for the service, accommodation, convenience or safety of the public. To assist the PUC in making the finding or determination, it will hold public hearings and investigations (the process is discussed in more detail in Chapter 3 under Uses of Regional Benefit). Once this certificate is awarded to the utility, it may exercise the power of eminent domain and acquire the land for development. The utility is then exempt from local zoning. At this point, the utility will usually start to acquire and analyze environmental data including air and water quality studies. When sufficient data has been collected, preliminary engineering studies will be completed, and the utility will apply for the necessary Department of Environmental Resources environmental protection permits. This application is made through the existing permit process discussed in Chapter 4, Permit Monitoring.

When all of these environmental protection permits are acquired (see Chapter 2, Coastal Policy Framework, Energy Facility Siting) and any potential conflicts are resolved through the public hearing process used by the Environmental Hearing Board, the utility will begin construction of the facility. This process from initial site acquisition to plant completion may take as long as 10 to 12 years.

Administrative Mechanisms - Because the energy facility siting process requires a great deal of lead time and prompt energy facility siting decisions are important in helping Pennsylvania and the Nation meet future energy needs, the Coastal Zone Management Branch will work closely with local governments to identify suitable sites for energy development, thus reducing the lead time presently required to develop energy facilities. At the request of local governments, the Coastal Zone Management Branch will assist them in identifying energy sites that are environmentally safe, satisfactory to the community, and potentially useful to the utility. The following administrative process for assessing site suitability based on the GAPC concept will be utilized. Site suitability for a wide variety of uses has been explored for each class of nominated GAPC. As a result of this exploration, the following decisions were arrived at: GAPC nominated as (1) areas of significant natural value, or (2) areas of significant recreational, historic or cultural value, are not appropriate for future development or expansion of energy facilities, while GAPC nominated as development opportunity areas will be given high priority for energy facility siting. By local identification of potential sites for energy

facilities, the process for issuing certificates of public convenience will be expedited and will be less likely challenged.

Within the Delaware Estuary coastal zone, energy activities should be developed at, or immediately adjacent, to existing energy facilities. In the Lake Erie coastal zone, new sites will be required.

As the previous section on Petroleum Refining (Delaware Estuary) indicates, on-site modifications and expansions are already underway or planned at existing locations. Peaking capacity has historically been added on the site of base load electric generating facilities. Similar strategies are appropriate for other types of energy facilities, as long as sufficient space for expansion is available. Practical considerations have, to an extent, forced this approach in the densely developed Delaware River waterfront area, but such a strategy would minimize impacts in both coastal zones.

In cases where existing sites are not suitable for expansion, those GAPC nominated as Development Opportunity Areas would be most appropriate for new or expanded energy facilities. Each Development Opportunity Area has been selected as a GAPC because of the potential to "serve regional, State or national economic interest". (See Criteria for Nominated GAPC, Chapter 3).

Specifically, GAPC classified as Development Opportunity Areas have already been accorded high priority for such uses as petroleum refining and electrical energy generation. (See section on Priority of Uses in GAPC, Chapter 3).

Within the Delaware Estuary coastal zone, 14 areas have been identified as Development Opportunity Areas. While each one is not capable of supporting every type of future energy use, more than enough land has been identified to accommodate the relatively limited amount of energy expansion forecast earlier in this section.

In the Lake Erie coastal zone, two Development Opportunity Areas have been nominated. DO-1 is the 2,100 acre portion of the U.S. Steel property inside the coastal zone boundary. Availability of water, port facilities, rail access and highway connections were all considerations in the nomination of these areas. DO-2, the Pennsylvania Electric Company site, was also nominated as a Development Opportunity Area. On this site, Penelec intends to construct a 690 megawatt electric generating plant.

In any area selected for new or expanded energy facilities, whether an existing site, GAPC or newly-identified location, the facility must conform to the State's existing regulatory and permit structure. The Department of Environmental Resources acts for the Commonwealth and ensures that all energy facilities are located in an environmentally responsible manner by issuing

permits. These permits are listed in Chapter 2 under Authorities for Energy Facility Siting.

Enforceable Policies and Authorities for Managing Energy Facilities

Coastal Zone Management development and approval provisions require coastal states to articulate coastal zone management policies, authorities and techniques for managing energy facilities and their impacts.

Pennsylvania's Coastal Zone Management policies and authorities pertinent to energy facility management are presented in detail in Chapter 2, Policies VIII-1 through VIII-4, of this document. These policies are based on legislative authority and on adopted rules and regulations of the Department of Environmental Resources and the Public Utility Commission. Because of this reliance on existing authorities and regulations, the energy facility management technique utilizes the concept of networking (which is described in Chapter 4 of this document) to implement the policies and to ensure that future energy facility siting or development occurs in a manner consistent with these policies. The key part of this strategy will be the Coastal Zone Management Branch review of all energy projects requiring the Department of Environmental Resources environmental protection permits. All energy facility development requires Department permits for both construction and operation.

Through the permit review process described in Chapter 4, the Coastal Zone Management Branch will possess a mechanism that will enable review of all energy facility development proposals that will affect the coastal zone.

Involvement of Interested Public and Private Parties

The siting of energy facilities in the Commonwealth is open to all public and private interests. Opportunities for involvement are available during initial site selection (PUC Certificate of Public Convenience Process), environmental permit review (Permit Monitoring Review Process), and after permit issuance (Environmental Hearing Board appeals process). Recommendations concerning alternative sites and alternative forms of energy productions should be presented at the PUC hearing process. Concerns on potential environmental impacts should be expressed to the Environmental Hearing Board. All of these processes and the entry points for involvement in the decision making process by public and private interests are discussed in detail in Chapters 4 and 5.

In addition to the mechanisms traditionally available to the public new avenues for participation in the siting of energy facilities have been opened through the establishment of local

Coastal Zone Steering Committees and the Coastal Zone Advisory Committee. Citizens and interest groups may make their views on siting issues known by:

1. Attending local Coastal Zone Steering Committee meetings.

2. Contacting local officials who participate in coastal zone meetings.

3. Contacting the county (or city) planning commission, which has a permanent seat on the Steering Committee.

4. Contacting the Coastal Zone Management Branch directly.

5. Appearing before the Coastal Zone Advisory Committee, in Harrisburg.

These new avenues for public participation, established by the Coastal Zone Management Program, are essentially two-way streets. Not only can citizens make their views known through the mechanisms described above, but the various State agencies forming the Coastal Zone Advisory Committee can solicit input and ideas from a variety of sources. Early involvement by the Coastal Zone Advisory Committee and early notification of interested participants is the most critical concern.

SHOREFRONT ACCESS AND PROTECTION PLANNING

Requirements

To fulfill the requirements of subsection 305(b)(7) of the 1976 amendments to the Coastal Zone Management Act of 1972, Pennsylvania's Coastal Zone Management Program must include a planning process that identifies public shorefront areas appropriate for increased access and/or protection.

There are three elements which must be included in the shorefront access and protection planning process:

1. A procedure for assessing public beaches and other public areas . . . which require access or protection, and a description of appropriate types of action.

2. A definition of the term "beach" . . . and an identification of public areas meeting that definition.

3. An identification and description of enforceable policies, legal authorities, funding programs and other techniques that will be used to provide

shorefront access and protection. 15 CFR 923.24 (March 28, 1979)

Introduction

Although the issue of the public's right to use the Nation's shorelines has been with us for centuries, it has become a much more pressing problem in recent years. Throughout the United States, the demand for shoreline recreation areas is increasing while the supply of land available for public recreation use is diminishing. There are a number of factors involved in this growing demand/supply imbalance. A basic factor is simply the large number of people living in close proximity to shoreline areas. It is estimated that one-half of the Nation's population lives in counties bordering our oceans and the Great Lakes. With increased leisure time and mobility, this growing population has created an intense demand for shoreline recreation. However, at the same time, land previously available to the public is being fenced off for private development of second homes and resorts, industrial and commercial facilities. Thus, access to the waterfront is becoming increasingly limited.

Riparian Ownership in Pennsylvania

In the Lake Erie coastal zone, differences in water level are dependent on hydrologic variables over the entire basin and produce changes of levels amounting to less than two feet per year, with extremes of record indicating a range of not more than five feet since 1860. Therefore, the shoreline of Lake Erie is fairly constant over time except with variations produced by extreme water level changes and shoreline erosion. The Commonwealth of Pennsylvania holds title to the land beneath Lake Erie in trust for the people of the Commonwealth.

When Pennsylvania was an English colony title to the Delaware River and its bed was vested in the British Crown. Following the American Revolution and the Treaty of September 3, 1783, all rights and sovereignty of Great Britain passed to the states. Because the Delaware River was a navigable coterminous stream between New Jersey and Pennsylvania, the title to the bed of the river extended from its respective shore to the center of the river. The Commonwealth's title on the shore of the Delaware extends to the ordinary low water mark. Such mark is defined as the height of water at ordinary stages of low water unaffected by drought or artificial means.

There is very real need for the Commonwealth, acting in concert with local authorities and utilizing the assistance of the Federal government, to deal with the access problem. It is the intent of the Commonwealth to work diligently with local governments to provide a planning process, whereby additional access can be guaranteed through restoration, acquisition, and development of lands in the coastal zone.

Definition of the Term "Beach" and Identification of Public Areas Meeting that Definition

The deposits of sand and gravel that cover the shore in many places are known as beaches. Although they appear stable under conditions of small waves, beaches are eroded so rapidly when attacked by heavy surf and storm waves that they may change their character in a few hours.

For many years Douglas W. Johnson's Shore Processes and Shoreline Development (1919) was the only text book related to beaches, but in recent years this has been supplemented with other works. The term beach, according to Johnson "is a deposit of material which is in more or less active transit along shore or on-and-off shore . . ".[42]

Most authors dealing with the geomorphic aspects of coasts generally define beach in similar terms all denoting action or transition. For purposes of the Coastal Zone Management Program, Pennsylvania has defined "beach" as:

> The zone of unconsolidated material extending landward from the mean low waterline to the place where there is a change in material or physiographic form as, for example, the zone of permanent vegetation, or a cliff. The upper limit of the beach usually marks the effective limit of storm waves.[43]

Lake Erie Coastal Zone - Pennsylvania's most outstanding beaches are found at Presque Isle State Park in Erie County. Presque Isle State Park is located on a compound, recurved, sand spit which forms a bay of seven square miles and shelters one of the best natural harbors on the Great Lakes. The sand spit is highly susceptible to storm waves, especially at the long connecting "neck", and erosion has been fought by the Commonwealth and the U.S. Army Corps of Engineers since 1810. The peninsula is approximately seven miles long and covers about 3,200 acres. (See map of Lake Erie coastal zone, Chapter 2) The state park plays host to over three million visitors annually.

The rest of the Lake Erie coastline consists mainly of bluffs varying from 10 to 170 feet high. Beach formation at the base of the bluffs is marginal, because of the lack of availability of materials in the littoral transport system. Therefore, beaches east and west of Presque Isle tend to be narrow and discontinuous. Accumulations there tend to be pocket beaches or accumulations of sand associated with stream mouths.

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[42]Johnson, Douglas, Wilson, Shore Processes and Development, New York, Hefner Publishing Company, 1965, facsimile of the 1919 edition.

[43]Sheppard, Francis P., Submarine Geology, Harper and Row, New York, New York; Second edition, 1963.

No significant privately owned beaches exist in the Lake Erie coastal zone. Public areas which meet the definition include: Raccoon Creek County Park, Eagley Park, Presque Isle State Park, and Shades Beach County Park.

There are additional public areas where there is marginal accumulations of sand, but use of the beach in the traditional sense is limited or discouraged.

The list of publicly owned beach areas is not likely to be enlarged because of volume of sediment deposited is small and is constantly redistributed by erosion processes.

Private ownership of the shore of Lake Erie limits access by the general public. Pennsylvania Route 5 parallels the coast both east and west of the City of Erie. Ownership lakeward of the road follows the St. Lawrence River Valley ownership pattern with narrow, deep lots connecting the road with the shore. In many locations, the lake is not visible or accessible due to this development pattern. Similarly, the stream valleys have tended toward private ownership excluding the general public in the majority of cases.

In addition to Presque Isle State Park and State owned historic sites, the State has developed recreation facilities at the mouth of Walnut Creek. The site is managed by the Fish Commission and provided boating and fishing access to Lake Erie.

County recreation facilities exist at Raccoon Creek, Scott County Park, and Shade Beach. Local governments have developed facilities at Eagly Park (Springfield), Lake Erie Community Park (Girard), East Side Marina (Millcreek Township), Freeport Beach and Darymple Beach (North East Township). Through these efforts, the State in cooperation with local governments has provided for protection and access to public beaches of Lake Erie as well as to other public coastal areas of environmental recreational historic, aesthetic, ecological or cultural value.

Areas with future potential for recreation access (some of which are indicated on locally prepared comprehensive plans) include: Crooked Creek, Elk Creek, Trout Run, Sixmile Creek, Sevenmile Creek, Sixteenmile Creek (Orchard Beach) and Twentymile Creek. In most cases, these areas with future potential for access are not zoned for open space or recreation because they are privately owned.

Delaware Estuary Coastal Zone - An inventory of the Pennsylvania side of the Delaware Estuary reveals there are a number of public areas of recreational, historical, and ecological importance to which the Commonwealth has provided public access in cooperation with local governments.

Existing publicly-owned recreational access areas include: McClure Park, Governor Printz State Park, and Tinicum Marsh, in

Delaware County; Ft. Mifflin, Penn's Landing, Penn Treaty Park, Pennypack Park, and Pleasant Hill Park, in Philadelphia County; and Neshaminy State Park, Delaware River Access Area, Pennsylvania Canal, and Pennsbury Manor, in Bucks County. Local comprehensive plans indicate recreation or open space potential at the mouth of the Chester Creek, Little Tinicum Island, mouth of the Pennypack Creek, and a "greenway" along the Delaware River in Bensalem, Bristol, and portions of Falls Townships.

As in the case of Lake Erie, most of these plans are not reflected in zoning ordinances as long as the land remains in private ownership.

No significant beaches either publicly or privated owned. At low tide, tidal flats of mud or gravel are uncovered in several locations. Recreational boaters sometimes beach their vessels on the narrow "beaches" and bars of Little Tinicum Island; Echo Beach, in Bensalem Township; a small cove in Tulleytown; and on the property of the Warner Company, above Money Island, in Falls Township. All of these locations are privately owned.

The majority of boaters using the Delaware River prefer to beach on tidal flats on the New Jersey side of the river or the islands such as Newbold, Burlington or Chester which belong to New Jersey.

One of the key goals of the Coastal Zone Management Program is to use program management funds to update local plans and revise ordinances to reflect increased public access to public coastal areas. Access will be acquired through the use of funds from the Coastal Energy Impact Program and the other programs listed later in this chapter under Federal programs.

A Procedure for Assessing Public Areas Requiring Access or Protection

Because public access to the water is so limited in Pennsylvania's two coastal zones, this section will concentrate on public areas, appropriate for access or protection. Earlier in this chapter, techniques used to identify Geographic Areas of Particular Concern (GAPC) were described. During the development of the Coastal Zone Management Program, four types of nominated GAPC areas were identified because of their critical nature or special management needs, including:

1. Areas of Significant Recreational, Historic or Cultural Value - where reclamation, restoration, public access and other remedial actions may be needed.

2. Areas of Significant Natural Value - where "overlaps" or concentrations of natural features such as

woodlands, wetlands, wildlife habitats and floodplains exist.

3. Development Opportunity Areas - especially suited to more intensive development or redevelopment.

4. Overlap Areas - containing development potential and natural amenities.

The first two of these nominated GAPC types include the areas of the coastal zone most appropriate for the development, or improvement of public access. In the Lake Erie coastal zone, fourteen areas were identified as either:

1. Areas of Significant Recreational, Historic or Cultural Value, or

2. Areas of Significant Natural Value.

A list of these areas may be found in the Inventory of GAPC presented previously in the Chapter. These fourteen areas should receive the highest priority for improvement in public access.

In the Delaware Estuary coastal zone, twenty-three areas were nominated as Recreational, Cultural or Historic GAPC and five areas were nominated as Natural Value GAPC (See Inventory of GAPC). These 30 areas are suitable for development or improvement for public access.

"Areas of Preservation and Restoration (APR) identified pursuant to Section 306(c)(9) of the Coastal Zone Management Act may also require improvements for public access. These areas are described in a previous section entitled Areas for Preservation and Restoration.

If additional sites are to be identified in the future for improved public access, the GAPC methodology will be utilized.

To further improve public access to waterfronts in Pennsylvania's two coastal zones, the following processes will be employed:

1. In consultation with local governments, sportsmen groups, and other interested groups or individuals, the Department of Environmental Resources will develop a needs inventory projecting anticipated demand for shore access into the next two decades.

2. An assessment of existing areas for possible expansion of access as well as possible limitations of existing use will be examined in light of projected needs.

3. The Coastal Zone Management Branch will encourage local governments to incorporate designated GAPC having significant natural value or recreation,

historic or cultural value, into their comprehensive plans and zoning ordinances. Results will also be factored into SCORP.

4. The Coastal Zone Steering Committees (See Chapter 5) will recommend nominated GAPC with high priority for improved access for designation to Pennsylvania's Coastal Zone Management Branch.

5. Plans for providing additional access will be prepared with and presented to the public for advice and affirmation based on technical input.

6. To facilitate acquisition and development of access sites, traditional funding sources and potential new funding sources will be explored along with less than fee acquisition such as easements.

7. Access in coastal areas can be provided in GAPC through the expenditure of coastal zone management funds.

Demonstration Projects for Improved Public Access

In order to explore and demonstrate the manner in which Coastal Zone Management funds can be utilized by local governments, four feasibility studies for improving public access were initiated in late 1979 and early 1980. Two feasibility studies were conducted in the Delaware Estuary coastal zone and two were undertaken in the Lake Erie coastal zone. In each case, the areas studies had been previously nominated as Areas of Significant Recreational, Historic and Cultural Value (GAPC). In the Delaware Estuary feasibility studies examined:

R-1 - McClure Park in Marcus Hook Borough, Delaware County

The feasibility study examines the possibility of expanding McClure Park to include adjacent parcels along the Delaware River, including the Federal Quarantine Station. The outstanding feature of this park is its vantage point for viewing river activity. It is one of only two public access areas on the river in Delaware County.

R-22 - Falls Township Access Area, Bucks County

At the foot of Lauderback Road, adjacent to land owned by U.S. Steel is a small tract of land owned by Falls Township. The study examines the feasibility of developing this vacant site for boat launching, fishing or passive recreation.

In the Lake Erie coastal zone, the feasibility of expanding or improving access was studied for:

R-2 - Elk Creek Estuary Site, Girard Township, Erie County

This site consisting of approximately 320 acres has long been considered a potential site for recreational development. Most of the land is privately owned and the west bank of the creek mouth is owned by the Pennsylvania Electric Company. The feasibility of developing the site for public fishing, swimming and boating, while protecting the forested bluffs which surround the stream valley, is examined by the study.

R-9 - Twentymile Creek Access Area, North East Township, Erie County

This GAPC covers approximately 75 acres and is privately owned. There are about three dozen summer cottages located near the lakefront on both sides of the creek. Because of the scarcity of public access areas in the eastern portion of the Lake Erie coastal zone, the feasibility of recreational development is examined.

If the results of these studies show that it would be feasible and desirable to develop these areas for access and recreational opportunities, then efforts will be made to develop these areas using coastal zone management Section 308 Coastal Energy Impact Program funds, Section 315 coastal zone management funds (if funded), or any other available sources of funds.

Consideration of SCORP Policies

When considering areas suitable and appropriate for improved and enhanced public access, the Coastal Zone Steering Committee (CZSC) and local governments should consider the following policies contained in Pennsylvania's State Comprehensive Outdoor Recreation Plan (SCORP):

1. It is Commonwealth policy to strive for the provision of recreational opportunities for every citizen of the Commonwealth as well as visitors and tourists, in both urban and nonurban settings.

2. It is Commonwealth policy to strive for improvements in accessibility to recreation areas, facilities, and programs.

3. It is Commonwealth policy to acquire or to assist other levels of government in their acquisition of lands and waters which are identified as having significant recreational, natural, scenic, and aesthetic values and those areas which are needed to protect existing public recreation resources from encroachment.

4. It is Commonwealth policy that Pennsylvanians are to have a supply of clean, unspoiled water to meet their water-related recreation needs.

5. It is Commonwealth policy to manage the fisheries resources in a manner which provides recreation opportunities to all fishermen, from the most dedicated to the occassional.

6. It is a Commonwealth policy to manage the wildlife resources in a manner which protects natural predators as well as rare and endangered species, provides for the full diversity of species of which: Pennsylvania is ecologically capable, and fosters a naturally bountiful supply of game which can be harvested in recreational hunting.

7. It is Commonwealth policy to identify and protect those lands which qualify as either wild or natural areas.

8. It is Commonwealth policy to place a high priority on the use of suitably identified floodplains for low density recreation areas and open space.

9. It is Commonwealth policy to regulate use of State areas and facilities in order to maintain the quality of the recreation experience and to prevent degradation of resources.

Identification and Description of Enforceable Policies, Legal Authorities and Funding Programs

Pennsylvania's specific policies dealing with public access and recreation are found in Chapter 3, Policy Framework, Section V, Policies V-1 and V-2. These policies are based on legislative authorities which allow State agencies to acquire land needed to provide access. As described earlier, the Commonwealth has provided public access to public resources in both coastal zones. Presque Isle State Park is the most heavily used of all State Parks. Pennsylvania will also assure public access to public coastal areas through the GAPC process as described earlier in this chapter. Since recreation is a use of regional benefit as defined by the Commonwealth, Pennsylvania ensures that State recreation areas which provide access to public areas of the coastal zone will not be arbitrarily excluded by actions of local governments.

Federal Programs: In addition to the State authorities, cited in Chapter 3 and Appendix B and the Coastal Energy Impact Program discussed earlier, the following Federal programs are useful for the provision of visual and physical access in the coastal zone:

a. Coastal Zone Management Program Administration

(1) Authorization: Coastal Zone Management Act of 1972, Section 306, 16 U.S.C Section 1455 (1972); Coastal Zone Management Act Amendments of 1976, Section 306, 16 U.S.C Section 1455 (1976).

(2) Administration: National Oceanic and Atmospheric Administration, Department of Commerce. Funds are channeled through the Pennsylvania Department of Environmental Resources, Coastal Zone Management Branch, to state agencies and local governments.

(3) Eligibility: Any coastal state whose Coastal Zone Management Program has been approved by the Secretary of Commerce.

(4) Types of Assistance: Project grants are available. At least 20 percent of the total project cost must be provided by the applicant. Federal funds from other sources cannot be used to match.

(5) Uses and Use Restrictions Applicable to Public Access: Grants may be used only to administer the State's approved Coastal Zone Management Program. States are encouraged to apply implementation funding for these purposes in which there are national interests including the provision of access to and use of the shorefront and urban waterfronts. Other purposes include the management of designated areas of particular concern.

b. Outdoor Recreation - Acquisition, Development, and Planning

(1) Authorization: Land and Water Conservation Fund Act of 1965, as amended, 16 U.S.C. Sections 4601-6 et seq. (1965).

(2) Administration: Heritage Conservation and Recreation Service, Department of the Interior. Funds are channeled through the Pennsylvania Department of Environmental Resources, Recreation Grants-In-Aid staff, and the Pennsylvania Department of Community Affairs, Bureau of Recreation and Conservation.

(3) Eligibility: For acquisition and development grants, the Department of Environmental Resources's Recreation Grants-In-Aid staff, may apply for assistance for itself, or on behalf of

other State agencies. The Department of Community Affairs, Bureau of Recreation and Conservation, handles grants for political subdivisions, such as cities, counties, or park districts. Individuals and private organizations are not eligible.

(4) Types of Assistance: Project grants available to 50 percent of cost. Under certain conditions, all or part of the project sponsor's share may be from certain other Federal assistance programs, such as Title I Community Development. Funds are available for obligation during the fiscal year in which appropriated and for the following fiscal years.

(5) Uses and Use Restrictions Applicable to Public Access: Acquisition and development grants may be used for a wide range of outdoor recreation projects and support facilities for these same projects. Facilities must be open to the general public. Development of basic rather than elaborate facilities is favored. Priority consideration generally is given to projects serving urban populations.

c. Economic Development - Grants and Loans for Public Works and Development Facilities.

(1) Authorization: Public Works and Economic Development Act of 1965; as amended; 42 U.S.C. Sections 3131. 3132, 3135, 3141, 3171 (1965).

(2) Administration: Economic Development Administration, Department of Commerce.

(3) Eligibility: States, local subdivisions thereof, and private or public nonprofit organizations or associations representing a redevelopment area are eligible to receive grants and loans. Corporation and associations organized for profit are not eligible.

(4) Types of Assistance: Project Grants and Direct Loans. The basic grant rate may be up to 50 percent of the project cost. Severely depressed areas that cannot match Federal funds may receive supplementary grants to bring the Federal contribution up to 80 percent of the project cost. Additionally, redevelopment areas located within designated economic development districts may, subject to the 80 percent maximum Federal grant limit, be eligible for a 10 percent bonus on grants for public works

projects. Long-term (up to 40 years) low interest loans may be made to the applicant when financial assistance is not otherwise available from private lenders or Federal agencies on terms which would permit accomplishment of the project.

(5) Uses and Use Restrictions Applicable to Public Access: Grants for public tourism facilities are available. To qualify, these projects must fulfill a pressing need of the area and must: (a) tend to improve the opportunities for the successful establishment or expansion of industrial or commercial plants or facilities, (b) assist in the creation of additional long-term employment opportunities, or (c) benefit the long-term unemployed and members of low-income families or otherwise substantially further the objectives of the Economic Opportunity Act of 1964. In addition, proposed projects must be consistent with the currently approved overall economic development program for the area in which it is located.

d. Public Land for Recreation, Public Purposes and Historic Monuments

(1) Authorization: Recreation and Public Purposes Act of June 14, 1926, as amended; 43 U.S.C. Section 869; et seq. (1926).

(2) Administration: Bureau of Land Management, Department of the Interior.

(3) Eligibility: States, Federal and State instrumentalities and political subdivisions, including counties and municipalities, and nonprofit corporations. Individuals do not qualify.

(4) Types of Assistance: The sale, exchange, or donation of property and goods is available. For public recreation purposes, a price of $2.50 per acre with a minimum of $50 per transaction, lease at $0.25 per acre per year with minimum payment of $10 per lease.

(5) Uses and Use Restrictions Applicable to Public Access: Available public lands may be leased or purchased for public recreation and other recreational and public purposes. The applicant cannot secure lands under this act for any use authorized under any other public land law. If applicant attempts to change use of land to

other than that for which land is conveyed, or transfer title without consent of the Secretary of the Interior, title of land will revert to the United States.

e. Disposal of Federal Surplus Real Property

(1) Authorization: Federal Property and Administrative Services Act of 1949, Section 203, as amended, 40 U.S.C. Section 484 (1949); Surplus Property Act of 1944, Section 13(g), as amended, 50 U.S.C. Section 1622 (1944); Act of May 19, 1948, 16 U.S.C. Section 667 (1948); Act of January 2, 1971, 42 U.S.C. Section 4638 (1971).

(2) Administration: General Services Administration; applications are made to the Heritage Conservation and Recreation Service, Department of the Interior.

(3) Eligibility: States and local government agencies are eligible to apply for surplus real property for park, recreational, . . ., and general public purposes.

(4) Types of Assistance: The sale, exchange, or donation of property and goods is available.

(5) Uses and Use Restrictions Applicable to Public Access: Surplus real property may be conveyed for public park or recreation use at discounts up to 100 percent. Surplus property conveyed for public park or recreation use must be used for the purposes so conveyed in perpetuity. Surplus real property which is not deeded to public bodies is generally offered for sale to the public on a competitive bid basis.

Other Techniques for Providing or Improving Access: In addition to fee-simple and less-than-fee interests, access may be provided by:

1. Acquisition in fee by gift of land for public purposes. This is a highly desirable method of conveying property. Donation holds advantages for the donor especially with regard to tax savings, and is a relatively simple process which gives the state a measure of freedom to vary the uses of the property as it sees fit. The landowner can include use restrictions in the deed of transfer to ensure the land will be used according to the donor's wishes;

and, the receiving government must accept the conditions attached to the grant.

2. Police power. The two most useful police power techniques are the application of eminent domain and the imposition of land use controls and regulations.

   Eminent domain is a process by which governmental entities can acquire proprietary interests in privately held land in exchange for compensation, regardless of the owner's willingness to sell. Compensation is usually fixed at market price. Land acquired through this process must be used for public use or benefit.

   In acquiring shorelands and waters access with eminent domain, property can be condemned in fee. A second application of eminent domain is to condemn easements for public rights-of-way. Agencies in Pennsylvania, which can use eminent domain to provide public access for achieving the shorefront access objectives of the program, are the Department of Environmental Resources, the Department of Community Affairs, and the Pennsylvania Fish Commission.

   A variety of land use and regulatory controls such as zoning may be applied to secure and protect public access. Of course, for these regulations to be implemented, enabling legislation must be in place.

3. Preferential taxation. This is a process which can be applied to public access acquisition. A shoreline owner can be encouraged to maintain his property for open space or agricultural uses. Taxation is based on current use rather than assessment of potential.

SHORELINE EROSION/MITIGATION PLANNING

Introduction

The Federal Coastal Zone Management Act, as amended in July 1976, acknowledges the concern of the Federal Government for coastal erosion and provides guidelines for addressing these concerns. Section 305(b)(9) provides for:

> . . . a planning process for (a) assessing the effects of shoreline erosion (however caused), and (b) studying and evaluating ways to control, or lessen the impact of, such erosion, and to restore areas adversely affected by such erosion.

Rules and regulations developed by the Office of Coastal Zone Management as a result of such legislation require the states to include: (15 CFR 923.25, March 28, 1979)

1. A method for assessing the effects of shoreline erosion and evaluating techniques for mitigating, controlling or restoring areas adversely effected by erosion.

2. An identification and description of enforceable policies, legal authorities, funding techniques . . that will be used to manage the effects of erosion.

The following section deals exclusively with erosion/mitigation planning for the Lake Erie coastal zone. Erosion has not been identified as a significant problem in the Delaware Estuary coastal zone.

Background

Shoreline erosion and bluff recession continue to be the most significant problems of the Lake Erie shoreline. The Commonwealth, early in the coastal zone management effort, recognized the need for a comprehensive inventory of shore hazards and commissioned a study to deal with the phenomena. The results of this study are published as a separate report entitled Shoreline Erosion and Flooding: Erie County by the Department of Environmental Resources.

Two studies were developed by the Department of the Army, Buffalo District, Corps of Engineers: one, regarding shore damage statistics and costs of protection, which has been incorporated into the Chicago District's "Shoreline Damage Inventory"; and another dealing with a shore structure inventory, which is an ongoing study headed by COE Joseph Jarnot, provide useful information in establishing losses and measures taken by the public to mitigate those losses.

The Coastal Zone Steering Committees have, for three years, been a valuable source of information, assisting the Commonwealth in a better appreciation of the problem.

The various studies clearly demonstrate that a comprehensive planning process dealing with erosion/recession and structural or nonstructural mitigative procedures is essential. While any such process is not an end in itself, it will provide an effective means of communicating the seriousness of the problem and direct assistance to the public.

Because the shoreline of Pennsylvania on Lake Erie is relatively short, the Commonwealth, has in the past, not comprehensively addressed the problem associated with erosion. The single

outstanding exception is Presque Isle State Park, a sand spit located off the City of Erie. Governmental efforts in attempting to prevent widescale beach losses on Presque Isle have been constant and costly over time. Inclusion of the Pennsylvania coast in Federal studies has generally been in conjunction with basin-wide problems and little detail emerges for any particular area. Presque Isle is an exception due to the concentrated efforts of the Corps of Engineers to solve the erosion problems there.

With the exception of Presque Isle, very little research has been accomplished relative to erosion losses and bluff recession phenomena. While other states faced with hundreds of miles of shore have been working diligently on the problem, Pennsylvania was under no particular pressure to become acquainted with the erosion problems of its Lake Erie shore. Since the advent of the Coastal Zone Management Program, the Commonwealth has come to recognize the importance of erosion/recession to the people of Erie County. The Coastal Zone Management Branch has made attempts to accumulate additional information and has given top priority to geotechnical studies of the bluff and shore areas, in order to determine the physical and social impacts of this continuing problem.

The Problem

The coastline of Erie County, Pennsylvania, is 108 km (67 miles) long consisting mainly of bluffs of varying height above chart datum of 173.3 m (568.6') from 3 m (10') to 50 m (170'). Physiographically, the shore is divided into three segments; (a) from the Pennsylvania-Ohio boundary northeastward to the neck of Presque Isle peninsula, (b) Presque Isle peninsula, and (c) northeastward of Presque Isle to the Pennsylvania-New York Boundary.

The first segment is comprised of bluffs of glacial till and lacustrine deposits, highly erodible and prone to mass wasting. This segment is dissected by streams of varying magnitude from intermittent streams to Elk Creek, a stream of some 40 km (25 miles) in length and the largest stream in the coastal zone. The relative rate of recession in this reach varies from .6 m per year to less than .15 m per year (24" to 6"). The average rate of recession for the reach is .45 m (18") per year depending on variables of material and conditions.

The central section includes Presque Isle peninsula which forms a bay of 18 k (7 sq. mile) behind it forming one of the finer natural harbors on the Great Lakes. On the southern shore of the bay is the City of Erie, Pennsylvania's only lake port, and dependent on the spit for its harbor activities. The spit is highly susceptible to erosion during storms and control measures have been attempted by the Commonwealth and the Corps of

Engineers since 1810. The spit is approximately 11 km (7 miles) long and covers 1,280 hectares (3,200 acres) in area.

The third segment is comprised of bluffs with a bedrock base overlain by glacial till and lacustrine deposits and dissected by streams varying in magnitude from weather tributaries to Twentymile Creek approximately 24 km (15 miles) in length. These bluffs are only moderately erodible due to the protection offered by the bedrock base. The relative rate of recession over this reach varies from .1 m per year to .3 m per year (4" to 12"). The average rate of recession over the reach is .15 m (6") per year.

Each of the three sections present different problems related to erosion/recession phenomena and planning efforts must accordingly differentiate between the sections if such efforts are to have maximum impact and meaning.

As discussed in the previous section on shorefront access, beach formation at the base of the bluffs is marginal, responding to availability of materials in the littoral transport system. Therefore, beaches west and east of Presque Isle tend to be narrow and discontinuous. Greater accumulations result from entrapment by shore structures (groins).

As mentioned previously, Presque Isle has extensive beaches that are under constant wave attack. The shoreline configuration is constantly changing due to erosion in conjunction with structural and nonstructural methods employed in its defense. As a result of studies made through coastal zone management efforts and the Corps of Engineers, a determination of the cause and effect relationship of erosion/recession on the shoreline can be made.

Bluff recession is defined by the Bluff Recession and Setback Act as the loss of material along the bluff face caused by the direct or indirect action by one or a combination of groundwater seepage, water currents, wind generated waves or high water levels.

Shoreline erosion is a function not only of higher lake levels, but the frequency and intensity of storm waves, as well as the sediment budget in the littoral transport system.

Conclusions drawn by the Shoreline Erosion and Flooding Report in 1975 have been modified to recognize changes since that time. These new conclusions are:

1. A majority of construction actually built assumed that average water levels on Lake Erie were a constant and could be depended upon for planning purposes.

2. Construction in the coastal zone was done without knowledge of the potential effects such construction

could have on the stability of the bluff or on the shore zone.

3. Despite periodic warnings in the form of past damage, local planning agencies have never addressed the problem in a comprehensive, coordinated manner.

   (This has been corrected by coastal zone management efforts of the past four years through cooperative efforts between the Department of Environmental Resources, the Erie County Department of Planning and local governments. The result is the Bluff Recession and Setback Act.)

4. Recession as a physical force is not clearly understood, and neither is the insidious nature of the phenomena. Recession is caused by a variety of processes. Measurement has shown that those areas protected by natural or manmade features will suffer less recession than an unprotected bluff. Experience has shown, however, that serious down-drift consequences develop in conjunction with any deterrent (either natural or man-made) to littoral drift.

5. In the past eight years, the physical processes have been operating at a higher than normal rate and have resulted in disruption, damage, and destruction. It cannot be stated with any certainty whether this accelerated activity will continue or, for how long.

6. It has been concluded that, while floodprone land makes up a small percentage of the total coastal area, persistent use of these areas for development has caused the greatest amount of damage to be concentrated in those areas. Rapid bluff recession is occurring primarily in areas of low density use and the damage is related to loss of land with occassional instances of structural loss. As recession continues and as development spreads to hazardous bluff areas, losses of existing structures will increase. The Bluff Recession and Setback Act will regulate the siting of future structures in hazard areas to prevent losses to these structures.

   (Despite the fact that losses of land to recession are greatest in undeveloped areas, it does not negate the direct effect of development on the bluff. There is a direct cause and effect relationship between land development and accelerated recession.)

7. The placement of groins by individuals has generally resulted in protection of the individual's property but, in most cases, is having direct impact on erosion down-drift. This impact is negative in that erosion

losses accelerate as sand is withheld as a protective influence. The Dam Safety Act now closely regulates the siting of these structures to prevent accelerated erosion rates.

In summary, the problem is the confrontation between the completely natural forces of erosion and mass wasting and the development by man of areas where these forces are at the maximum. With a better understanding of the phenomena involved, the planning process will recommend and administer programs to encourage better utilization of coastal resources.

A Method for Assessing the Effects of Erosion/Recession

This section will deal with the physical and economic losses suffered as a result of erosion and recession. The physical losses include the loss of solid land to lake waters through erosion of beach materials and the loss of land at the top of the bluffs to the bluff face by mass wasting and ultimately to the lake waters through erosion. Economic losses include loss of real property, loss of tax base, loss of recreational opportunity, and structural loss.

Four programs recently completed that give evidence of the degree of loss in both categories include:

1. Recession Rate Analysis (as part of the Shoreline Erosion and Flooding Report).

2. Cooperative Beach Erosion Control Project: Presque Isle (between the Commonwealth and the Department of the Army, Corps of Engineers).

3. Shore Structure Inventory (unpublished data obtained by the Edinboro Foundation for the Department of the Army, Corps of Engineers).

4. Property Damage Survey (unpublished data obtained by the Lake Erie Marine Science Center for the Department of the Army, Corps of Engineers).

Each of the above was an attempt to assess the impact of erosion/recession in the coastal zone; attempts are being made to lessen (mitigate) the impact. Each effort establishes losses in both categories with some margin of error indicated and made determinations with respect to those areas most critically affected. The recession rate analysis and the locations of hazard areas, as documented in the Shoreline Erosion and Flooding Report, will be formally adopted in regulations and formally designated as bluff recession hazard areas pursuant to the Bluff Recession and Setback Act.

There is every reason to believe that, taken together, the four works provide definite information about erosion/recession and the impacts implied.

It is recommended that in order to improve existing permitting criteria for the regulation of structural or nonstructural measures to reduce erosion/recession, that a complete analysis of the lake-beach-bluff interface be undertaken to provide the information needed to improve engineering of protective devices. In order to select a solution for a particular area, the geophysical and baythymetic character of that area should be known before chosing between structural or nonstructural protection methods. Overall costs of any erosion program can be reduced if comprehensive information is available prior to construction.

Because of the tremendously complex character of the Lake Erie shoreline, very few generalizations can be made with confidence.

Recommended Study Elements

1. Institute a monitoring program of existing Commonwealth control points over time to substantiate photogrammetric data pertaining to recession rate data.

2. Establish additional control points as indicated by continuing study of causal factors.

3. Conduct full-scale geotechnical studies including:

   a. Rate of mass wasting in materials of glacial origin in relation to groundwater loading in various materials of various thicknesses;

   b. Impact of water level changes on various materials at the base of the bluff; and

   c. Sediment load measurements based on sediment size analysis of various materials commonly found in the bluffs.

4. A vegetation study to examine the alternative measures that can be taken to mitigate damage by erosion/recession.

5. Establish a data retrieval, information system to collect and store information on factors pertinent to bluff recession.

Proposed Implementation Elements

The results of these studies can be used by the Coastal Zone Management Program to:

1. Improve regulations governing the siting and design of erosion control structures.

2. Improve regulations governing the siting of structures in bluff recession hazard areas.

3. Produce information useful to homeowners, agriculturalists, and developers in assessing relative hazards in the coastal zone.

4. Improve technical data base to substantiate and expand current knowledge of erosion/recession impacts on the coastal zone.

State Policies Pertaining to Erosion/Recession

The Pennsylvania Coastal Zone Management Program outlines in Chapter 2 of this document specific erosion/recession policies and identifies the authorities and actions that will be used to implement the policies. This section in the policy framework, on Coastal Hazard Areas, provides a clearer articulation of actions that must be taken to protect people and property from the potential dangers of erosion and recession. Specific policies address the problems associated with bluff recession (Policy I-A.1); improper installation of shoreline protection structures (Policy I-A.2); reducing the volumes of surface water runoff (Policy I-A.3); the need for technical assistance to prevent increased erosion and bluff recession (Policy I-A.4); and protection of people and property from the dangers of flooding (Policy I-B). With the accomplishment of these policies, through the Coastal Zone Management Program, Pennsylvania will continue to move closer to defining a sound comprehensive policy concerning erosion/recession in the coastal zone. Additional information on Pennsylvania's authority to implement these erosion/recession policies is contained in Appendix A, Existing Management Authorities.

The Commonwealth of Pennsylvania has, for several years, been involved in a cooperative effort with the Department of the Army, Corps of Engineers, in a Cooperative Beach Erosion Control Project at Presque Isle peninsula. The most recent effort has involved a proposal by the Corps of Engineers to establish a series of segmented breakwaters as a protective device against erosion losses. The agreement established between the Corps of Engineers and the Commonwealth establishes policy by the Commonwealth with regards to eroson control. The Draft Environmental Impact Statement includes the following statement:

"The Commonwealth of Pennsylvania, through the Department of Environmental Resources, has stated that it will act as the local sponsor for the 'permanent' beach erosion control project and provided a letter dated 7 March 1978 stating their intent to meet the terms required for cooperation in a Local Assurance Agreement.[44]

In order for a beach erosion control project to be constructed at Presque Isle, the local sponsor must give assurances satisfactory to the Secretary of the Army that it will:

1. Provide without cost to the United States all lands, easements, and rights-of-way, including suitable borrow and spoil-disposal areas as determined by the Chief of Engineers, necessary for the construction of the project;

2. Provide a cash contribution equal to the appropriate percentage of the final construction cost exclusive of lands, easements, and rights-of-way, the percentage to be in accordance with existing law and based on shore ownership and use existing at the time of construction, which contribution is presently estimated at 30 percent;

3. Pay 30 percent of annual beach redistribution and replenishment costs for the project;

4. Hold and save the United States free from damages due to the construction works;

5. Maintain and operate all the works, including periodic sand replenishment and redistribution as needed, after completion, in accordance with regulations prescribed by the Secretary of the Army;

6. Assure continued public ownership or continued public use, without cost to the United States, of appropriate access and facilities, including parking and sanitation, necessary for the realization of the public benefits upon which the Federal participation is based, and administer and maintain the beach for continued public use during the life of the project; and

7. Control water pollution to the extent necessary to safeguard the health of bathers.

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[44]Presque Isle Cooperative Beach Erosion Control Project; An Information Packet Summarizing Results of Investigations Undertaken Through Stage II of the Phase I Design, U.S. Army Corps of Engineers, Buffalo District, September, 1979, p. 9.

As a result of information gathered during the coastal zone management efforts of the past four years, and in response to recommendations made by the Commonwealth with respect to recession, the Bluff Recession and Setback Act has been written to provide local authorities with regulation governing setback ordinances. Under "Purpose and Policy" of the Act are the following:

1. Encourage planning and development in bluff areas which is consistent with sound land use practices.

2. Protect people and property in bluff areas from the dangers and damage associated with the inevitable recession of bluffs.

3. Prevent and eliminate urban and rural blight which results from the damages of bluff recession and erosion.

4. Minimize the expenditure of public and private funds for shoreline protection and bluff stabilization structures and activities.

5. Authorize a comprehensive and coordinated program to regulate development activities through the use of setback ordinances in bluff recession hazard areas, designed to preserve and restore the natural ecological systems, and to prevent continuing destruction of private property and structures.

6. Encourage local administration and management of bluffs consistent with the Commonwealth's duty as trustee of natural resources, and the people's constitutional right to the preservation of the natural, scenic, aesthetic, and historical values of the environment.

The four coastal zone policies relating to shoreline erosion/recession establish the concern of the Commonwealth relative to erosion and measures taken to prevent it. Such policies, here combined, are a definitive statement of policy that can be used to administer and regulate activities in the coastal zone. Through continued interaction with the Coastal Zone Steering Committees (CZSC), the Commonwealth will assist in the generation of more detailed policies concerning erosion/ recession in the coastal zone.

Procedures for Designating Areas for Control, Mitigation, or Restoration

It shall be the express policy of the Coastal Zone Management Branch to interact with the CZSC in all matters pertaining to the expenditure of coastal zone management related funds for managing

activities affected by or designed to control shoreline erosion. The following are criteria to be used when coastal zone management funds are involved:

1. Administration of local ordinances to implement the provisons of the Bluff Recession and Setback Act.

2. State administration and monitoring of the local administration of the Bluff Recession and Setback Act.

3. Provisions of technical assistance to local governments.

4. Administration of the Dam Safety Act.

5. Coastal zone management funds will be expended only for measures consistent with the overall Coastal Zone Management Program.

6. For expenditure of coastal zone management funds, the full range of alternative erosion control measures, including no action, must be studied.

Areas to be protected or restored shall be put forth by the CZSC on recommendations made by local authorities or nominated by private citizens. If an area has attributes that are greater than local concern, the Commonwealth may act as a nominating body of the CZSC. Within the guidelines established above, the CZSC shall designate an area for restoration or protection and seek funds for acquisition, study, and implementation.

Erosion control measures taken by private individuals on private land use must meet with all requirements of the Dam Safety and Encroachments Act and the Bluff Recession and Setback Act. It shall be the function of the CZSC to assist the Coastal Zone Management Branch in regulating structural or nonstructural alternatives in a manner that considers the impacts on public health, safety, or the rights of others. While the Commonwealth may have the right to restrict structures not in conformance with the above, the CZSC will be able to help the Coastal Zone Management Program expedite formal applications for permits for structures in conformance with coastal zone management policies and standards.

Procedures for Managing the Effects of Erosion/Recession

As noted in the Coastal Zone Management Program development guidelines, erosion planning processes must consider, in addition to structural measures for erosion control, any nonstructural technique or alternative to mitigate erosion losses.

The Commonwealth has taken the position that erosion/recession is a natural phenomena which man has very little chance of

controlling. Therefore, structural methods are generally seen as temporary and having generally minimal effects on reducing erosion. Also, the high costs of most structural techniques leads the Commonwealth to discourage structural alternatives to erosion/recession. The serious up and down-drift impacts of most structural alternatives is another obvious detractor from structural alternatives.

However, where valuable property is involved and the threat of loss is great, the Commonwealth acknowledges that structural alternatives may provide the best short-term solution. The nonstructural alternative usually accepts the no-win situation and carefully evaluates the temporary measure against the long-term gain. This would include the "do nothing" option.

Through the administration of the Dam Safety and Encroachments Act, Pennsylvania Department of Environmental Resources will control structural methods of controlling erosion/recession. Permits will not be issued without careful consideration of long and short-term impacts. Criteria for issuance of permits is formed in Chapter 105, of the Commonwealth regulations (see Appendix B). The Bluff Recession and Setback Act will ensure that new structures are built outside of bluff recession hazard areas to minimize the need for structural method of protection. The two pieces of legislation are, therefore, complimentary. Together they ensure that reliance on structural methods will be carefully controlled. Coastal zone management funds will not be used to construct or repair any types of erosion or recession control structures.

As generally accepted, the following are the structural, nonstructural methods applicable to the shores of Lake Erie. Any of these activities occurring in the coastal waters will be subject to State permitting and criteria found in Chapter 105 regulations (see Appendix B).

<u>Seawalls, Bulkheads, Revetments</u> - The exact definition for each of the above varies from region to region. Generally, they consist of devices constructed parallel to the beach, separating the land from the erosive forces of the water. They are limited by the following:

1. Cost of properly engineered device and accompanying high construction costs;

2. Lack of access to bluff base where bluffs exceed 9 m (30') in height;

3. Lack of available natural materials when the use of concrete is discouraged;

4. Inability to cope with flanking problems on adjacent properties;

5. Loss of natural beach;

6. Lack of sufficient foundation;

7. Reduction of shore access; and

8. Fluctuation in water levels.

Generally, the cost of a seawall is discouragement enough for most private property owners. Attempts are made by many to shortcut proper engineering and construction steps with the result being structural failure. The seawall concept is discouraged by the Commonwealth except in extreme cases where the threatened loss warrants the extreme costs of a suitable structure.

The use of discarded materials for revetments is discouraged. Concrete rubble, junk cars, and similar materials have minimum effect on reducing erosion and detract significantly from the natural scene.

Groins - A groin is defined as any measure taken to interfere with the long-shore transport system by building or placing material perpendicular to the beach face with the intent of trapping sand on the updrift side. In Erie County, the groin has been an obvious choice because of the relative low cost and the fact that the sand accumulation provides a buffer against the erosive force of the waves and provides recreational opportunity. Disadvantages to groins include:

1. Removal of sand from littoral system causing accelerated erosion downdrift of the groin;

2. Creation of a safety hazard since sand accumulation on the updrift side produces deepening on the downdrift side;

3. A general lack of sufficient foundation for the construction of the groin;

4. Breaching caused by flanking or overtopping, reducing the effectiveness of the structure;

5. A general lack of knowledge of design criteria including wave climate and water level fluctuations; and

6. Lack of sufficient sand in the transport system which negate the effectiveness of any structure.

Because of the extreme down-drift impact, the use of groins is discouraged except in the most unusual circumstances. Where loss is imminent due to extremes in environmental conditions, the use

of temporary groins (gabions, tire mats, etc.) would be encouraged.

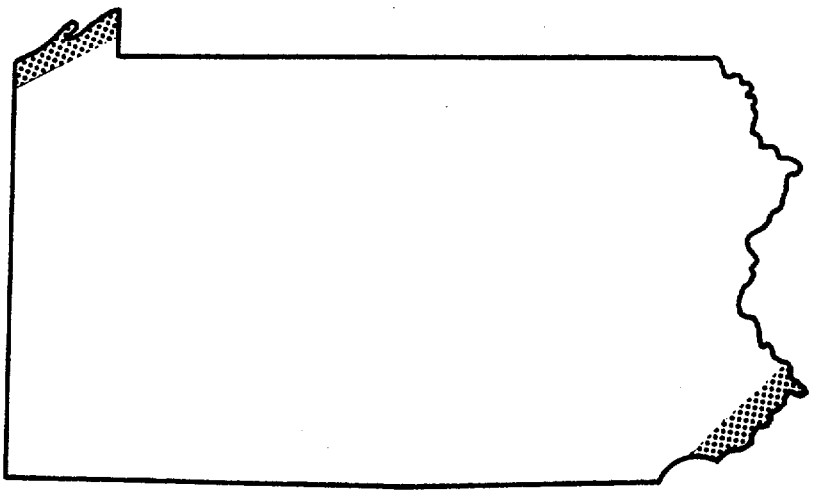
Nonstructural Techniques - Nonstructural alternatives involve a variety of techniques that attempt to produce a satisfactory response in erosion reduction. Among such alternatives are beach nourishment and sand pumping. Both procedures involve high annual costs, destroy the natural regimen and have a severe impact on aquatic life. Such techniques are discouraged. However, in cases where structural alternatives are too costly in protecting a public facility or lands of high value, these nonstructural techniques may have to be considered.

Another nonstructural technique is to do nothing. While obviously financially attractive, it remains an unsatisfactory alternative when structural, or property loss is imminent.

To prevent recurring property losses, the Commonwalth is dedicated to utilizing zoning amendments governing structural setback requirements. The Bluff Recession and Setback Act provides that each designated coastal community acknowledge erosion/recession as a continuing phenomena and to develop ordinances that prohibit the construction or substantial improvement to structures in bluff hazard areas.

Additionally, the Commonwealth, through advisory services, educates landowners about activities that aggravate recession phenomena. Proper vegetation management, management of stormwater run-off, proper sanitary drains, and other activities that lessen mass wasting are encouraged.

Chapter 4



Program Authorities and Organization

MANAGEMENT REQUIREMENTS AND AUTHORITIES

Introduction

In order to receive approval by the Secretary of the U.S. Department of Commerce for its management program, a state must demonstrate that it has the authorities necessary to implement the program. The following is a list of requirements a state must meet to demonstrate that it is capable of and willing to manage its coastal resources in the prescribed manner.

1. A state must identify those uses of coastal resources, having direct and significant impacts upon the coastal waters, which will be subject to management by the state program.

2. A state must demonstrate that it has the necessary authorities on which to base a management program and an organizational structure that is designed in such a manner that it can and will be applied to ensure implementation of the state's enforceable Coastal Zone Management policies.

3. A state must select an implementation strategy from among the three approved implementation strategies identified in the Regulations of the Coastal Zone Management Act. The state may select one or a combination of more than one of the three strategies listed below.

   a. State establishment of criteria and standards for local implementation.

   b. Direct state land and water use planning and regulations.

   c. Case by case review of actions affecting land and water uses subject to the management program.

4. A state must describe the mechanisms that it will utilize in implementing the type of management program that it has selected.

5. A state must designate a single state agency to receive and administer Federal grants for purposes of implementing the management program.

6. A state must demonstrate that it has developed adequate processes to ensure that the management program has necessary monitoring and evaluation capabilities.

7. A state must demonstrate the adequacy of its intergovernmental coordination and review processes.

The remainder of this chapter is devoted to demonstrating how Pennsylvania has developed a management program which fulfills these requirements.

Uses Subject to Management

During the early phases of the Coastal Zone Management Program, extensive inventories were made of the Commonwealth's coastal resources and uses. Current and past problems and issues associated with the utilization of coastal resources were identified and analyzed, and future demands on the coastal resources were projected.

Utilizing the results of these studies, incorporating the needs and desires of the coastal residents, businesses, industries, and interest groups, and realizing the need to address national priorities such as energy development, wetland preservation, and port revitalization, it was determined that the following uses of the coastal areas have a direct and significant impact on coastal waters and so are subject to management by the Commonwealth's Coastal Zone Management Program.

1. Activities associated with the placement and design of structures in coastal hazard areas. Particular attention will be given to the placement of structures in coastal hazard areas where they would be subject to damage by and/or exacerbate the problems associated with flooding and erosion.

2. Activities such as dredging and spoil disposal which could negatively impact navigation, flood flow capacity, wetlands, environmental quality, and public interest.

3. Activities which cause both positive and negative impacts upon coastal fishery populations and their aquatic habitat.

4. Activities that would result in the degradation or destruction of tidal or freshwater wetland.

5. Activities which possess the potential for providing or hindering the development of public access sites for both passive and active forms of recreation.

6. Activities which adversely impact or which enhance the restoration and/or preservation of historic sites and structures.

7. Activities in port areas which directly affect overall port planning, development, enhancement, and revitalization.

8. Activities related to energy production and energy facility siting that have the potential to cause adverse environmental impacts to sensitive ecological areas.

9. Activities which affect air quality and water quality in the coastal zones.

Pennsylvania has developed a State/Local management partnership that combines both State and Local administration of State authorities. The bulk of the management program will be administered by State agencies. However, local governments will administer State authorities for floodplain management and bluff setback permitting in accordance with State standards.

All State enforceable coastal policies will be administered in a uniform fashion in the coastal areas according to the Program's regulatory authorities. The Executive Order and the Memoranda of Understanding will help to provide a basis for carrying out the management program's nonenforceable policies in a coordinated fashion throughout the coastal areas. This concept of linking various State authorities under one agency is known as networking. However, for purposes of program approval, the Executive Order and Memoranda of Understanding are not required since all program regulatory authorities are enforced by the Department of Environmental Resources.

Networking Mechanisms

The following mechanisms are used to achieve networking in Pennsylvania:

Executive Order - The Executive Order provides the bases for networking in Pennsylvania. It directs all administrative departments, independent administrative boards and commissions, and other State agencies to comply with the program's regulatory policies. It is legally enforceable in this regard to the extent that it directs the administrative departments, independent administrative boards and commissions, and other State agencies to follow the enforceable policies of the Coastal Zone Management Program. Additionally, the Executive Order designates the Department of Environmental Resources as the lead agency for implementing and administering the Pennsylvania Coastal Zone Management Program and as the single State agency to receive and administer Federal grants available for implementing the management program. The Executive Order is found in Appendix A.

Memoranda of Understanding - The Memoranda of Understanding are program agreements between the Department of Environmental Resources and other State agencies and commissions that administer authorities and various programs that will be used in

the implementation of the program's nonregulatory policies. The Memoranda of Understanding details the manner in which the agencies, independent boards and commissions will use their authorities in the furtherance of the program's nonregulatory policies. A final of the standard terms of the Memoranda of Understanding is found in Appendix A.

Environmental Rights Amendment - Article 1, Section 27 of the Pennsylvania Constitution, commonly refered to as the Environmental Rights Amendment (ERA), provides another basis for networking the various statutory authorities and agencies together in conformance with Pennsylvania's Coastal Zone Management Program. The ERA states:

> "The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic, and aesthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people."

The amendment imposes the obligation on the Commonwealth to act as a trustee to conserve and maintain Pennsylvania's public natural resources. Every Commonwealth administrative agency, independent board and commission, and every local government body has the responsibility to carry out the requirements of the ERA.

Networked Authorities

Networking in Pennsylvania is facilitated by the fact that all authorities needed to implement the program's regulatory policies and many of the authorities needed to implement the program's nonregulatory policies are housed in the Department of Environmental Resources (DER). The Department of Environmental Resources is the lead agency for implementing and administering the Coastal Zone Management Program and the single State agency for receiving and administering Coastal Zone Management grants. These authorities are as follows:

Regulatory Authorities

1. Bluff Recession and Setback Act, Act of May 13, 1980

2. Dam Safety Act, Act of November 26, 1978, P.L. 1375, as amended, (32 P.S. Sections 693.1 *et seq*.)

3. Floodplain Management Act, Act of October 4, 1978, P.L. 851 (32 P.S. Sections 679.101 et seq.)

4. Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended, (35 P.S. Sections 691.1 et seq.)

5. Pennsylvania Solid Waste Management Act, Act of July 31, 1968, P.L. 788, as amended, (35 P.S. Sections 6001 et seq.)

6. Air Pollution Control Act, Act of January 8, 1960, P.L. (1959) 2119, as amended, (32 P.S. Sections 4001 et seq.)

7. Radiation Control Act, Act of January 28, 1966, P.L. (1965) 1625 (73 P.S. Section 1301 et seq.)

8. Gas Operations Well-Drilling Petroleum and Coal Mining Act, Act of November 30, 1955, P.L. 756, as amended, (52 P.S. Sections 2101 et seq.)

9. Pennsylvania Sewage Facilities Act, Act of January 24, 1966, P.L. (1965) 1531, as amended, (35 P.S. Sections 750.1 et seq.)

Nonregulatory Authorities

1. Soil Conservation Law, Act of May 15, 1945, P.L. 547, as amended, (3 P.S. Sections 849 et seq.)

2. Open Space Lands, Act of January 19, 1968, P.L. (1967) 992 (32 P.S. Sections 5001 et seq.)

3. Stormwater Management Act, Act of October 4, 1979, P.L. 864 (32 P.S. Section 680.1 et seq.)

The remainder of the authorities needed to implement the program's nonregulatory policies are either State authorities applying to all agencies, or authorities administered by State agencies that have been networked under the program. The authorities are as follows:

State Authorities Applying to all Agencies

1. Article 1, Section 27 of the Pennsylvania Constitution

2. Administrative Code of 1929, Act of April 9, 1929, P.L. 177, as amended, (71 P.S. Sections 510-1 et seq.)

3. Open Meeting Law, Act of July 19, 1974, P.L. 486 (65 P.S. Sections 261 et seq.)

Networked State Agencies' Authorities

1. Fish Law of 1959, Act of December 15, 1959, P.L. 1779, as amended, (30 P.S. Sections 20 et seq.)

2. Historic Preservation Act, Act of November 22, 1978, P.L. 160 (71 P.S. Sections 1047.1(a) et seq.)

Networked Agencies and Intradepartmental Offices, Bureaus and Divisions - The following list contains the Department of Environmental Resources's offices, bureaus, and divisions that have been networked into the management program. A description of their activities is contained in the DEIS.

1. Office of Chief Counsel

   a. Bureau of Regulatory Counsel
   b. Bureau of Litigation
   c. Bureau of Legal Services

2. Office of Environmental Protection and Regulation

   a. Bureau of Solid Waste Management
   b. Bureau of Water Quality Management
   c. Bureau of Air Quality Control

3. Office of Resources Management

   a. Coastal Zone Management Branch
   b. Bureau of Resources Programming
   c. Bureau of Design
      (1) Division of Recreational Facilities
      (2) Division of Water Control Structures
   d. Bureau of Operations
   e. Bureau of Soil and Water Conservation
      (1) Division of Soils Resources and Erosion Control
   f. Bureau of State Parks
   g. Bureau of Dams and Waterway Management
   h. Bureau of Topographic and Geologic Survey

The following is a list of departments and commissions exclusive of the Department of Environmental Resources (the lead agency) which have been networked together under the auspicies of the Coastal Zone Management Program. For a description of how they will be utilized in the furtherance of coastal zone management goals and policies, see the DEIS.

1. Department of Commerce

2. Department of Community Affairs

3. Department of Transportation

4. Pennsylvania Fish Commission

5. Pennsylvania Historic and Museum Commission

6. Public Utility Commission

PROGRAM MONITORING AND EVALUATION

The Executive Order designated the Department of Environmental Resources, Coastal Zone Management Branch, as the lead agency for implementing and administering the Coastal Zone Management Program in Pennsylvania. The Coastal Zone Management Branch is responsible for monitoring and evaluating activities pertinent to coastal zone management, and ensuring compliance with the program's enforceable policies. The following mechanisms will be used by the Coastal Zone Management Branch to monitor pertinent activities in the coastal zones.

Permit Process

The permit process in Pennsylvania provides an established legal and institutional mechanism for the monitoring of the program's regulatory policies.

DER Administered Permits - Review of applications for permits by the Coastal Zone Management Branch is the primary mechanism used for monitoring compliance with the regulatory policies of the management program implemented by the Department of Environmental Resources. The Coastal Zone Management Branch will utilize the following procedures to ensure early coordination and consultation with the regional and central offices of the Department of Environmental Resources, on the issuance of all air, water, solid waste, dams and encroachments permits affecting uses subject to management by the program:

1. Regional Office Permits - Permits issued by regional offices, that will be monitored, include water, air and solid waste permits. They will be monitored in the following manner:

    a. The Coastal Zone Management Branch will receive a copy of the form #1 (permit coordination form) following composite review and comment by regional staff. A general project description will accompany the form #1 to provide this office with a better understanding of the scope of the project.

b. Along with form #1, a copy of the acknowledgement letter will also be sent to this office at the time the letter is processed to the applicant.

c. Any additional discussion or information needed concerning an application will be provided to the Coastal Zone Management Branch upon request. This may include copies of the application and/or discussion by telephone with regional staff and Coastal Zone Management staff.

d. Any major concerns over an application affecting the Coastal Zone Management Program will be addressed in writing to the regional office. Concerns rejected by the region will involve further discussion by regional director and the Coastal Zone Management Program Manager for resolution. If these actions fail to resolve the differences, conflict resolution mechanisms as described later in this chapter will be utilized.

e. This process runs concurrently within the established permitting process and is executed within the established time frame of 60 days.

Figure iv-1 graphically depicits the permitting process utilized for regional office permits.

2. Central Office Permits - Permits issued by the central office of the Department of Environmental Resources in Harrisburg that will be monitored are Dams and Encroachments permits. They will be monitored in the following manner:

a. All applications for permits in the coastal zone, pertinent to uses subject to management, will be brought to the attention of the Coastal Zone Management Branch by the Bureau of Dams and Waterway Management via telephone or memorandum for review and comment by the Coastal Zone Management Program Manager.

b. Information provided to the Coastal Zone Management Branch will include project type, location, and description.

c. If it is determined that the proposed action has no adverse affect upon coastal resources and if it is consistent with the Commonwealth's enforceable policies, the Coastal Zone Management Program Manager will notify the

REGIONAL PERMIT REVIEW FLOW PROCESS

Figure iv-1

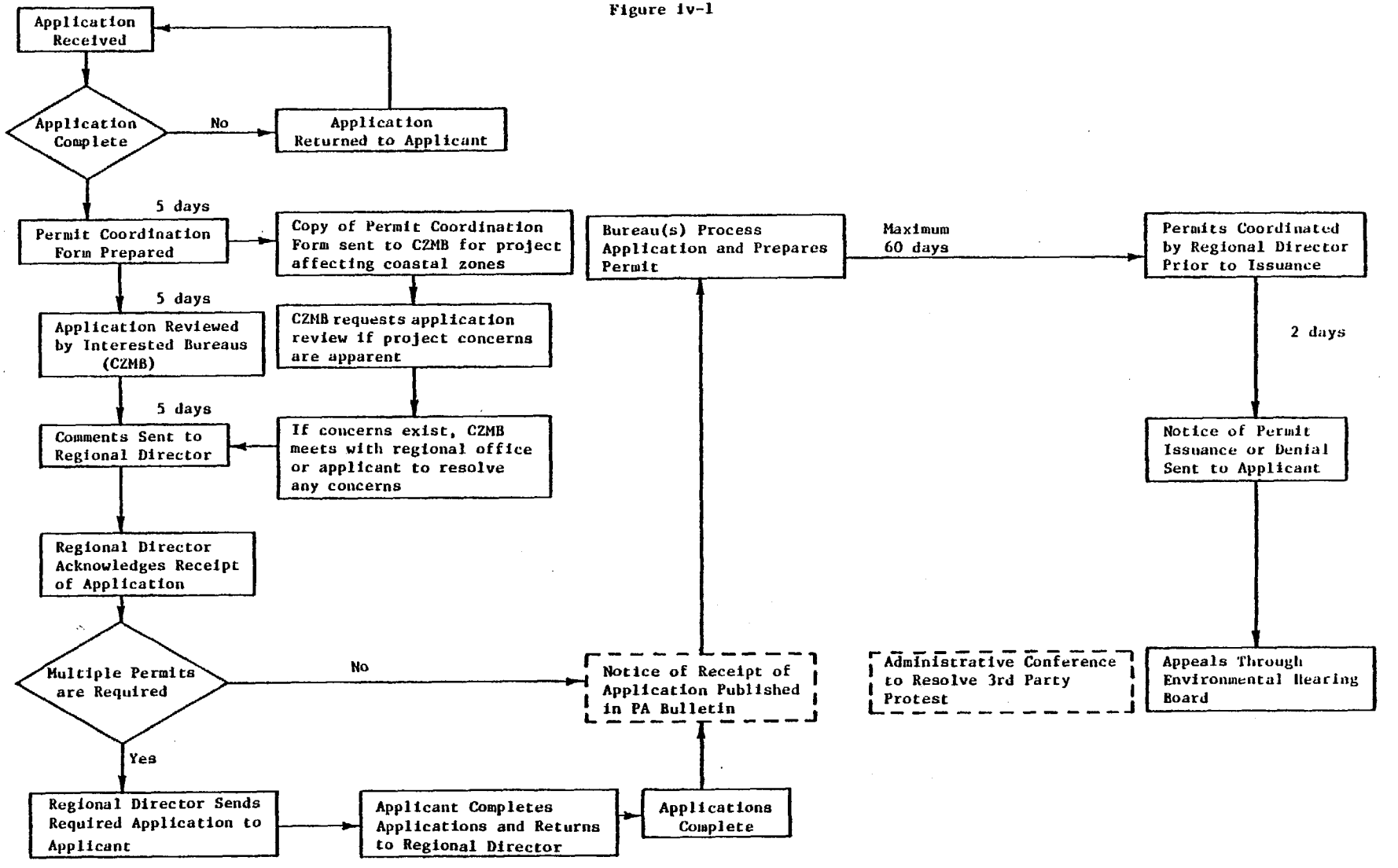
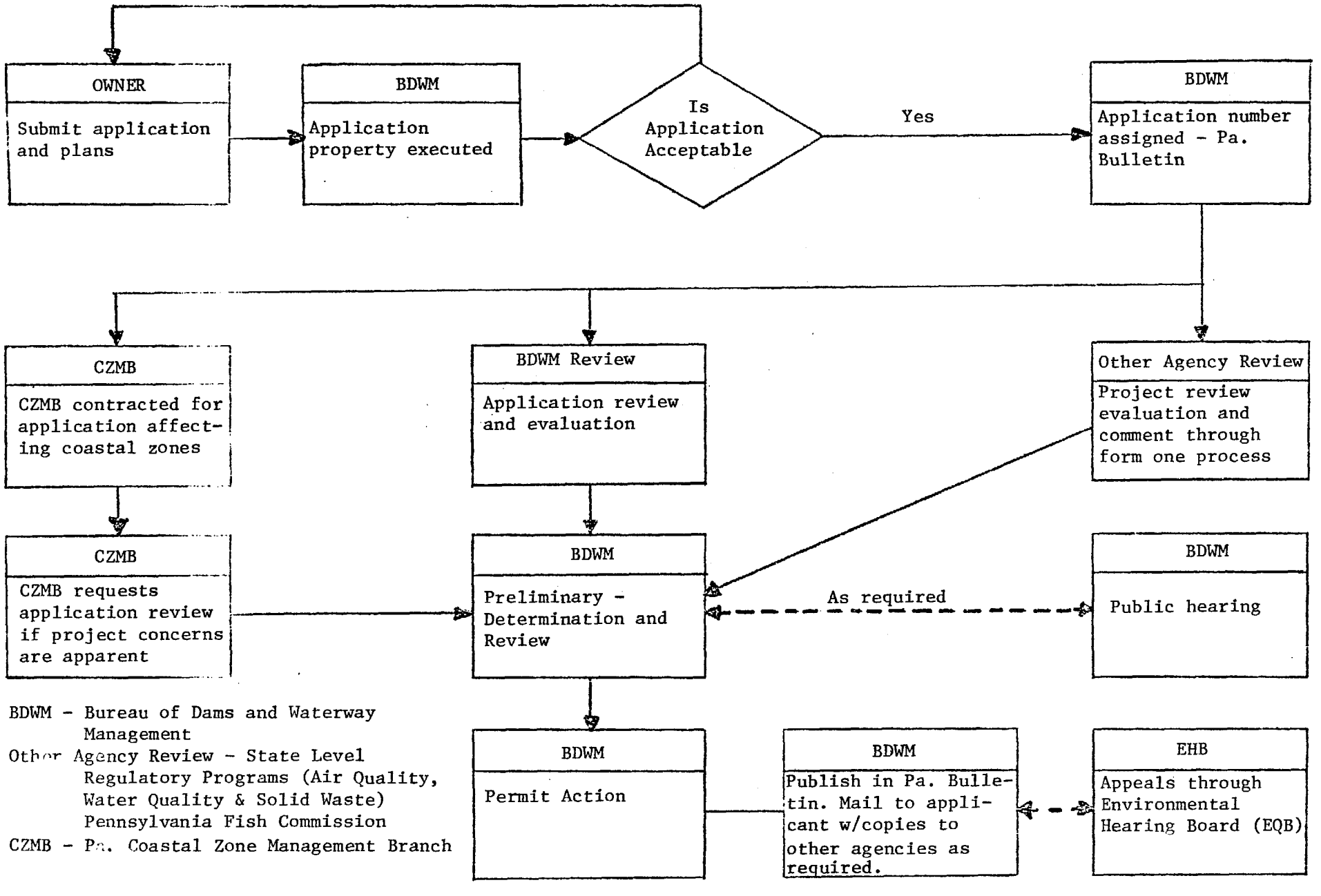


FIGURE iv-2
CENTRAL OFFICE PERMIT REVIEW FLOW CHART
BUREAU OF DAMS AND WATERWAY MANAGEMENT (DER)



BDWM - Bureau of Dams and Waterway Management
Other Agency Review - State Level Regulatory Programs (Air Quality, Water Quality & Solid Waste) Pennsylvania Fish Commission
CZMB - Pa. Coastal Zone Management Branch

Bureau of Dams and Waterway Management of such, via form letter.

d. If it is determined that the project will have an adverse affect upon coastal resources or if it is not consistent with the Commonwealth's enforceable policies, arrangements will be made by the Coastal Zone Management Branch to meet with the Bureau of Dams and Waterway Management to discuss and attempt to resolve any concerns that are raised.

e. Three possible actions can occur as a result of the meeting: either the Coastal Zone Management Program Manager's concerns can be addressed and he will then issue the form letter mentioned in c. above; the permit issuer will deny the permit based on the Coastal Zone Management Program Manager's concerns; or no agreement may be reached and the process of a conflict resolution will be initiated.

f. This process runs concurrently with the established permitting process and is executed within the established time frame of 60 days.

Figure iv-2 graphically depicits the permitting process utilized for central office permits.

3. Locally Administered Permits - Compliance with three enforcement policies will be monitored via permitting delegated to local governments. Local governments are required to develop and adopt State approved permitting programs covering activities in floodplains and bluff recession hazard areas. State criteria and standards contain provisions for periodic inspections to assure that the affected municipalities are enforcing the programs in a uniform and coordinated manner and are in compliance with the intent of the acts. This enables the Coastal Zone Management Branch to monitor these activities with respect to compliance with the policies of the Coastal Zone Management Program.

a. Floodplain Management - This Act requires local governments to qualify within six months of designation or by October 4, 1978 for the National Flood Insurance Program. Municipalities identified by the Department of Housing and Urban Development as having areas subject to flooding are required to develop zoning ordinances, subdivision regulations, building codes, and other special purpose ordinances which will minimize the effects of

flooding on life and property. The Act places joint responsibility for administration with the Department of Community Affairs and the Department of Environmental Resources and specifies penalties for failure to comply. The Coastal Zone Management Branch will assist the Department of Community Affairs when requested in review of municipal implementation and administration of local ordinances to ascertain compliance or noncompliance with any applicable floodplain management regulations. The Department of Environmental Resources's assistance in the review is predicated upon the provisions of the Floodplain Management Act. All coastal municipalities which experience flooding are currently participating in the program.

b. Bluff Recession and Setback Act - Requires communities designated as having bluff recession hazard areas, within six months of designation, to develop and submit to the Department of Environmental Resources bluff setback ordinances that meet the minimum requirements of the Act. Regulations developed pursuant to the Act require the Department to review municipal implementation and administration of the local ordinance at least once a year to verify that the municipality is providing uniform and coordinated enforcement of the bluff setback ordinance. Designated municipalities, subject to the provisions of this Act, are presented in Chapter 85, Bluff Recession and Setback Regulations, located in Appendix B of this document.

c. Dam Safety and Encroachments - Pursuant to Section 17 of the Dam Safety and Encroachments Act, and subject to the provisions of this section, the Department may by written agreement delegate to a county conservation district or other county agency one or more of its regulatory functions including enforcement and the power to permit, inspect, and monitor the following categories of water obstructions and encroachments: any category of water obstruction or encroachment, including culverts, fills, streambank retaining devices, stream crossings, outfalls and headwalls, which do not have the potential of endangering public safety or property or causing significant damage to the environment.

Any permit for a water obstruction or encroachment issued by a delegated agency shall be subject to review by the Department, unless the right of review is waived by the Department. A permit issued by a delegated agency shall become effective 30 days following the receipt of notice by the Department of issuance, unless the permit is disapproved by the Department or an appeal is filed with the Department pursuant to Section 17 of the Dam Safety and Encroachments Act.

Where the Department delegates one or more of its regulatory functions to a local agency, the Department shall in all cases retain the concurrent power to inspect and monitor all categories of water obstructions and encroachments, and to enforce the Dam Safety and Encroachments Act and regulations adopted thereunder.

Project Review Process

The following mechanisms will be used to monitor and evaluate activities pertinent to coastal zone management that do not require a permit and will also be used to help ensure that the Coastal Zone Management Branch is aware of all pertinent permitting activities.

1. Pennsylvania Bulletin - Is the official gazette of the Commonwealth of Pennsylvania. It contains notices, regulations, and other documents filed with the Legislative Reference Bureau and supplements the Pennsylvania Code - a loose-leaf codification of administrative regulations, legislative documents, court rules, and home rule charter documents.

2. The A-95 review process established by the Intergovernmental Cooperation Act of 1968 provides for a network of State and areawide clearinghouses for the purposes of reviewing and commenting on all notices of intent to apply for Federal aid in Pennsylvania. The purpose of the review process is to provide Federal cooperation with State and local governments in the evaluation, review, and coordination of Federal and Federally assisted programs and projects.

3. Federal Environmental Impact Statement Process - All Federal, State, and local projects involving the expenditures of Federal funds will be monitored via the Environmental Impact Statement process. This process is incorporated in the A-95 review process.

4. Project Review and Evaluation Process (PREP) - Departmental PREP review is an internal departmental review of departmental actions. In addition, extradepartmental activities are channeled into the PREP process for departmental review. The following are the types of departmental and extradepartmental projects processed through the review system.

   a. Applications for Federal Categorical Funds, OMB Circular A-95, Part I

   b. Direct Federal Development Projects, OMB Circular A-95, Part II

   c. National Environmental Policy Act Documents (E.I.A.'s negative declarations and EIS's)

   d. State Plans, OMB Circular A-95, Part III

   e. Multijurisdictional Area Planning Coordination Agreements, OMB Circular A-95, Part IV

   f. Park Projects Funded Under Pennsylvania's Project 500

   g. Act 120 Transportation Projects

   h. Federal Regulations

   i. Intra-Departmental Project Reviews to resolve internal differences

   As described earlier in this report, all applications for Federal aid requiring A-95 clearance generated within the Department of Environmental Resources are subject to an internal review. This review is designed to resolve internal differences before the application is submitted to the State Clearinghouse.

   These nine project types constitute the range of projects currently being reviewed through the Department's project review system. One of the assets of the project review system is that it can be used to accommodate a variety of new project or program types. The most important features of the program are the procedures which obtain input from the various bureaus in the Department and provide for resolving differences that end in formulating a single departmental position. Because of this, PREP provides a rather flexible mechanism that can be used to review a variety of projects, proposals, and plans.

5. Water Resources Policy Advisory Committee (WRPAC) - Is a statewide level water resources advisory committee

which advises the Department of Environmental Resources on legal, institutional, and policy issues regarding water planning management.

6. The Coastal Zone Advisory Committee - Whose membership and activities are described in Chapter 5.

7. The Coastal Zone Steering Committees - Whose membership and activities are described in Chapter 5.

CONFLICT RESOLUTION

The Pennsylvania Coastal Zone Management Program is designed to balance the protection and preservation of coastal resources with use and development. Because of the scarcity of space in the coastal zone, conflicts often arise over uses. To resolve the conflicts, Pennsylvania will use a set of existing legal and administrative mechanisms. These mechanisms will provide Federal, State, regional, and local agencies, as well as citizens and special interest groups a forum to express their views, enter into the decision-making process and challenge actions of the Coastal Zone Management Program. It is anticipated that most of these potential conflicts will be resolved through informal staff meetings. However, in the event that these informal meetings do not resolve the conflict, legal and administrative processes are available.

The actions of the program to which legal or administrative conflict resolution mechanisms may apply are:

1. Legislative initiatives

2. Rule making and formal designations pursuant to existing state authority

3. Permit issuance or denial

4. Findings of inconsistency of agency actions with policies of the Coastal Zone Management Program

5. Failure to enforce the Coastal Zone Management Program

6. Administrative decision-making

The legal mechanisms include the:

1. Legislative process

2. Environmental Quality Board

3. Environmental Hearing Board

4. Citizen suits to enforce Article I, Section 27 of the Pennsylvania Constitution

5. Judicial procedures pursuant to State statutes

6. Judicial procedures pursuant to local administration of State statutes.

The Administrative mechanisms include:

1. Interdepartmental resolution

2. Intradepartmental resolution

Legal Conflict Resolution

The purpose, structure, and means by which agencies, individuals, and groups can become involved in the legal processes are discussed in the following sections.

Legislative Process

Interested parties are notified of proposed bills via special mailings by the House in which the bill originated, news releases, and T.V. and radio coverage. The public may express their concerns directly at committee hearings on the proposed legislation, or may express their concerns to committee members. All sessions of either House where legislation is acted on is open to the public. All committee meetings are open to the public, and all during the legislative process anyone can make his interests known by contacting any elected member of the legislature.

Environmental Quality Board

The purpose of the Environmental Quality Board (EQB) is to propose and adopt regulations to implement State authorities administered by the Department of Environmental Resources (DER).

By law, the EQB is comprised of the Secretaries of Agriculture, Commerce, Community Affairs, Environmental Resources, Health, Labor and Industry, and Transportation; the Executive Directors of the Fish Commission, Game Commission, Historical and Museum Commission, and State Planning Board; the Chairman of the Public Utility Commission; four members of the General Assembly, and five members of the Department of Environmental Resources's Citizens Advisory Council. The Secretary of Environmental Resources serves as chairman.

There are three opportunities for a person (person is defined as "any individual, partnership, association, corporation, political subdivision, municipal authority, or other entity") to enter the EQB rulemaking process. These are:

1. Proposal of Regulations - Any program unit, the EQB, the Environmental Hearing Board, any staff member of such boards, official of the Department of Environmental Resources, legal counsel (which includes the Chief Counsel or any member of his staff) or a member of the public may propose regulations to implement state authority. Presentation of proposed regulations to the EQB must be made by legal counsel of the Department of Environmental Resources. The EQB, at its discretion, will determine whether the proposed regulations shall be rejected, considered for adoption, or returned to the person or unit initiating the proposed regulations for resubmission at a later date.

2. Public Hearing on Proposed Regulations - Proposed regulations which are considered for adoption by the EQB will at the discretion of the EQB, unless otherwise mandated by law, be subject to public hearings. Public notice of the hearing is generally provided 30 days in advance of the hearing in the Pennsylvania Bulletin. However, this notice of hearings is subject to the discretion of the EQB.

3. Written Testimony on Proposed Regulations - Agencies, individuals, and groups unable to attend a public hearing(s) on proposed regulations have an opportunity to express their reviews in writing to the EQB during the period of public notices prior public hearing(s) and for a period of time after the public hearing(s). The length of these periods in which the record is open for written testimony is subject to the discretion of the EQB and is so stated in the Pennsylvania Bulletin. Generally, the period to receive written testimony remains open 30 days after completion of public hearing(s).

Following formal adoption of the regulations by the EQB, any aggrieved person would have to challenge the applicability of the regulations to the Environmental Hearing Board. This process is reviewed in the following section.

Environmental Hearing Board

The purpose of the Environmental Hearing Board (Board) is to hold hearings and issue adjudications on actions of the Department of Environmental Resources. An "action" is defined as an order, decree, decision, determination or ruling by the Department affecting personal or property rights, privileges, immunities, duties, liabilities or obligations of any person, including but not limited to, denials, modifications, suspensions and revocations of permits, licenses and registrations; orders to cease the operation of an establishment or facility; orders to correct conditions endangering waters of the Commonwealth; orders

to construct sewers or treatment facilities; orders to abate air pollution; and appeals from and complaints for the assessment of civil penalties. This includes actions of the Pennsylvania Coastal Zone Management Program. The membership of the Board consists of its Chairman and two members appointed by the Governor.

Any "person" aggrieved by an action of the Department of Environmental Resources may enter the appeals process by addressing the specific objections to the action of the Department of Environmental Resources in writing. Upon receiving the appeal, the Board shall provide notice in the Pennsylvania Bulletin and the opportunity for any "person" to provide pertinent testimony. "person" refers to anyone except the applicant, appealee, plaintiff, dependent or intervenor.

Upon completion of the hearing process, final orders of the Board will be issued.

The appelant may appeal the decision of the Board to the Commonwealth Court provided the appeal is filed 30 days after final orders of the Board. Further appeal to the Pennsylvania Supreme Court is a matter of judicial discretion. Petitions for allowance for appeal to the Supreme Court must be filed within 30 days after the decision of the Commonwealth Court.

Citizen Suits Under the Environmental Rights Amendment - Article I, Section 27 of the Pennsylvania Constitution provides that:

> "The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and aesthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all people."

The section was placed in Article I, the portion of the Constitution which guarantees political rights such as due process, freedom of speech, and freedom of religion to Pennsylvania citizens. The amendment creates important personal "environmental rights" which citizens can assert on their own, if necessary, in the courts. The remaining portion of the amendment imposes duties on the Commonwealth to act as trustee to "conserve and maintain" Pennsylvania's "public natural resources".

When citizens bring suit in Commonwealth Court against the Commonwealth or its representatives for actions that are challenged as improper under Article I, Section 27, the court has developed a three-fold test to resolve the issue. This test, evolved from the Payne vs. Kassab Commonwealth Court decision and has become the standard test used in all subsequent court

decisions. The test asks three basic questions to resolve the issue:

1. Was there compliance with all applicable statutes and regulations relevant to the protection of the Commonwealth's public natural resources?

2. Does the record demonstrate a reasonable effort to reduce the environmental incursion to a minimum?

3. Does the environmental harm which will result from the challenged decision or action so clearly outweigh the benefits to be derived therefrom that to proceed further would be an abuse of discretion?

Judicial Procedures Pursuant to State Administration of State Statutes - The Pennsylvania Coastal Zone Management Program relies in part on seven legislative acts, which delegate administration of the acts to the Department of Environmental Resources. These are the Dam Safety Act, Clean Streams Law, Solid Waste Management Act, Air Pollution Control Act, Radiation Control Act, Gas Operations Well Drilling Petroleum and Coal Mining Act, and Sewage Facilities Act. These acts provide that the Department of Environmental Resources may institute suits in law or equity to abate violations of either the act or regulations. These suits are instituted in Commonwealth Court. Appeals from such suits are taken, as a matter of right, to the Pennsylvania Supreme Court. Such appeals must be filed within 30 days following the decision of the Commonwealth Court.

Judicial Procedures Pursuant to Local Administration of State Statutes - The Pennsylvania Coastal Zone Management Program relies in part on two legislative acts which delegate administration of State authorities to local governments. These are the Floodplain Management Act and the Bluff Recession and Setback Act. Both laws provide that the Department of Environmental Resources or any affected county, municipality or aggrieved person may institute suits in law or equity to abate violations of either Act or regulation. These suits are to be instituted in the Commonwealth Court. Appeals from such suits are taken to the Pennsylvania Supreme Court as a matter of right. Such appeal must be filed within 30 days following the decision of the Commonwealth Court.

Persons may become involved in the administration of the Floodplain Management Act and the Bluff Recession and Setback Act at the local level according to the formal provisions of the Pennsylvania Municipalities Planning Code or other applicable enabling legislation.

Persons have two opportunities to become involved in the local administration of these statutes. These are:

1. Public hearings prior to enactment of local zoning ordinances.

2. Appeals on the validity of local zoning ordinances or the application of these ordinances. (see Figure iv-3.)

Administrative Conflict Resolution

Through the use of the monitoring mechanisms described in this chapter, the Coastal Zone Management Branch, hereinafter the Branch, will be informed of all major activities in the coastal zones.

Most decisions and actions of the Pennsylvania Coastal Zone Management Program will occur at the staff level. Occassionally, there may be instances when intra- and interagency staff level discussion may not produce agreement on an action that is taken or proposed to be taken by the Program. On these occassions, it may be necessary for the heads of agencies to administratively resolve these conflicts.

Intradepartmental Conflict Resolution

When the Branch is informed of an activity (not requiring Department permits), it will contact the appropriate bureau and request detailed information on the activity. This detailed information will include drawings, activity descriptions, proposed time frames for completion and any other information that may be required to evaluate the activity. On receipt of this information, the Branch will notify the chairman of the appropriate coastal zone steering committee of the proposed activity and request that he and his committee provide the Branch with their opinion of the activity. The Branch will also review the activity for consistency with the program policies. If the review by the Branch and the coastal zone steering committee indicate that the activity is consistent with the program, the Branch will indicate this fact to the bureau. The Branch will continue to monitor the activity for continued compliance with the program.

In the event the activity is found to be inconsistent, the Program Manager will schedule a meeting with the appropriate bureau to discuss and resolve the conflicts. If this meeting does not resolve the conflicts, a meeting will be scheduled with the Deputy Secretary for Resources Management to assist in resolving the conflict.

The Branch is located in this Deputate; and for conflicts between the Branch and any bureau of this Deputate, the Deputy Secretary will resolve the conflict.

If the conflict is with a bureau in another Deputate, the Deputy Secretary for Resources Management will request a meeting with the appropriate Deputy Secretary to resolve the conflict. If this meeting fails to resolve the conflict, the Deputy Secretary for Resources Management will request a meeting with the Secretary of the Department of Environmental Resources to resolve the conflict. The Secretary will issue a decision that is administratively binding on all parties involved in the activity. (see Figure iv-4).

Interdepartmental Conflict Resolution

The first steps of this process are identical to the intradepartmental conflict resolution process. The major difference in the two processes occurs when an activity is proposed by another State agency and is determined to be inconsistent. In this event, the Program Manager for the Branch will meet with the appropriate representatives from the agency to resolve the conflict. If the meeting fails to resolve the conflict, the Program Manager will request that the Deputy Secretary for Resources Management schedule a meeting with appropriate representatives of the agency to resolve the conflict.

If this meeting fails to resolve the conflict, the Deputy Secretary for Resources Management shall contact the Secretary of the Department of Environmental Resources and request that a meeting be scheduled with the appropriate representatives of the agency to resolve the conflict. If this meeting also fails to resolve the conflict, the Secretary of the Department of Environmental Resources may request the Governor to review the conflict and issue an order resolving the conflict. This order will be administratively binding on all parties under the Governor's jurisdiction. (see Figure iv-5.)

Figure iv-3

APPEALS PROCESS

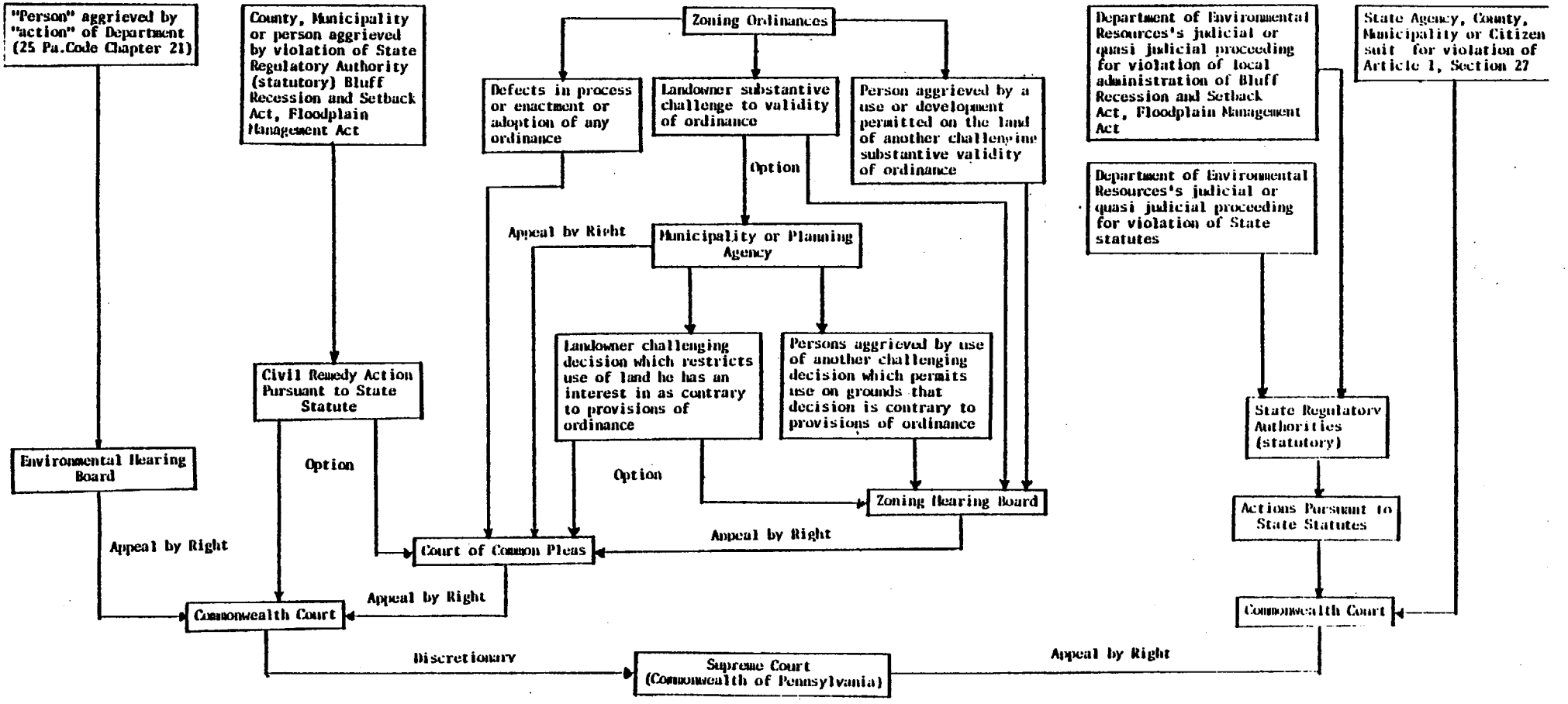
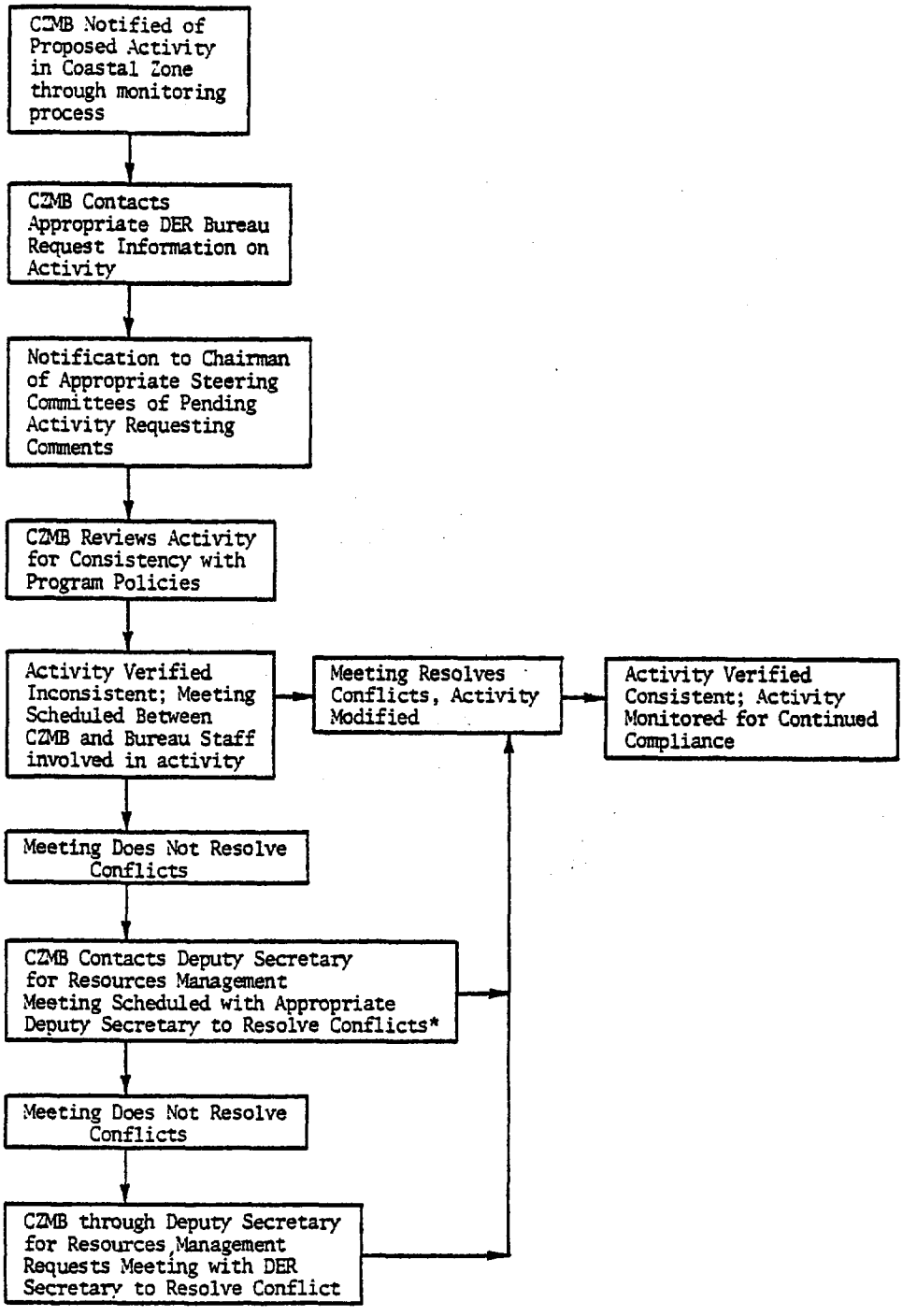


Figure iv-4

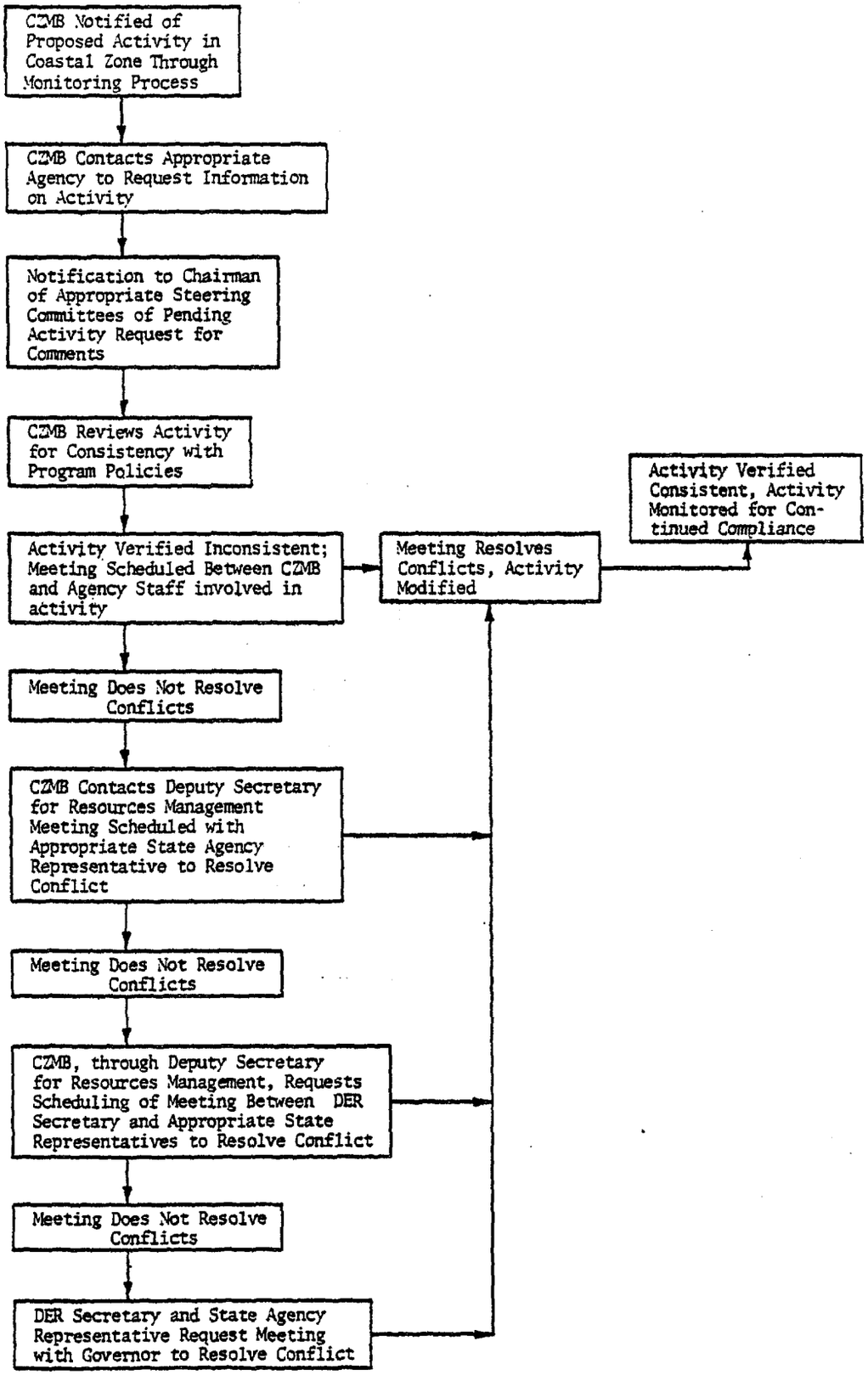
DER ADMINISTRATIVE CONFLICT RESOLUTION
FOR NONENFORCEABLE POLICIES



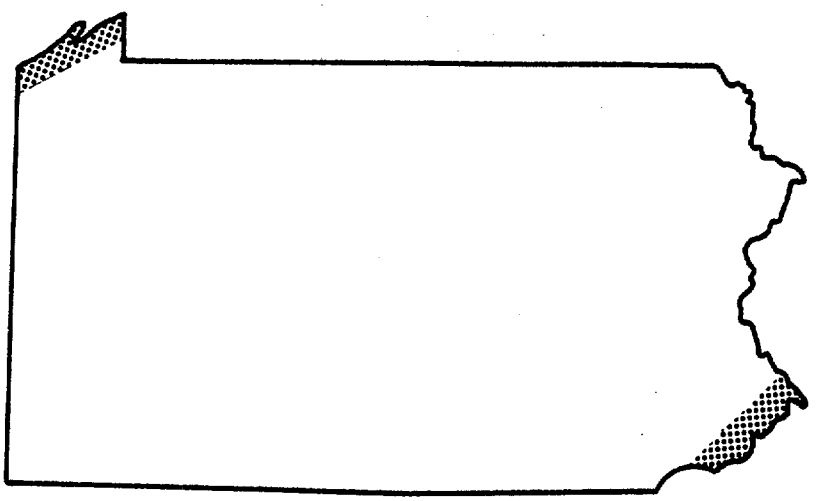
* The CZMB is located in the Offices of Resources Management of the DER. Therefore, the Deputy Secretary will resolve conflicts between Bureaus in this Deputate and CZMB.

Figure iv-5

STATE AGENCY ADMINISTRATIVE CONFLICT RESOLUTION
FOR NONENFORCEABLE POLICIES



Chapter 5



Intergovernmental/ Public Coordination and Review

INTRODUCTION

This chapter presents the institutional and administrative mechanisms that will be utilized to coordinate with and review activities of various governmental units as well as the public. The coordination and review activities are presented at the Federal, interstate, State and local levels. Plan coordination (Section 306(c)(2)(A) of the Federal Coastal Zone Management Act) has been handled through these mechanisms at the interstate, State and local levels. Plan coordination entailed the coordination of the management program with pertinent local, areawide, and interstate plans, which included; plans prepared pursuant to the Housing and Urban Development Act of 1968, the Clean Water Act, the Flood Insurance Act, regional and interstate highway plans and fishery management plans.

FEDERAL COORDINATION ACTIVITIES

Federal Agency Consultation

The preparation and implementation of the Pennsylvania Coastal Zone Management Program included the development of processes and mechanisms designed to facilitate coordination between various Federal agencies and the management program, and ensure that the national interest is adequately considered in coastal decision-making. These mechanisms are designed to help resolve conflicts between various programs, projects and plans.

Pennsylvania began the process of Federal involvement in April of 1975. Since that time, the Coastal Zone Management Branch has requested input on the program from Federal agencies and the appointment of a Federal contact who would be responsible for coordinating Pennsylvania's coastal zone management activities with the Federal agency. The list of Federal agencies and bureaus include:

1. U.S. Department of the Interior

    a. National Park Service
    b. Fish and Wildlife Service
    c. Bureau of Land Management
    d. Bureau of Mines
    e. Heritage Conservation and Recreation Service
    f. Geological Survey

2. U.S. Department of Defense

    a. U.S. Navy
    b. U.S. Air Force
    c. U.S. Army Corps of Engineers (Philadelphia and Buffalo Districts)

3. Federal Energy Regulatory Commission

4. U.S. Department of Energy

5. Environmental Protection Agency

6. General Services Administration

7. Department of Housing and Urban Development

8. U.S. Department of Transportation

   a. Federal Highway Administration
   b. Federal Railroad Administration
   c. Federal Aviation Administration
   d. U.S. Coast Guard (9th District, Cleveland, Ohio; 3rd District, New York, New York)

9. U.S. Department of Commerce

   a. Maritime Administration (Eastern and Great Lakes Regions)
   b. Economic Development Administration
   c. National Marine Fisheries Service
   d. National Oceanic and Atmospheric Administration
   e. National Weather Service

10. U.S. Department of Agriculture

    a. Soil Conservation Service
    b. Forest Service

11. U.S. Department of Health, Education and Welfare

12. Mid-Atlantic Fisheries Management Council

A summary of all input received from Federal agencies is presented in the DEIS. This established mechanism of Federal/State coordination and consultation will be continued throughout program implementation and will provide the State with an early warning mechanism of pending and/or continuing Federal program activities. A list of Federal activities, permits, and funding programs to be reviewed with respect to consistency with the Pennsylvania Coastal Zone Management Program, along with mechanisms for review and comment, will be presented in the next section. As Federal activities change or are modified, this list will be updated to reflect the changes. Final changes will only be made after receiving an acknowledgement from the Federal agency of the proposed change.

Other mechanisms to help achieve adequate Federal/State consultation will be the utilization of the Federal A-95 review process, review of Environmental Impact Statements issued in response to the National Environmental Protection Act, and

multistate regional commissions. In Pennsylvania, because of the separation of the coastal zones, two such commissions (the Great Lakes Basin Commission and the Delaware River Basin Commission) will be utilized. Since representatives of Federal agencies and adjacent states including Pennsylvania are participants in these multipurpose commissions, a forum for increased coordination and representative decision-making is provided that can be effectively utilized to further coastal zone management interests and accomplishment of recommendations. In addition, the Coastal Zone Management Program will provide ongoing consultation with U.S. Fish & Wildlife Service on the impacts of any proposed actions by the program on the Federal endangered or threatened species lists as maintained by the U.S. Department of the Interior.

Federal Consistency

The Federal Coastal Zone Management Act requires that Federal agency activities including development projects directly affecting the coastal zone must be consistent with approved state coastal zone management programs to the maximum extent practicable. Federally licensed and permitted activities, including those described in detail in Outer Continental Shelf (OCS) plans, and Federal assistance programs to state and local governments, which affect the coastal zone, must be consistent with the Pennsylvania Coastal Zone Management Program.

The Coastal Zone Management Branch, in the Office of Resources Management of Pennsylvania's Department of Environmental Resources, will be responsible for coordinating Federal consistency review of these activities and concurring with or objecting to the consistency determinations of Federal agencies and consistency certifications of applicants for Federal licenses or permits, or Federal assistance.

The following Federal activities or development projects, Federal activities requiring a Federal license or permit, OCS pre-lease sale, exploration, development and production activities, and Federal assistance to State and local governments, will be subject to consistency procedures.

1. U.S. Department of the Interior

    a. Proposed Bureau of Land Management OCS pre-lease activities.

    b. Proposed National Park Service acquisition in or directly affecting the coastal zones.

    c. HCRS assistance for historic preservation, waterfront redevelopment and state outdoor recreation planning and development in or directly affecting the coastal zones.

d. Proposed U.S. Fish and Wildlife acquisitions in or directly affecting the coastal zones.

e. Licenses and permits described in detail in OCS plans.

2. U.S. Department of Defense

a. U.S. Army Corps of Engineers dredge and fill permits, channel works, breakwaters, erosion control.

b. Structures, beach replenishment and dams in or directly affecting the coastal zones and on or in rivers directly discharging into coastal waters.

c. Licenses and permits described in detail in OCS plans.

3. Federal Energy Regulatory Commission

a. All pertinent FERC licenses and certificates as presented on Page II-5-8.

4. Environmental Protection Agency

a. Construction grants for wastewater treatment works in the coastal zones.

b. Water pollution control and areawide waste treatment program grants.

c. Water pollution control state and interstate program grants.

d. Air quality maintenance planning

5. General Services Administration

a. Location and design of proposed Federal government property, acquisition and building construction in or directly affecting the coastal zones.

b. Disposal of surplus Federal lands in or directly affecting the coastal zones.

6. Department of Housing and Urban Development

a. "701 Planning" comprehensive planning assistance in or affecting the coastal zones.

b. Housing and Community Development Act (block grants)

c. Public housing - acquisition and construction in or directly affecting the coastal zones.

d. Mortgage Insurance and mobile home parks

7. U.S. Department of Transportation

a. Federal aviation administration airport planning program and airport development aid program for projects in or directly affecting the coastal zones.

b. Federal highway administration highway research planning and construction activities in or directly affecting the coastal zones.

c. Federal railroad administration, activities affecting railroad expansions, new construction or abandonments in or directly affecting the coastal zones.

d. U.S. Coast Guard changes in regulations affecting port and waterway safety, designation of anchorage grounds and issuance of permits for the construction and modification of bridges or causeways in navigable waters, and the location of new or enlarged Coast Guard Stations, bases and lighthouses within the coastal zones.

8. U.S. Department of Commerce

a. Proposed activities relating to port development and promotion and intermodel planning grants.

b. Proposed port expansion planning assistance for new terminals and harbors.

c. Grants and loans for public works and development facilities in or directly affecting the coastal zones.

d. Planning and technical assistance projects in or directly affecting the coastal zones.

e. Public works impact program projects in or directly affecting the coastal zones.

f. Emergency port planning program projects in or directly affecting the coastal zones.

The preceeding list of Federal activities, permits, or assistance projects requiring a consistency determination or certification has been compiled in part through Federal agency consultation. Because Federal agencies may engage in a variety of other actions which could indirectly impact the land and water uses of the coastal zone, the Pennsylvania Coastal Zone Management Branch will review such actions by means of the A-95 process and Environmental Impact Statement process, and will request that Federal agencies notify it if they are considering actions, such as technical assistance to local governments for which A-95 review is not required. By reviewing Federal actions which may affect the coastal zone directly or indirectly, comprehensive and coordinated planning and decision-making by all levels of government in the coastal zone will be reinforced.

Review Process for Assuring Consistency: The Pennsylvania Coastal Zone Management Branch will utilize the following processes to verify consistency with previously mentioned Federal agency action. These mechanisms will be modified if the Federal consistency regulations promulgated by the Secretary of Commerce mandate changes or if unforeseen deficiencies or conflicts arise in utilizing this mechanism. Necessary changes made to correct deficiencies or conflicts will be submitted to all Federal agencies and bureaus, for comment. Following a reasonable review period, all received comments will be evaluated and a new review mechanism will be developed. This new mechanism will then be utilized in the review of Federal actions requiring consistency.

The existing review mechanisms for consistency are as follows:

- The Review of Federal Activities Including Development Projects covers any Federal development project involving the planning, construction, modification or removal of public works, facilities, or other structures, and the acquisition, utilization, or disposal of land or water resources and any Federal activities which may be classified as a residual category covering Federal actions which are neither development projects nor activities covered by the Federal license, permit and assistance, or subparts of the Federal consistency regulations.

- At the earliest practicable time, Federal agencies are required to notify the State that they are planning to undertake an activity or development project directly affecting the coastal zones, and whether or not it is consistent to the maximum extent practicable with Pennsylvania's management program. The Federal agency will communicate to the Department of Environmental Resources its consistency determination through the OMB A-95 review process, Environmental Impact Statement process, and direct communication with the Coastal Zone Management Branch. This consistency determination will include a brief statement on

whether or not the "proposed action will be undertaken in a manner consistent, to the maximum extent practicable, with the State's approved management program, a detailed description of the proposed action, its associated facilities, its combined coastal effects and will be presented in sufficient detail to support the Federal agency's consistency statement". As appropriate and at the request of the Federal agency, the Department of Environmental Resources's Coastal Zone Management Program Manager will assist the agency in making the consistency determination concerning the proposal. Consistency determination will be made with respect to the program's enforceable policies.

- Upon receipt of the consistency determination and other required information, the Coastal Zone Management Branch will, in cooperation with other appropriate State agencies and affected coastal municipalities, review the consistency determination and respond to the Federal agency within the time period and in the manner prescribed by 15 CFR, Section 930.41. Should the Coastal Zone Management Branch disagree with the Federal agency's consistency determination and fail to resolve its differences with the Federal agency through personal meetings, the Coastal Zone Management Branch will request mediation by the Secretary of Commerce and will represent Pennsylvania in the dispute settlement process established by 15 CFR, Section 930.42-44. The Federal agency will, after the mediation process, proceed with its activities or revise them to comply with the Pennsylvania program. Should Pennsylvania be dissatisfied with the outcome of the dispute mediation process, it may elect to pursue remedies in the Federal courts.

- Federal Licenses and Permits: Any individual or organization, except a Federal agency, who files for a Federal license or permit, approval or other forms of permission to conduct an activity in or affecting a state's coastal zone must certify consistency with the approved State Coastal Zone Management Program before the Federal agency will issue the license or permit (15 CFR, Section 930.50 et seq.).

The geographic scope of the consistency review process includes the entire coastal zone and, in some cases, areas outside the coastal boundaries. Federal lands within the boundary are excluded from the coastal zone, and are not ordinarily subject to a consistency review. Activities on Federal lands and on other

lands outside the zone are subject to consistency review if it is found that they may significantly affect the coastal zone outlined in 15 CFR 930.33c. Whether these "spillover effects" will have such an impact will depend generally on the type of activity to be conducted, its magnitude, and its proximity to the coastal zone. Persons proposing to conduct an activity with potential spillover impacts should consult with the Department of Environmental Resources, Coastal Zone Management Program, early in the planning process in order to avoid later problems.

There are certain geographic areas outside the coastal zone in which activities are likely to have significant and predictable impacts on the coastal zone. Any upstream riverine or lake activity impacting water quantity or quality for example, that is likely to significantly affect coastal zone areas. Likewise, an activity within a coastal zone air basin which impacts air quality that is likely to significantly affect coastal zone areas. In general, any activity impacting upon coastal wetlands, floodplains, erosion hazards, water quality or air quality may be assumed to significantly affect the coastal zone. This section does not address licenses or consistency requirements issues pursuant to the OCS Lands Act (43 USC Section 1331 et seq.). To assist Federal agencies and applicants in determining whether or not licenses or permits for an activity will require a consistency certification with the Pennsylvania Coastal Zone Management Program, the following list of licenses and permits is offered. It should be noted that the list is not static, other permits and licenses may be added as further needs are indicated. As this list is modified, the Coastal Zone Management Branch will communicate the changes, to the appropriate Federal agencies, and the Federal Office of Coastal Zone Management.

- Environmental Protection Agency

  Water pollution control

  Clean air

- Nuclear Regulatory Commission

- Construction and operation of nuclear facilities and the possession and use of hyproduct, source and special nuclear material pursuant to the Atomic Energy Act of 1954, as amended. Title II of the Energy Reorganization Act of 1974 and the National Environmental Policy Act of 1969.

- Federal Energy Regulatory Commission

- Licenses required for non-Federal hydroelectric projects and primary transmission lines under Section 3 (11), 4(e), and 15 of the Federal Power Act (16 U.S.C. 796(11), 797(e), and 808).

  Orders interconnection of electric transmission facilities under Section 202(b) of the Federal Power Act (16 U.S.C. 824a(b)).

  Certificates of public convenience and necessity for the construction and operation of natural gas pipeline facilities, including both interstate pipelines and LNG terminal facilities under Section 7(c) of the Natural Gas Act (15 U.S.C. 717f(c)).

  Permission and approval for the abandonment of natural gas pipeline facilities under Section 7(b) of the Natural Gas Act (15 U.S.C. 717f(b)).

- Department of Defense - Army Corps of Engineers

  Obstructions or alterations in navigable waters pursuant to Sections 9, 10, 11 and 14 of the Rivers and Harbors Act of 1899.

  Discharge of dredge or fill material in navigable waters pursuant to Section 404 of the Federal Clean Water Act, as amended.

- Department of Transportation

  Construction of bridges under U.S.C. 401, 491-507, and 525-534 (U.S. Coast Guard)

  Construction or alteration of airports

  Transportation of liquids (other than petroleum products) by pipeline (Section 195.6 of the regulations for transportation of liquids by pipeline).

Any applicant requiring a Federal license or permit or development of an Environmental Impact Statement for a project that affects land or water uses in the coastal zone should consult with the Coastal Zone Management Branch to assure that the proposed activity will be conducted in a manner consistent with the Coastal Zone Management Program.

Persons or agencies required to obtain Federal licenses or permits designated by the State as requiring consistency review, or determined by the Federal agency to require review because of effects on land or water uses in the coastal zone shall: submit a copy of the license or permit application to the Coastal Zone Management Branch indicating that the proposed activity will comply with and be conducted in a manner consistent with the management program. Upon receipt of the application, certification, and any additional necessary information, the Coastal Zone Management Branch will provide public notice including requests for hearings and/or comments through the Pennsylvania Bulletin.

In the case of an application for a permit or license determined to require State consistency review, the Department of Environmental Resources will make its decision within 90 days of receipt of the certification. If the Department of Environmental Resources has not replied within 180 days of receipt of the certification materials, concurrence will be presumed. The consistency decision will, in either case, be communicated to both the applicant and the Federal agency, to which the permit application was filed.

It is anticipated that the Federal application process will run concurrently with the State's consistency review. Upon receiving certification concurrence from the Department of Environmental Resources, the Federal agency may then proceed to permit or license the activity.

If a disagreement concerning a consistency certification arises, the Coastal Zone Management Branch will forward in writing to the applicant and to the proper Federal agency the reasons the application was determined to be inconsistent. The letter will also include the appropriate recommendations for making the application consistent with Pennsylvania's program. If the disagreement continues, the Federal agency, or the Coastal Zone Management Branch may request mediation of the dispute by the Secretary of Commerce, who will then appoint a representative to meet with the parties involved in the dispute at a mutually agreed upon time and place to attempt to resolve the differences. If this meeting fails to generate positive steps towards solving the conflict, the applicant may file an appeal with the Secretary of Commerce within 30 days of receipt of the State's objections. The Secretary of Commerce shall then determine whether the activity is consistent with the objectives of the Federal Coastal Zone Management Act

or is necessary in the interest of national security. If the Secretary finds that the proposal meets with either of these requirements, the Federal agency may approve the activity. If neither of these requirements are met, then the Secretary shall notify the Federal agency that it may not issue the permit.

Federal Assistance Program: The Coastal Zone Management Branch will review all Federal assistance activities to State and local governments that will potentially affect the environmental, economic, and social resources of the Commonwealth's coastal zones. Monitoring of these activities will be accomplished through the utilization of the OMB A-95 review process. The Coastal Zone Management Branch will be notified by the Pennsylvania A-95 Clearinghouse, and also through the Department of Environmental Resources's A-95 internal Project Review Evaluation Process (PREP), of all proposals that may potentially affect the coastal zones.

The Coastal Zone Management Branch will utilize the Pennsylvania Bulletin as a check should the Pennsylvania Clearinghouse fail to provide notice to the Coastal Zone Management Branch of a pending Federal assistance activity. In the event that the Coastal Zone Management Branch determines that it was not notified of proposed Federal assistance program that will affect the coastal zone, the Coastal Zone Management Branch will notify the Pennsylvania A-95 Clearinghouse and request the appropriate information needed to make a consistency decision.

In the case of planning and development assistance applications, the Department of Environmental Resources will forward the application and supporting material to the identified coastal municipality and it will have 30 days to review the application and provide any comments on the activity. The State will then have 30 days to make its consistency decision. The State will prepare a consistency approval or objection statement and send copies to the appropriate clearinghouse and the applicant.

In responding through the Department of Environmental Resources's A-95 PREP review process, if the Coastal Zone Management Branch does not object, the Federal agency may proceed with the processing of the application.

In the event the Coastal Zone Management Branch does object to the applicant agency's proposal, the Coastal Zone Management Branch will note its objection and forward its reasons, supporting information and

alternative measures which will make the proposed project consistent with the program through the Department of Environmental Resources's A-95 internal PREP to the Pennsylvania Clearinghouse.

The Pennsylvania Clearinghouse will then notify the applicant, State agency, and the Federal agency of the Coastal Zone Management Branch's objection to providing Federal assistance, and as a result the Federal agency may not provide the assistance.

The applicant agency may appeal a negative decision; first by contacting the Coastal Zone Management Branch to arrange a meeting to discuss or clarify the intent of the assistance and to resolve the conflicts; or failing this approach, file within 30 days of receiving State notification of the objection, an appeal to the Secretary of Commerce requesting review. Following public notice, receipt of comments and in some cases a hearing, the Secretary of Commerce shall determine whether or not the activity is consistent with the objectives of the Federal Coastal Zone Management Program, or is necessary in the interest of national security. If the Secretary determines that the activity meets either of the above requirements, the Secretary shall approve the proposal. If the Secretary feels that the activity does not meet either of the two requirements, the Federal agency may not provide the aid.

Outer Continental Shelf Activities: Exploration, development or production activities requiring a Federal license or permit and described in detail in an OCS plan for any area which has been leased under the OCS Lands Act (43 USC, Section 1331 et seq.), and which affect the coastal zone, must be conducted in a manner consistent with an approved state coastal zone management program. The applicant submitting an OCS exploration or development/production plan to the U.S. Department of the Interior must provide a consistency certification. The Department of the Interior will then forward a copy of the OCS plan, excluding proprietary information and the applicants consistency certification to the Department of Environmental Resources requesting an opinion on the applicants certification.

Concurrent with efforts in working with applicants to assure consistency of OCS development plans, the Commonwealth will work to ensure that Corps of Engineers and any other pertinent Federal permits associated with implementation of these plans, are consistent with the Pennsylvania Coastal Zone Management Program.

The Department of Environmental Resources, acting as the representative of Pennsylvania, shall, at the time it receives the certification and necessary supporting information, provide public notice in the Pennsylvania Bulletin. This notice will include a summary of the proposal and an announcement stating that comments on this proposal or requests for additional information should be sent (made) to the Department of Environmental Resources, Coastal Zone Management Branch. In addition to utilizing the Pennsylvania Bulletin, the Coastal Zone Management Branch will contact the appropriate coastal community representative and request comments concerning this action be forwarded to the Coastal Zone Management Branch. The Coastal Zone Management Branch will then notify the Assistant Administrator and the Federal agency of its decision.

The Department of Environmental Resources's Coastal Zone Management Branch will issue to the applicant and the Department of the Interior a response within three months of receiving from the Department of the Interior the consistency certification and supporting information. If a decision on consistency is not issued within three months of receipt, the Department of Environmental Resources will notify the U.S. Department of the Interior, the permit applicant, and the Assistant Administrator of the status of the consistency review. Concurrence with the consistency certification shall be conclusively presumed in the absence of this certification. Concurrence shall also be conclusively presumed in the absence of an objection by the Department of Environmental Resources within six months of commencement of the consistency review.

In the event that the Department of Environmental Resources objects to the consistency certification made by the applicant, the Department will notify the applicant, the Department of the Interior and the Assistant Administrator of the reasons why the State objects to the action. Additionally, the applicant will be provided with the following: suggestions for correcting the proposal so that it will comply with the program, notice that the applicant may appeal to the Secretary of Commerce, and that the Coastal Zone Management Branch in the Department of Environmental Resources will at the request of the applicant or Department of the Interior schedule a meeting to attempt to resolve the differences.

If a meeting or other attempts prove unsatisfactory, then the applicant may file an appeal with the Secretary of Commerce. If the applicant pursues this

course of action, the applicant must provide copies of the appeal and supporting information to the Department of Environmental Resources in Harrisburg, Pennsylvania.

The Secretary of Commerce, following public notice, receipt of comments and in some cases a public hearing shall make a decision on whether or not the activity should be approved or disapproved. If the Secretary finds the activity is in keeping with the goals and objectives of the Federal Coastal Zone Management Program or is in the interest of national security, the Secretary will notify the Department of the Interior that it may issue its permits. In the event the Secretary does not feel either of these requirements are met then the applicant will be requested to submit, an amended, or new OCS plan to the Department of the Interior and a new consistency certification to the Department of Environmental Resources.

Excluded Federal Lands: Section 304(1) of the act provides that lands, the use of which is subject solely to the discretion of the Federal government or which are held in trust by the Federal government, are excluded from the coastal zone. The Department of Justice has interpreted this to include all lands owned, leased or otherwise used, by the United States. Even though Federal lands are excluded from the coastal zone, the uses of these lands are subject to the Federal consistency requirements of the act where their use directly affects the coastal zone. However, even though Federally owned lands are excluded from state coastal zone management programs, the Coastal Zone Management Act requires that certain activities, which may have significant spillover impacts on uses or resources under the purview of the state's management program, to be consistent with the state's program.

Incorporation of Water Pollution and Air Pollution Requirements

Section 307(f) of the Coastal Zone Management Act and 15 CFR Section 923.44 of the approval regulations calls for the "incorporation" of the requirements of the Federal Water Pollution Control Act, as amended, and the Clean Air Act, as amended, into coastal zone management programs. The Department of Environmental Resources as the lead State agency is the single institutional focus for integrating the standards, regulations, and guidelines necessary to achieve the related requirements of these programs and any changes to these programs that may occur in the future. The Coastal Zone Management Program through State law will incorporate the requirements of the Federal Water Pollution Control Act and the Clean Air Act into the Pennsylvania Coastal Zone Management Program. Any action or proposal which would violate State air or water quality laws and regulations is

considered to be inconsistent with the Pennsylvania State Coastal Zone Management Program. Water and air permits will be monitored by the Coastal Zone Management Branch following the process outlined on Page II-4-7.

National Interest

Section 306(c)(8) of the Federal Coastal Zone Management Act requires that the national interest receive adequate consideration in planning for and siting facilities which are necessary to meet requirements which are "more than local in nature". The requirement is intended to assure that national concerns over facility siting and resource protection are expressed and dealt with in the development and implementation of the Coastal Zone Management Program.

In order to meet the requirements of Section 306(c)(8), Pennsylvania must:

1. Describe the national interest in the planning for and siting of facilities considered during program development.

2. Indicate the sources relied upon for a description of the national interest.

3. Indicate how and where the consideration of those national interests is reflected in the program.

4. Describe a process for continued consideration of the national interest . . . during program implementation.

   - 15 CFR 923.52 (March 28, 1979).

Early in the development of Pennsylvania's coastal program, efforts were begun to identify activities and facilities located in each coastal zone that involve the national interest. A concerted effort was made to inform involved Federal agencies of the Pennsylvania Coastal Zone Management Program. This was accomplished through correspondence with Federal agency representatives as described in the DEIS, (Intergovernmental and Public Participation Activities). Members of the public as well as interest groups are also involved in identifying uses of the Pennsylvania coastal zone that are in the national interest.

As program planning progressed, identified Federal agencies were provided further opportunities for input. Copies of the Draft Technical Record were mailed to each agency requesting comments on goals and objectives, policies, and recommendations of the Pennsylvania Coastal Zone Management Program.

Through this involvement, national interests have been considered throughout the development of the management program.

Approximately 30 Federal representatives have been contacted and offered an opportunity to consult on the definition of "national interest". Comments received have been carefully considered and responses prepared.

The Pennsylvania Coastal Zone Management Program evaluated, and will continue to evaluate, the following sources for policies and information to adequately consider the national interest in planning and management responsibilities:

1. Federal laws and regulations.

2. Policy statements or Executive Orders from the President of the United States (e.g., National Energy Plan).

3. Special reports, studies and comments from Federal and State agencies.

4. Testimony received at public meetings on the Pennsylvania Coastal Zone Management Program.

5. Certificates, policy statements and solicited opinions issued on specific projects by Federal regulatory agencies.

6. Statements of national interest issued by Federal agencies.

The following concerns are considered by Pennsylvania to be of such long-range, comprehensive importance as to be in the national interest: National Defense, Energy Production and Transmission, Recreation Facilities, Air and Water Quality, Historic Sites, Wetlands, and Ports and Navigation.

The Pennsylvania Coastal Zone Management Program does not exclude any national interests as long as they conform to requirements of applicable Commonwealth authorities. This represents a performance approach for assuring both proper resource protection and management in facility siting. Consideration of the national interest in program development is represented in the Coastal Zone Policy Framework (Chapter 2), Designation of Geographic Areas of Particular Concern (Chapter 3), and Broad Priorities of Uses for GAPC (Chapter 3).

<u>National Defense</u> - In determining the national interest in defense, the Departments of Defense and the Army, Navy, Air Force, U.S. Coast Guard, and U.S. Army Corps of Engineers were contacted during the period of program development. The following are the major objectives for national defense:

1. To ensure sovereignty of the Nation and protect its citizens from physical harm or expropriation, and

2. To establish and maintain the facilities necessary to carry out the first objective.

No goal or policy found in the Pennsylvania Coastal Zone Management Program contradicts or interferes with the siting of facilities in the national defense.

The Pennsylvania Coastal Zone Management Program recognizes the importance of national defense facilities to ensure the Nation's sovereignty and to protect her citizens. Strategically located defense facilities are necessary to achieve these ends. Defense facilities in the coastal zone are located on Federally owned land and are thus excluded from the coastal zones. However, activities related to defense facilities must be consistent with the Pennsylvania Coastal Zone Management Program to the maximum extent practicable to the extent that they directly affect the coastal zone.

Energy Production and Transmission - The energy facilities and activities which are considered to be in the national interest are all those defined in Section 304(5) of the Coastal Zone Management Act and include electric generating plants, petroleum refineries and associated facilities, gasfication plants, facilities associated with liquified natural gas, uranium enrichment or nuclear fuel processing facilities, and oil and gas facilities. The Energy Facility Planning Process (Chapter 4) fully discusses the regulatory authority, policies and planning process for facilities and activities associated with energy production and transmission.

To determine the national interest in activities related to energy production and transmission, the following legislation, documents, and Federal agencies were consulted:

National Energy Plan

Department of Energy Reorganization Act

Outer Continental Shelf Lands Act

U.S. Department of Energy

Bureau of Land Management

U.S. Geological Survey

According to the sources listed above, the major national interests in energy in the Pennsylvania coastal zones involve:

1. Reductions of dependence on foreign oil and vulnerability to supply interruptions.

2. Maintenance of U.S. oil imports at levels low enough to weather the period when world oil production approaches its limit.

3. Development of renewable and virtually inexhaustible energy sources for sustained economic growth.

4. Development of Outer Continental Shelf oil and gas resources to reduce dependence on foreign oil and gas supplies.

5. Siting of energy facilities such as power plants and refineries in the coastal zone in an environmentally responsible manner.

Pennsylvania's specific policies dealing with energy facility siting include:

1. Policy VIII-1 - Improve upon and monitor the existing energy facility permitting process.

2. Policy VIII-2 - Develop intrastate natural gas supplies.

3. Policy VIII-3 - Encourage coastal municipalities to plan for energy facilities.

4. Policy VIII-4 - Support development of OCS oil and gas resources.

5. Policy IX-C - Improve the regulatory permitting process in the coastal zone (See Chapter 2, Coastal Zone Policy Framework).

Recreation Facilities - To determine the national interest in recreation, the following documents, legislation, and Federal agencies have been consulted: Statewide Comprehensive Outdoor Recreation Plan, Heritage Conservation and Recreation Service, National Park Service, Fish and Wildlife Service, Historic Preservation Act, and Land and Water Conservation Fund Act.

The Coastal Zone Management Program has determined that the major objectives of the national interest in recreation are:

1. High quality recreation opportunities for all citizens consistent with environmental protection.

2. Increased public recreational opportunities in high density areas.

3. Access to and management of recreation areas should be improved.

Specific policies dealing with recreation include:

1. Policy III-1 - Ensure that coastal waters support fish populations to provide increased fishing opportunities.

2. Policy III-2 - Ensure that stocking of coastal waters is done in a way to augment native stocks and introduce new species.

3. Policy III-3 - Fishing and boating access shall be improved through acquisition and improvement of sites.

4. Policy V-1 - Provide additional public access for active and passive recreation.

5. Policy V-2 - High priority will be given to acquisition or development of GAPC nominated for their recreational value.

Air and Water Quality - In determining the national interest in air and water quality, the following documents, legislation, and Federal agencies were consulted: Federal Water Pollution Control Act, Federal Clean Air Act, and U.S. Environmental Protection Agency.

The national interest in air and water pollution control is to provide clean air and water to enhance the quality of life for all citizens of the Nation.

Specific policies dealing with air and water quality are:

1. Policy IX-B.1 - Adopt by reference the requirements of the Clean Water Act (95-217) and to incorporate these requirements into the Coastal Zone Management Program.

2. Policy IX-B.2 - Adopt by reference the requirements of the Clean Air Act (P.L. 95-95) and to incorporate these requirements into the Coastal Zone Management Program.

Historic Sites - In determining the national interest in historic sites, sources consulted by the Coastal Zone Management Program include: The Antiquities Act of 1906, Historic Site Act of 1935, National Historic Preservation Act of 1966, Archaeological and Historic Preservation Act of 1974, National Historic Preservation Act of 1974, and National Environmental Policy Act of 1969.

Major objectives of the national interest in historic and archaeological sites are:

1. To afford protection for designated historic sites from adverse impacts.

2. To consider cultural resources in assessing the environmental impacts of proposed activities.

Specific Coastal Zone Management policies dealing with historic sites include:

1. Policy VI - Assist the Pennsylvania Historic and Museum Commission in the identification, restoration, and preservation of archaeologically, architecturally and historically significant sites.

Wetlands - In determining the national interest in wetlands, the following agencies, legislation and documents were consulted: Fish and Wildlife Service, U.S. Army Corps of Engineers, National Marine Fisheries Service, Fish and Wildlife Coordination Act, Marine Protection, Research and Santuaries Act of 1972, Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, Executive Order No. 11990 (protection of wetlands), Executive Order No. 11988 (floodplain management), and Fishery Conservation and Management Act of 1976.

Objectives of the national interest in wetlands include:

1. To avoid to the greatest extent possible the long- and short-term adverse impacts associated with the disruption or modification of wetlands.

2. Provide means whereby ecosystems upon which endangered and threatened species depend may be preserved.

4. Regulation of placement of dams, water obstructions, and encroachments in such a manner as to protect wetlands and their valuable contribution to the coastal ecosystem.

3. Make use of wetlands as outdoor classrooms through the acquisition and/or development of appropriate sites.

Ports and Navigation - To determine the national interest in ports and navigation, the following documents, legislation, and Federal agencies have been consulted: Department of Transportation Act, U.S. Coast Guard, Maritime Administration's Office of Port and Intermodal Development, and U.S. Army Corps of Engineers.

The national interest in ports and navigation has been incorporated in the Pennsylvania Coastal Zone Management Program through the following policies:

1. Policy VII-1 - To actively attract and encourage the siting of water dependent economic activities in the Commonwealth's coastal ports.

2. Policy VII-2 - Support long-range, comprehensive planning for future development and growth of Pennsylvania's ports.

Process for Continued Consideration of National Interest

Means for continued consideration of the national interest is provided by the following:

1. Permit procedures

2. The Executive Order

3. Memoranda of Understanding between the Department of Environmental Resources and other State agencies

To ensure that the national interest is being considered in permitting procedures, citizens, Federal agencies, and interest groups can become involved in this process through both the legal and administrative mechanisms available for conflict resolution described in Part II, Chapter 4. These include the legislative process, the Environmental Quality Board, and the Environmental Hearing Board, citizen suits under Article I, Section 27 of the Pennsylvania Constitution, judicial appeals on State and local administration of State statutes and informal discussions with Coastal Zone Management staff and Coastal Zone Steering Committees. In addition, consideration of the national interest and the siting of facilities is provided in the process of the Public Utility Commission certificate of public convenience. This process is described under Uses of Regional Benefit, Part II, Chapter 3. In accordance with the Governor's Executive Order and pursuant to the Memoranda of Understanding between the Department of Environmental Resources and agencies of the Commonwealth, all State agencies networked in the program are required to consider the national interest in their decision-making.

INTERSTATE COORDINATION ACTIVITIES

The following mechanisms are utilized in the coordination and review of interstate agencies activities, including neighboring state's coastal zone management programs, affecting Pennsylvania's management program. As noted previously, these same mechanisms were used to achieve plan coordination at the interstate levels.

1. GLBC (Great Lakes Basin Commission) - Is a formal organization of the Great Lakes states and several Federal agencies. The states and agencies formed the Commission in 1967 so that they could work together at planning for water resources in the Great Lakes area.

The Commission works closely with the International Joint Commission and Canadian personnel to encourage international cooperation in addressing the problems faced in managing the Great Lakes. The GLBC has a special standing committee on coastal zone management.

2. DRBC (Delaware River Basin Commission) - Was created by interstate Federal compact in 1961 to establish coordinated multipurpose regional planning, management and protection of water resources associated with the Delaware River, which impacts the four state (New York, Pennsylvania, New Jersey and Delaware) areas water resources associated with the Delaware. Activities subject to the jurisdiction of the DRBC which impact upon the water quality or other coastal resources of the Delaware Estuary will be addressed by the Pennsylvania Coastal Zone Management Program through the Commonwealth's representative on the DRBC.

3. GLC (Great Lakes Commission) - The purposes of the GLC compact are, through means of joint or cooperative action:

   a. To promote the orderly, integrated, and comprehensive development, use, and conservation of the water resources of the Great Lakes Basin (hereinafter called the Basin).

   b. To plan for the welfare and development of the water resources of the Basin as a whole as well as for those portions of the Basin which may have problems of special concern.

   c. To make it possible for the states of the Basin and their people to derive the maximum benefit from utilization of public works, in the form of navigational aids or otherwise, which may exist or which may be constructed from time to time.

   d. To advise in securing and maintaining a proper balance among industrial, commercial, agricultural, and water resources of the Basin.

   e. To establish and maintain an intergovernmental agency to the end that the purposes of this compact may be accomplished more effectively.

STATE COORDINATION ACTIVITIES

The following mechanisms are utilized in the coordination and review of State agencies activities affecting the management program. As noted previously, these same mechanisms were used to achieve plan coordination at the State level.

1. Coastal Zone Advisory Committee - The Coastal Zone Advisory Committee (CZAC) was established by the Department of Environmental Resources to advise and assist the Coastal Zone Management Branch in the design, implementation and administration of the Commonwealth's Coastal Zone Management Program. It is a State level committee comprised of representatives from State agencies, commissions, offices, etc., that administer and/or are affected by the administration of programs in the Commonwealth's coastal areas. In addition, the CZAC also has representatives from the local Coastal Zone Steering Committees to ensure coordination between the State and local advisory mechanisms.

   The CZAC membership is as follows:

   Department of Environmental Resources

   Coastal Zone Management Branch
   Office of Chief Counsel
   Bureau of Environmental Planning
   Bureau of Water Quality Management
   Bureau of Topographic and Geologic Survey
   Bureau of Dams and Waterway Management
   Bureau of Soil and Water Conservation

   Other State Agencies

   Department of Commerce
   Historical and Museum Commission
   Public Utility Commission
   Department of Community Affairs
   Governor's Office of Policy and Planning
   Pennsylvania Fish Commission
   Pennsylvania Game Commission
   Department of Transportation
   Governor's Energy Council

In a program such as Pennsylvania's, which is based on networking, it is important to develop the program in such a manner as to have close coordination between the designated agency and the other State agencies involved in implementing the program. Under the planning phase, the CZAC has been instrumental in helping to design a program which provides for the necessary coordination. The activities undertaken by the CZAC under the planning phase are described in the DEIS.

The CZAC will perform the following tasks during the program's implementation phase.

1. Address project coordination

2. Address State and local coordination on actions of the Coastal Zone Management Program

3. Advise the Coastal Zone Management Branch of effectiveness of regulations pertaining to coastal resource management.

4. Participate in the continuing program review process.

Address Project Coordination: The purpose of this function is to ensure that projects or activities proposed for funding under the Coastal Zone Management Program are in concert with planned or existing State agency activities. Coordination is achieved in the following manner. All projects and actions funded or otherwise, proposed by the local Coastal Zone Steering Committees or the Coastal Zone Management Branch are reviewed by the CZAC members with respect to coordination with their agency's programs and actions. Additionally, members of the CZAC propose projects or actions for consideration for Coastal Zone Management funding and/or support. These projects are reviewed by other CZAC members, as well as the affected Coastal Zone Steering Committee with respect to coordination with their actions and programs. Besides determining consistency, CZAC members also comment on the relative importance their agency attaches to the proposed program or action.

Whenever a project or action is found to be in concert, the Coastal Zone Management Branch is notified. The Coastal Zone Management Branch then utilizes the resources of the CZAC and, if pertinent, the local Coastal Zone Steering Committee, to address the problem of achieving coordination. If coordination cannot be achieved through these mechanisms, then the Coastal Zone Management Branch will drop the project or action from further consideration or resubmit the proposal to the originator with suggested modifications.

Address State and local coordination on actions of the Coastal Zone Management Program: Once all projects or actions proposed for Coastal Zone Management funding and/or support are reviewed by the Coastal Zone Steering Committees and the CZAC, the Coastal Zone Management Branch will make a final determination of what projects or actions are to be undertaken. Following this determination, the CZAC will then be notified. Each agency, committee, commission, etc., conducting activities in the coastal zones pertinent to the implementation of the adopted programs or activities will utilize its regional offices, local contacts, the local Coastal Zone Steering Committee, etc., to ensure that its agencies actions consider local actions and the actions of other agencies. The review will also focus on determining whether or not all Commonwealth offices and agencies are cooperating and participating to the fullest extent possible in the achievement of the goals and policies of the Coastal Zone Management Program. The committee then makes recommendations to the Coastal Zone Management Branch on how to improve the program such as by

modifying existing policies, developing new policies, placing more emphasis on certain policies, developing Memoranda of Understanding, implementing new coordinative mechanism, etc. The Coastal Zone Management Branch will prepare a report based on these comments and submit it to the Secretary of the Department of Environmental Resources. Upon the Secretary's review and his determination of any actions which should be undertaken, the Coastal Zone Management Branch, with the assistance and cooperation of the CZAC, will implement the charges. Any amendment to the management program is subject to the approval of the Office of Coastal Zone Management.

Advise Coastal Zone Management Branch on regulations affecting coastal resources: Periodically, CZAC members will be asked to review the effectiveness of regulations, affecting coastal resources which they are mandated to administer, with respect to achieving the policies and goals of the Coastal Zone Management Program. If a regulation is found to be deficient, the Coastal Zone Management Branch will be notified along with a recommendation on how the problem may be rectified. Upon review of the problem, the Coastal Zone Management Branch may bring the problem to the attention of the Environmental Quality Board and recommend a change in the regulations or the development of new regulations.

Participate in the continuing program review process: Annually, the CZAC will review the Coastal Zone Management Program with respect to its achievements in attaining the goals of the Coastal Zone Management Program and meeting the needs of the Commonwealth coastal areas. The review will also focus on determining whether or not all Commonwealth offices and agencies are cooperating and participating to the fullest extent possible in the achievement of the goals and policies of the Coastal Zone Management Program. The committee then makes recommendations to the Coastal Zone Management Branch on how to improve the program such as by modifying existing policies, developing new policies, placing more emphasis on certain policies, developing Memoranda of Understanding, implementing new coordinative mechanisms, etc. The Coastal Zone Management Branch will prepare a report based on these comments and submit it to the Secretary of the Department of Environmental Resources. Upon the Secretary's review and his determination of any actions, which should be undertaken, the Coastal Zone Management Branch with the assistance and cooperation of the CZAC will implement the changes.

2. Pennsylvania Bulletin

The Pennsylvania Bulletin is the official gazette of the Commonwealth of Pennsylvania. It contains notices, regulations, and other documents filed with the Legisaltive Reference Bureau and supplements the Pennsylvania Code, a loose-leaf codification of administrative regulations, legislative documents, court

rules, and home rule charter documents. The bulletin contains lists of permits, legal notices, legal actions, etc.

3. Project Review Evaluation Program (PREP)

The PREP review is an internal review of departmental actions. In addition, extra departmental coordination mechanisms are channeled into the PREP process. A detailed explanation of the PREP review is contained in Chapter 4.

As described earlier in this report, all applications for Federal aid requiring A-95 clearance generated within the Department of Environmental Resources are subject to an internal review. This review is designed to resolve internal differences before the application is submitted to the State Clearinghouse.

These nine project types constitute the range of projects currently being reviewed through the Department of Environmental Resources's project review system. One of the assets of the project review system is that it can be used to accommodate a variety of new project or program types. The most important features of the program are the procedures which obtain input from the various bureaus in the Department and provide for resolving differences that end in formulating a single departmental position. Because of this, PREP provides a rather flexible mechanism that can be used to review a variety of projects, proposals and plans.

4. Water Resources Policy Advisory Committee (WRPAC)

The WRPAC is a state level water resources advisory committee which advises the Department of Environmental Resources on legal, institutional and policy issues regarding water planning and management.

LOCAL COORDINATION ACTIVITIES

The Coastal Zone Steering Committees (CZSC) are utilized in the coordination and review of areawide and local governmental activities. As noted previously, these mechanisms were used to achieve plan coordination at the areawide and local governmental level.

The Coastal Zone Steering Committees have been operating in the Lake Erie and Delaware Estuary areas since 1975. They have played a major role in determining the goals, policies, scope and objectives of the Pennsylvania Coastal Zone Management Program. They have been instrumental in providing coordination between the Coastal Zone Management Branch and local elected officials, and providing a mechanism for incorporating public interest and

values in the management program. The DEIS contains a detailed outline of the activities that the CZSC have engaged in during the planning phase of the management program.

Under the implementation phase of the management program, the structure of the CZSC will be revised and their focus of attention will be shifted. The Commonwealth's two coastal areas contain distinctly different political and social structures, and the committees have evolved somewhat differently in adopting to these different structures.

Lake Erie Coastal Zone Steering Committees

In the Lake Erie coastal zone, the Department of Environmental Resources's consultant, Erie County Department of Planning (ECDP), is responsible for providing each of the three committees with technical support that enables the western, eastern and central committee members to make effective coastal zone management decisions. These committees are comprised of representatives from the following municipalities:

Western Study Area Committee

Springfield Township
Girard Township
Lake City Borough
Fairview Borough

Eastern Study Area

Harborcreek Township
North East Township
North East Borough

Central Study Area

Millcreek Township
City of Erie
Lawrence Park Township
Erie City Council
Erie City Planning Commission
Erie/N.W. Pa. Port Authority

Additionally, each committee has a minimum of three rotating citizen representatives who are appointed by the committee. Every effort is made to include responsible representatives from environmental, business and service-related organizations, in order to ensure a broad public viewpoint. In addition, the Executive Director of the Erie County Department of Planning sits on each of the committees and acts as their representative to the Coastal Zone Advisory Committee.

The Erie CZSC will perform the following tasks during program implementation:

1. Priority Setting: The CZSC develops and sets priorities on lists of requests for coastal zone management funding on technical assistance in their area.

2. Coordination: The CZSC reviews all proposed State level coastal zone management activities with respect to coordination with local goals and actions.

3. Conflict Resolution: The CZSC provides a forum for discussion and a focal point for the collection of information and ideas, should problems or conflicts occur at the local level.

4. Monitoring: The CZSC provides a means for local monitoring of coastal uses subject to the management program with respect to compliance with the program's policies.

5. Program Review: Participates in the State's continuing program review process. The CZSC annually reviews the State's Coastal Zone Management Program with respect to the effectiveness of the Coastal Zone Management policies and goals in their respective areas, and makes recommendations for improvement when pertinent.

6. Local Contact: The CZSC provides a local and highly visible contact for all coastal publics interested in participating in or interacting with the management program.

Delaware Estuary Steering Committee

The Delaware Estuary Steering Committee (DESC) covers areas of three counties: Bucks, Philadelphia and Delaware. The committee is staffed with representatives from regional and local agencies conducting activities in the coastal zone. The Delaware Valley Regional Planning Commission, consultant for the Coastal Zone Management Branch, provides technical support to the steering committee. A representative from the Delaware Valley Regional Planning Commission is a member of the committee and represents them on the CZAC in Harrisburg.

The permanent membership of the steering committee is as follows:

Bucks County Planning Commission
Bucks County Municipal Governments (coastal)
Philadelphia City Planning Commission
Delaware County Planning Department
Delaware County Municipal Governments (coastal)

Delaware Valley Regional Planning Commission
Chester City Planning Department

The following agencies and organizations have participated in the Steering Committee during program development. They will be encouraged to continue but the list is expected to change based on participation and interest.

Delaware River Basin Commission
Delaware River Port Authority
Water Resources Association
League of Women Voters
Academy of Natural Sciences
Army Corps of Engineers
Environmental Protection Agency
Pennsylvania Department of Community Affairs
(Philadelphia Office)
Warner Company
Sun Oil Company
Philadelphia Electric Company
Greater Philadelphia Partnership

In addition to the permanent members, a minimum of three members are appointed by the committee each year, from interest groups existing in the region to represent the public in the following areas; recreation, historic preservation, port revitalization, business, and environmental protection. All committee meetings are advertised and open to the public.

It is important to note that the close coordination with the local governments, inherent in the Lake Erie CZSC, is achieved in the Delaware Estuary by Delaware Valley Regional Planning Commission holding two meetings annually in each of the three counties included in the coastal zone. At the first of the two meetings, of which officials from all the coastal municipalities in the county are invited, a status report of the management program's activities is given, and funding levels for the next year are discussed and local government representatives to the CZSC will be selected. These appointments are made to ensure a broad public viewpoint is integrated into the committee actions. At the second annual meeting, the local officials provide their input into the program's continuing review process and present lists of projects and activities for consideration for Coastal Zone Management Program funding and/or sponsorship.

The DESC will perform the following tasks during program implementation:

1. Priority Setting: Utilizing information acquired in annual local officials meetings, the DESC develops and prioritizes a list of requests for Coastal Zone Management funding and/or technical assistance for the area.

2. Coordination: The DESC reviews all proposed State level coastal zone management activities with respect to coordination with local goals and actions.

3. Conflict Resolution: The DESC provides a forum for discussion and a focal point for the collection of information and ideas, should problems or conflicts occur at the local level.

4. Monitoring: The DESC provides a means for local monitoring of coastal uses subject to the management program with respect to compliance with the program's policies.

5. Program Review: Participates in the State's continuing program review process. The DESC annually reviews the State's Coastal Zone Management Program with respect to the effectiveness of achieving the coastal zone management policies and goals in their respective areas, and make recommendations for improvement when pertinent.

6. Local Contact: The DESC provides a local and highly visible contact for all coastal publics interested in participating in or interacting with the management program. This is achieved through the annual meetings with the local officials and the Delaware Valley Regional Planning Commission and the county planning departments (who are represented on the DESC) close day to day contact with the public concerning coastal issues.

PUBLIC INVOLVEMENT

The Coastal Zone Management Program represents significant amounts of citizen energy which was utilized in improving the data base, verifying Coastal Zone Management information, determining program goals and objectives, and incorporating local values and concerns. The public involvement activities that have been undertaken during the Coastal Zone Management Program's planning process are described in the DEIS.

These activities will culminate with the holding of public hearings in both coastal areas to obtain the views of all interested parties on the entire management program. Thirty days notice will be given on these hearings, and they will fulfill the requirements of Section 923.58 of the Federal regulations of the Coastal Zone Management Act. Additionally, transcripts of hearings on joint State/Federal hearings on the Program's Draft Environmental Impact Statement as well as from hearings on bluff setback regulations have been furnished to the Office of Coastal Zone Management.

The Pennsylvania Coastal Zone Management Program will utilize the following means and mechanisms to ensure opportunity for full participation by all interested parties both public and private under program implementation.

1. The Lake Erie CZSC and the DESC as outlined in their respective tasks in the previous section on steering committees.

2. The holding of annual public meetings as part of the continuing program review process.

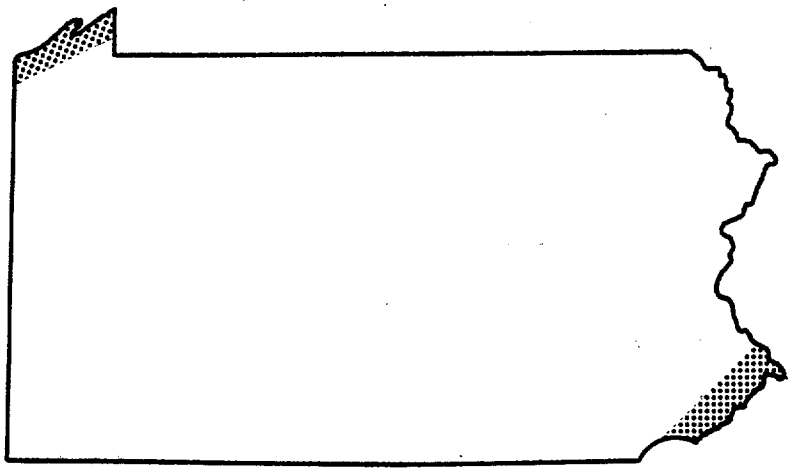
3. Adherence to the Pennsylvania "Sunshine Law' concerning all meetings where formal decisions are to be undertaken.

4. The distribution of a newsletter, "Coastal Tidings", and other informational materials concerning the program and its activities.

5. Utilization of the A-95 review process and the Pennsylvania Bulletin.

6. Other formal and informal means such as news releases, ad hoc meetings, public displays, and speaking engagements will be utilized when pertinent to afford interested parties every opportunity to participate in the management program.

Appendix A



Existing Management Authorities

INTRODUCTION

The Federal Coastal Zone Management Act requires coastal states to identify the means by which the state proposes to manage land and water uses subject to the program, including a listing of relevant constitutional provisions, laws, regulations and judicial decisions. This appendix provides a detailed explanation of those authorities which will be utilized in carrying out the policies of Pennsylvania's Coastal Zone Management Program. The authorities are presented in the following numerical sequence:

1. Pennsylvania Constitutional Provision
2. Bluff Recession and Setback Act
3. Dam Safety Act
4. Soil Conservation Law
5. Floodplain Management Act
6. Clean Streams Law
7. Open Space Lands
8. Pennsylvania Solid Waste Management Act
9. Air Pollution Control Act
10. Radiation Control Act
11. Administrative Code of 1929
12. Gas Operations Well-Drilling Petroleum and Coal Mining Act
13. Pennsylvania Sewage Facilities Act
14. Schuylkill River Pollution/ Siltation Law
15. Fish Laws of 1959
16. Historic Preservation Act
17. Stormwater Management Act
18. Open Meeting Law
19. Executive Order
20. Memoranda of Understanding

EXISTING MANAGEMENT AUTHORITIES

1. Pennsylvania Constitutional Provision

On May 18, 1971, the Pennsylvania Constitution was amended by adding a new section (hereinafter referred to as Article 1 Section 27 or Environmental Rights Amendment):

> Article I Section 27 Natural resources and the public estate
>
> The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and aesthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

The Environmental Rights Amendment was placed in Article I, the portion of the Constitution which guarantees political rights such as due process, freedom of speech, and freedom of religion to Pennsylvania citizens. The first sentence does create important personal "environmental rights" which citizens can assert on their own, if necessary, in the courts. Pennsylvania Gas and Water Co. v. Kassab, et al, 14 Pa. Cmwlth. 564, 322 A2d

775 (1974); Payne v. Kassab, 11 Pa. Cmwlth. 14, 312 A2d 86 (1973), aff'd 468 Pa. 226, 361 A2d 263 (1976). The remaining portion of Article I Section 27 imposes new duties on the Commonwealth to act as a trustee to "conserve and maintain Pennsylvania's public natural resources".

Initially, there was a question as to whether adoption of Article I Section 27 alone created citizen rights and Commonwealth duties. The courts have settled the question by holding that the amendment is "self-executing" Commonwealth v. National Gettysburg Tower, Inc., 8 Pa. Cmwlth. 231, 302 A2d 586 (1973), aff'd 454 Pa. 193, 311 A2d 588 (1973); Accord, Payne, v. Kassab, 11 Cmwlth. 14, 312 A2d 86 (1973) aff'd without a general ruling on self-execution 468 Pa. 226, 361 A2d 263 (1976). This means that although the Legislature may pass legislation further explicating the meaning of the amendment, no such legislation is required before rights and duties created by Article I Section 27 will be enforced by the courts.

The Department of Environmental Resources (hereinafter Department) is a trustee of the Commonwealth's public natural resources by virtue of Article I Section 27. Concerned Citizens for Orderly Progress v. Commonwealth, Department of Environmental Resources, 36 Pa. Cmwlth. 192, 387 A2d 989, 993-94 (1978). It is thus the Department's duty to conserve and maintain these resources for the benefit of the people. This duty attaches in its clearest sense to publicly owned lands such as parks, Payne v. Kassab, 468 Pa. 226, 245, 361 A2d 263, 272 (1976). Where public lands are involved, even a statute might have to give way if it is inconsistent with Article I Section 27, Klink v. Commonwealth, PennDOT 29 Pa. Cmwlth. 106, 370 A2d 389 (1977). In addition to publicly owned land, air and water are included in the public trust. Commonwealth v. Barnes & Tucker Co., 455 Pa. 392, 412, 319 A2d 871, 872 (1974), DER v. Locust Point Quarries, 27 Pa. Cmwlth. 270, 396 A2d 1205, 1209 (1979). Article I Section 27 also protects natural, scenic, aesthetic and historic values. Commonwealth v. National Gettysburg Tower, Inc., 8 Pa. Cmwlth. 231, 302 A2d 586 (1973), aff'd 454 Pa. 193, 311 A2d 558 (1973).

It should be noted that the Environmental Rights Amendment imposes on every administrative agency the responsibility to meet the requirements of the amendment. Bruhin et al. v. Commonwealth et al., 14 Pa. Cmwlth. 300, 306-307, 320 A2d 907, 910-911 (1974). Local governments also must fulfill trusteeship responsbilities imposed by Article I Section 27, particularly with respect to local land use planning. Community College of Delaware County v. Fox, 20 Pa. Cmwlth. 335, 358-359, 342 A2d 468, 482 (1975).

In Payne v. Kassab, 11 Pa. Cmwlth. 14, 29-30, 312 A2d 86, 94 (1973) aff'd 468 Pa. 226, 361 A2d 263 (1976), the Commonwealth Court applied a three-fold test for reviewing agency actions which are challenged as improper under Article I Section 27:

1. Was there compliance with all applicable statutes and regulations relevant to the protection of the Commonwealth's public natural resources?

2. Does the record demonstrate a reasonable effort to reduce the environmental incursion to a minimum?

3. Does the environmental harm which will result from the challenged decision or action so clearly outweigh the benefits to be derived therefrom that to proceed further would be an abuse of discretion?

It should be kept in mind that the Payne test was developed as a standard for courts to use when reviewing agency actions where citizens alleged that the agency failed to meet minimum duties imposed by Article 1 Section 27. Thus, the test identified minimum elements that must be incorporated into agency procedures.

2. Bluff Recession and Setback Act, Act of May 13, 1980

The policy and purpose of this Act is to:

1. Encourage planning and development in bluff areas which are consistent with sound land use practices.

2. Protect people and property in bluff areas from the dangers and damage associated with the inevitable recession of bluffs.

3. Prevent and eliminate urban and rural blight which results from the damages of bluff erosion and recession.

4. Minimize the expenditure of public and private funds for shoreline protection and bluff stabilization structures and activities.

5. Authorize a comprehensive and coordinated program to regulate development activities through the use of setback ordinances in bluff recession hazard areas, designed to preserve and restore the natural ecological systems, and to prevent continuing destruction of private property and structures.

6. Encourage local administration and management of bluffs consistent with the Commonwealth's duty as trustee of natural resources, and the people's constitutional right to the preservation of the natural, scenic, aesthetic and historic values of the environment.

The Act outlines a procedure whereby the Department of Environmental Resources (hereinafter Department) conducts studies to identify municipalities with bluff recession hazard areas. The Department then notifies municipalities identified and submits a report to the Environmental Quality Board(hereinafter EQB). The EQB, following notice and public hearing, may designate municipalities with bluff recession hazard areas. Municipalities so designated must, within six months, adopt bluff setback ordinances requiring permits for all proposed construction, installation or substantial improvement of structures or water, sewage, electric or gas utility services located in designated bluff recession hazard areas. These ordinances are subject to review and approval by the Department, and must meet the minimum standards delineated by the EQB.

Sanctions are imposed for failure to adopt and enforce ordinances by designated municipalities, and for violation of the provisions of the Act, any bluff setback ordinance, or regulation. The sanctions include mandamus actions and withholding funds to municipalities, as well as civil remedies and criminal penalties.

3. Dam Safety Act, Act of November 26, 1978, P.L. 1375, as amended (32 P.S. Sections 693.1 et seq.)

The purpose of this Act is to:

1. Provide for the regulation of dams and reservoirs, water obstructions and encroachments in the Commonwealth, in order to protect the health, safety and welfare of the people and property.

2. Assume proper planning, design, construction, maintenance, monitoring and supervision of dams and reservoirs, including such preventative measures as are necessary to provide an adequate margin of safety.

3. Protect the natural resources, environmental rights and values secured by the Pennsylvania Constitution and conserve the water quality, natural regime and carrying capacity of watercourses.

4. Assume proper planning, design, construction, maintenance and monitoring of water obstructions and encroachments, in order to prevent unreasonable interference with waterflow and to protect navigation.

The Act outlines a permitting procedure, and no person may construct, operate, maintain, modify, enlarge or abandon any dam, water obstruction or encroachment without a permit from the Department of Environmental Resources (hereinafter Department).

The EQB has the power and duty to adopt regulations necessary to carry out the purposes of the Act.

The term encroachment means any structure or activity which in any manner changes, expands or diminishes the course, current or cross section of any water course, floodway, or body of water. A "body of water" is defined as any natural or artificial lake, pond, reservoir, swamp, marsh or wetland.

Thus, the Department has the authority and duty to regulate dredging and filling activities (as encroachments). The Department also has the authority and duty to regulate all dams, water obstructions and encroachments in wetlands (as bodies of water).

Since the Commonwealth holds the beds in trust for the public, the Act also gives the Department the right, subject to approval by the Governor, to grant an easement, right-of-way, license or lease to occupy submerged lands of the Commonwealth in any navigable lake or river or stream declared a public highway or any dam, water obstruction or encroachment which is constructed for the purpose of:

1. Improving navigation or public transportation;

2. Recreation, fishing or other public trust purposes;

3. Protecting public safety or the environment;

4. Providing water supply, energy production or waste treatment;

5. Providing a public utility service by a government agency or subdivision or public utility or electric cooperative; or

6. Other activities which require access to water.

Sanctions imposed for violations of the Act or any regulation promulgated thereunder, include enforcement orders and civil and criminal penalties. The Department may issue enforcement orders for any purpose necessary to aid in the enforcement of the Act.

4. Soil Conservation Law, Act of May 15, 1945, P.L. 547, as amended (3 P.S. Sections 849 et seq.)

The Act declares that it is the policy of the Commonwealth to provide for the conservation of the soil, water and related resources of this Commonwealth, and for the control and prevention of soil erosion, and, thereby, to preserve natural resources; assist in the control of floods; prevent impairment of dams and reservoirs; assist in maintaining the navigability of rivers and harbors; preserve wildlife; preserve the tax base; protect public lands; and protect and promote the health, safety and general welfare of the people of the Commonwealth.

The Act provides for the creation of Conservation Districts managed by a board of district directors. The directors have the power, among other things:

1. To conduct surveys, investigations and research relating to the character of soil erosion and the preventive control measures needed.

2. To carry out preventive and control measures within the district.

3. To cooperate or enter into agreements with, and to furnish financial or other aid to, any agency, governmental or otherwise, or any occupier of lands within the district in carrying on erosion control and prevention operations.

4. To obtain options upon, and to acquire by purchase, exchange, lease, gift, grant, bequest, devise or otherwise, any property real or personal or right or interests therein; to maintain, administer and improve any properties acquired; to receive income from such properties and to expend such income in carrying out the purposes and provisions of this Act; and to sell, lease or otherwise dispose of any of its property or interests therein in furthernace of the purposes and the provisions of this Act.

5. To construct, improve and maintain such structures as may be necessary or convenient for the performance of any of the operations authorized in this Act.

6. To develop comprehensive plans for the conservation of soil resources and for the control and prevention of soil erosion within the district.

7. To accept contributions of any character from any source whatsoever, but only with the consent and approval of the State Soil and Water Conservation Commission, unless specifically authorized so to do by this Act.

8. To sponsor projects under the Watershed Protection and Flood Prevention Act, U.S. Public Law 566, of 1954, as amended, and the Resource and Conservation and Development Program authorized by Public Law 87-703, and the Food and Agriculture Act of 1962, as amended.

5. Floodplain Management Act, Act of October 4, 1978, P.L. 851 (32 P.S. Sections 679.101 et seq.)

The policy and purpose of this Act is to:

1. Encourage planning and development in floodplains which are consistent with sound land use practices.

2. Protect people and property in floodplains from the dangers and damage of floodwaters and from materials carried by such floodwaters.

3. Prevent and eliminate urban and rural blight which results from the damages of flooding.

4. Authorize a comprehensive and coordinated program of floodplain management, based upon the National Flood Insurance Program, designed to preserve and restore the efficiency and carrying capacity of the streams and floodplains of the Commonwealth.

5. Assist municipalities in qualifying for the National Flood Insurance Program.

5. Provide for and encourage local administration and management of floodplains.

7. Minimize the expenditure of public and private funds for flood control projects and for relief, rescue and recovery efforts.

The Act requires that each municipality, which has been identified by the United States Department of Housing and Urban Development as having an area or areas subject to flooding, shall adopt such floodplain management regulations, and amendments thereto, as are necessary to comply with the requirements of the National Flood Insurance Program. The identified municipality has six months after a floodplain map is approved or promulgated for the municipality by the United States Department of Housing and Urban Development to adopt the required ordinance.

The Department of Community Affairs, in consultation with the Department of Environmental Resources must review and approve all municipal floodplain management regulations for assuring compliance with the National Flood Insurance Program. The Department of Community Affairs is authorized to administer grants to municipalities and counties to assist or reimburse them for costs in preparing official plans and actual administrative enforcement and implementation costs and revisions to official plans for floodplain management required by this Act, and for carrying out related studies, surveys, investigations, research and analyses.

Sanctions for violating the requirements of the Act include withholding funds and civil penalties. If after 180 days notice of violation of the Act a municipality has failed to comply, the Secretary of Community Affairs shall notify the State Treasurer

to withhold payment of all funds payable to the municipality from the General Fund or any other fund. The State Treasurer is to hold funds in escrow until the municipality complies.

The Floodplain Management Act also confers powers on municipalities administering floodplain management regulations to require special regulation of hospitals, nursing homes, jails, new mobile home parks, subdivision or substantial additions to mobile home parks or subdivisions. The municipality is responsible for administering this provision with oversight by the Department of Community Affairs. The Department of Environmental Resources is responsible for administering Section 302 of the Act, which gives the Department exclusive jurisdiction to regulate the rough permit:

1. Any obstruction otherwise regulated under the Water Obstructions Act;

2. Any flood control project constructed, owned, or maintained by a governmental unit;

3. Any highway or other obstruction constructed, owned or maintained by the Commonwealth or a political subdivision thereof; and

4. Any obstruction owned or maintained by a person engaged in the rendering of a public utility service.

6. Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended (35 P.S. Sections 691.1 et seq.)

It is the policy of the Act that:

1. Clean, unpolluted streams are absolutely essential if Pennsylvania is to attract new manufacturing industries and to develop Pennsylvania's full share of the tourist industry;

2. Clean, unpolluted water is absolutely essential if Pennsylvanians are to have adequate out of door recreational facilities in the decades ahead;

3. It is the objective of the Clean Streams Law not only to prevent further pollution of the waters of the Commonwealth, but also to reclaim and restore to a clean unpolluted condition every stream in Pennsylvania that is presently polluted;

4. The prevention and elimination of water pollution is recognized as being directly related to the economic future of the Commonwealth; and

5. The achievement of the objective herein set forth requires a comprehensive program of watershed management and control.

The Department of Environmental Resources (hereinafter Department) has the power and duty to (among other things) review plans, issue permits, modify, suspend or revoke permits, and issue correction and cease operation orders.

Powers under this Act are broad due to the definition of "pollution" and "waters of the Commonwealth". Pollution means contamination of any waters of the Commonwealth such as will create or is likely to create a nuisance or to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, municipal, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life, including but not limited to such contamination by alteration of the physical, chemical, or biological properties of such waters, or change in temperature, taste, color or odor thereof, or the discharge of any liquid, gaseous, radioactive, solid or other substances into such waters. The Department shall determine when a discharge constitutes pollution, as herein defined, and shall establish standards whereby and wherefrom it can be ascertained and determined whether any such discharge does or does not constitute pollution as herein defined.

"Waters of the Commonwealth" shall be construed to include any and all rivers, streams, creeks, rivulets, impoundments, ditches, water courses, storm sewers, lakes, dammed water, ponds, springs and all other bodies or channels or conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

In addition, the Department is approved to operate NPDES permit system under the Federal Clean Water Act (25 Pa. Code Chapter 92).

Sanctions for violation of this Act include criminal and civil penalties as well as equity actions restraining violations of the Act, and enforcement orders to ensure municipal compliance.

7. Open Space Lands, Act of January 19, 1968, P.L. (1967) 992 (32 P.S. Sections 5001 et seq.)

It is the purpose of this Act to clarify and broaden the existing methods by which the Commonwealth may preserve land in or acquire land for open space in and near urban areas to meet needs for recreation, amenity, and conservation of natural resources, including farm land, forests, and a pure and adequate water supply. The acquisition and resale of property interests authorized by this Act are hereby declared to be for the public benefit, for the advancement of the public health, safety, morale

and general welfare of the citizens of the Commonwealth, and for the promotion of sound land development by preserving suitable open space and concentrating more dense development in nearby areas.

The Act provides that the Commonwealth through the Department of Environmental Resources may acquire any interest in real property by purchase, contract, condemnation, gift, devise or otherwise, for any of the following purposes:

1. To protect and conserve water resources and watersheds;

2. To protect and conserve forests and land being used to produce timber crops;

3. To protect an existing or planned park, forest, wildlife preserve, nature reserve, or other recreation or conservation site by controlling the use of contiguous or nearby lands in order to protect the scenic, aesthetic or watershed values of the site;

4. To protect and conserve natural or scenic resources, including but not limited to soils, beaches, streams, floodplains or marshes;

5. To protect scenic areas for public visual enjoyment from public rights of way;

6. To preserve sites of historic, geologic or botanic interest;

7. To promote sound, cohesive, and efficient land development by preserving open spaces between communities; and

8. To limit the use of the real property so as to achieve open space benefits by reselling real property acquired in fee simple, subject to restrictive covenants or easements limiting the use thereof for the purposes specified in clauses (1) through (7) hereof.

8. Pennsylvania Solid Waste Management Act, Act of July 31, 1968, P.L. 788, as amended (35 P.S. Sections 6001 et seq.)

Since improper and inadequate solid waste practices create public health hazards, environmental pollution and economic loss, it is the purpose of the Act to:

1. Establish and maintain a cooperative State and local program of planning and technical and financial assistance for comprehensive solid waste management;

2. Utilize, wherever feasible and desirable, the capabilities of private enterprise in accomplishing the desired objectives of an effective solid waste management program; and

3. Require permits for the operation of processing and disposal systems.

The Act requires municipalities with specified population densities to submit for Department of Environmental Resources (hereinafter Department) approval a plan for a solid waste management system within the municipality's jurisdiction. Each plan is to consider all aspects of planning, zoning, population estimates, economics, etc., so as to project the municipality's solid waste needs for ten years. The Department may bring actions in mandamus against municipalities which fail to submit adequate plans.

The Act also provides for a permit procedure administered by the Department. It is unlawful for any person, municipality, county or authority to use or continue to use their land (and/or the land of any other person, municipality, county or authority) as a solid waste processing or disposal area without obtaining a permit from the Department.

"Solid waste" means garbage, refuse and other discarded materials including, but not limited to, solid and liquid waste materials resulting from industrial, commercial, agricultural and residential activities. "Solid waste management system" means the entire process of storage, collection, transportation, processing and disposal of solid wastes by any person engaging in such process as a business or any municipality, authority, county or any combination thereof.

Sanctions for violation of this Act include criminal and civil remedies as well as suits in equity restraining violations of the Act and compliance orders to municipalities to comply with the Act.

9. Air Pollution Control Act, Act of January 8, 1960, P.L. (1959) 2119, as amended (35 P.S. Sections 4001 et seq.)

The Act declares that it is the policy of the Commonwealth to protect the air resources of the Commonwealth to the degree necessary for the (i) protection of public health, safety and well-being of its citizens; (ii) prevention of injury to plant and animal life and to property; (iii) protection of the comfort and convenience of the public and the protection of the recreational resources of the Commonwealth; and (iv) development, attraction and expansion of industry, commerce and agriculture.

The Department of Environmental Resources (hereinafter Department) has, among other powers, the power to develop a plan

for abatement, control and prevention of air pollution, to regulate the amount of air pollution allowed, to issue orders for compliance with Departmental regulations, and to institute proceedings in court to compel compliance with any Departmental orders. Such orders may be for cessation of operation, reduction of emissions, modification or repair or maintenance of pollution control devices, installation of pollution control devices or institution of process changes.

The Act also provides for a permit procedure administered by the Department. No person shall construct, assemble, install or modify any stationary air contamination source, or install thereon any air pollution control equipment or device or reactivate any air contamination source after said source has been out of operation or production for a period of one year or more unless such person has applied to and received from the Department written approval to do so. No person shall operate any stationary air contamination source which is subject to the provisions of subsection (a) of this section unless the Department shall have issued to such person a permit to operate such source in response to a written application for a permit.

"Air pollution" is defined as the presence in the outdoor atmosphere of any form of contaminant including but not limited to the discharging from stacks, chimneys, openings, buildings, structures, open fires, vehicles, processes, or any other source of any smoke, soot, fly ash, dust, cinders, dirt, noxious or obnoxious acids, fumes, oxides, gases, vapors, odors, toxic or radioactive substances, waste, or any other matter in such place, manner, or concentration inimical or which may be inimical to the public health, safety, or welfare or which is, or may be injurious to human, plant or animal life, or to property, or which unreasonably interferes with the comfortable enjoyment of life or property. "Stationary air contamination source" is any place, facility or equipment stationary or mobile, at, from or by reason of which there is emitted into the outdoor atmosphere any contaminant other than any place facility or equipment which, when operated, moves in a given direction under its own power.

Sanctions for violation of this Act include criminal and civil remedies, as well as enforcement orders, injunctions and petitions to enforce.

10. Radiation Control Act, Act of January 28, 1966, P.L. (1965) 1625 (73 P.S. Sections 1301 et seq.)

This Act designates the Department of Environmental Resources (hereinafter Department) as the agency of the Commonwealth which shall be responsible for the control and regulation of radiation sources, but the Department shall not have the power to regulate, license, or control nuclear reactors or facilities or operations incident thereto in duplication of any activity of the Federal government without the consent of the Federal government.

The Act makes it unlawful for any person to use, manufacture, produce, transport, transfer, receive, acquire, own, possess, or dispose of any radiation source contrary to the provisions of the Act or any rules or regulations issued thereunder.

Sanctions for violation of this Act include criminal penalties as well as equitable actions including injunctions.

11. Administrative Code of 1929, Act of April 9, 1929, P.L. 177, as amended (71 P.S. Sections 510-1 et seq.)

Section 510-1 provides for the transfer of powers and duties from numerous Departments to the Department of Environmental Resources.

Section 510-2(13) provides that the Department of Environmental Resources (hereinafter Department) shall, with the approval of the Governor, have the authority to enter into agreements with owners or lessees of property or property rights located in the same area as lands owned or leased by the Commonwealth, for the protection, preservation or recovery of metalic or nonmetalic ore, fuel, oil, natural gas, or any other mineral deposits underlying said lands, provided the said deposits are owned by the Commonwealth.

Section 510-8(d) transfers to the Department the powers and duties exercised by the Water and Power Resources Board with regard to permits for the construction of dams, and other water obstructions, or of any change therein or addition thereto, and consents or permits for changing or diminishing the course, current, or cross section, of any stream or body of water.

Section 510-17 gives the Department the power and duty to order nuisances to be abated or removed. This includes any condition which is declared to be a nuisance by any law administered by the Department, or any activities which exposes the people of the Commonwealth to unsanitary conditions.

12. Gas Operations Well-Drilling Petroleum and Coal Mining Act, Act of November 30, 1955, P.L. 756, as amended (52 P.S. Sections 2101 et seq.)

This is an Act relating to coal mining, well operations, and the underground storage of gas. The Act further describes procedures for the safety or personnel and facilities engaged in the activities mentioned above, and prescribes the rights and duties of well operators and coal mine operators.

The Act provides for a permit procedure for drilling any type of oil and gas wells.

Sanctions for violation of this Act include criminal penalties as well as equitable actions including injunctions.

13. Pennsylvania Sewage Facilities Act, Act of January 24, 1966, P.L. (1965) 1531, as amended (35 P.S. Sections 750.1 et seq.)

It is the policy of the Commonwealth of Pennsylvania through this Act:

1. To protect the public health, safety and welfare of its citizens through the development and implementation of plans for the sanitary disposal of sewage waste.

2. To promote intermunicipal cooperation in the implementation and administration of such plans by local government.

3. To prevent and eliminate pollution of waters of the Commonwealth by coordinating planning for the sanitary disposal of sewage wastes with a comprehensive program of water quality management.

4. To provide for the issuance of permits for on-lot sewage disposal systems by local government in accordance with uniform standards and to encourage intermunicipal cooperation to this end.

5. To provide for and ensure a high degree of technical competency within local government in the administration of this Act.

6. To encourage the use of the best available technology for on-site sewage disposal systems.

7. To ensure the rights of citizens on matters of sewage disposal as they may relate to this Act and the Constitution of this Commonwealth.

The Act outlines a procedure whereby each municipality shall submit to the Department of Environmental Resources (hereinafter Department) an officially adopted plan for sewage services for areas within its jurisdiction, and submit revisions to that plan from time to time as required by the Department. The Department is authorized to approve or disapprove all municipal plans.

The Act also provides for a permitting procedure administered by the local agencies with Department overview. The Act declares:

> No person shall install, construct, or request bid proposals for construction, or alter an individual sewage system or community sewage system or construct, or request bid

proposals for construction, or install or occupy any building or structure for which an individual sewage system or community sewage system is to be installed without first obtaining a permit indicating that the site and the plans and specifications of such a system are in compliance with the provisions of this Act and the standards adopted pursuant to this Act. No permit may be issued by the local agency in those cases where a permit from the Department is required pursuant to the Act of June 22, 1937 (P.L. 1987, No. 394), known as the "The Clean Streams Law", as amended, or where the Department pursuant to its rules and regulations, determines that such permit is not necessary either for a rural residence or for the protection of the public health.

"Sewage" means any substance that contains any of the waste products or excrement or other discharge from the bodies of human beings or animals and any noxious or deleterious substances being harmful or inimical to the public health, or to animal or aquatic life, or to the use of water for domestic water supply or for recreation, or which constitutes pollution under the Act of Jun 22, 1937 (P.L. 1987, No. 394), known as "The Clean Streams Law, as amended.

"Individual sewage system" means a system of piping, tanks, or other facilities serving a single lot and collecting and disposing of sewage in whole or in part into the soil or into any waters of this Commonwealth or by means of conveyance to another site for final disposal; an alternate individual sewage system shall mean an individual sewage system not heretofore recognized by rules, regulations and standards of the Department.

"Community sewage system" means any system, whether publicly or privately owned, for the collection of sewage or industrial wastes of a liquid nature from two or more lots, and the treatment and/or disposal of the sewage or industrial waste on one or more of the lots or at any other site.

Sanctions for violations of this Act include criminal and civil remedies as well as suits in equity to enjoin violation of the Act and enforcement orders to municipalities to ensure their compliance with the Act.

14. Schuylkill River Pollution/Siltation Law, Act of June 4, 1945, P.L. 1383, as amended, (32 P.S. Sections 751.1 et seq.)

It is the intent and purpose of this Act to carry into effect a project to prevent the future accumulation of wastes including coal, silt, industrial processes and municipal sanitation, and the prevention of pollution in the Schuylkill River and its tributaries, and to dredge and dispose of the existing accumulations in the Schuylkill River above the Norristown dam at

Norristown, Pennsylvania. Such project, among other things, will involve the acquisition of dams, canals, lands, easements, right-of-ways and other rights, and of properties for the disposal of material dredged from the Schuylkill River and its tributaries; the construction, repair and maintenance of dams required to carry on dredging operations; the construction of dikes and other protective works at disposal areas and physical dredging operations.

The Department of Environmental Resources is authorized to clean out, widen, alter, dredge, deepen or change the course, current or channel of the Schuylkill River, or any of the tributaries; to fill up any abandoned canal or water course; to construct and maintain levees, dikes, walls, revetments, dams, reservoirs, and other works and improvements deemed necessary to carry out the purpose of this Act and to prohibit any dredging operation deemed inimical thereto. It also has the power to control and regulate the flow of the Schuylkill River and its tributaries during the period of the execution of the project; to construct or enlarge bridges and culverts; to construct and relocate public highways; to construct any of said works and improvements across or through any public highway, canal, railroad right-of-way or tracks; to remove, change the location of, or construct any of the above mentioned strucutres and facilities, or such other structures or facilities as are necessary to carry out the intent of the Act.

15. Fish Laws of 1959, Act of December 15, 1959, P.L. 1779, as amended, (30 P.S. Sections 1 et seq.)

This Act is a comprehensive statute relating to fish and fishing in the Commonwealth. It covers the following general subject areas:

1 Fishing Regulations applying to inland waters.

2. Fishing Regulations applying to boundary lakes

3. Fishing Regulations applying to boundary rivers

4. Seine Licenses

5. Artificial Propagation Licenses

6. Dams, fishways, barbacks, obstructions, etc.

7. Pollution, trespass on State hatcheries

8. Sale of fish

9. Fishing Licenses

10. Complimentary Licenses

11. General powers of the Fish Commission

12. Sunday fishing

13. Enforcement of the Act

14. The Fish Fund

15. Frogs, tadpoles and turtles

16. Historic Preservation Act, Act of November 22, 1978, P.L. 1160 (71 P.S. Sections 1047(o) et seq.)

It is the policy of this Act that:

1. Section 27 of Article I of the Constitution of Pennsylvania makes the Commonwealth trustee for the preservation of the historic values of the environment.

2. The conservation of Pennsylvania's historic heritage and the preservation of public records, historic documents and objectives of historic interest, and the identification, restoration and preservation of architecturally and historically significant sites and structures are duties vested primarily in the Pennsylvania Historical and Museum Commission.

3. The irreplaceable historical, architectural, archeological and cultural heritage of the Commonwealth should be preserved and protected for the benefit of all of the people, including future generations.

4. The preservation and protection of historic resources within the Commonwealth promotes the public health, prosperity and general welfare.

5. The rapid social and economic development of our contemporary society threatens to destroy the remaining vestiges of our historic heritage.

6. It is in the public interest for the Commonwealth, its citizens and its political subdivisions to engage in comprehensive programs of historic preservations for the enjoyment, education and inspiration of all the people, including future generations.

The Act further provides that all public officials shall cooperate fully with the commission in the preservation, protection and investigation of archeological sites.

17. Stormwater Management Act, Act of October 4, 1979, P.L. 864 (32 P.S. Section 680.1 et seq.)

The policy and purpose of this Act is to:

1. Encourage planning and management of stormwater runoff in each watershed which is consistent with sound water and land use practices.

2. Authorize a comprehensive program of stormwater management designed to preserve and restore the flood carrying capacity of Commonwealth streams; to preserve to the maximum extent practicable natural stormwater runoff regimes and natural course, current and cross-section of water of the Commonwealth; and to protect and conserve groundwaters and groundwater recharge areas.

3. Encourage local administration and management of stormwater consistent with the Commonwealth's duty as trustee of natural resources and the people's constitutional right to the preservation of natural, economic, scenic, aesthetic, recreational and historic values of the environment.

The Act requires that each county prepare and adopt a watershed stormwater management plan for each watershed located in the county as designated by the Department of Environmental Resources. Guidelines published by the Department will provide useful information to the counties in preparing watershed plans. The stormwater management plans will be prepared with the assistance of watershed advisory committees composed of representatives of municipalities and others, and will include criteria and standards for the control of stormwater runoff. Stormwater plans are to be implemented by municipalities in the adoption of ordinances to regulate development to control stormwater runoff.

18. Open Meeting Law, Act of July 19, 1974, P.L. 486 (65 P.S. Sections 261 et seq.)

This Act requires that the meetings or hearings of every agency at which formal action is scheduled or taken are public meetings and shall be open to the public at all times. No formal action shall be valid unless such formal action is taken during a public meeting.

"Formal action" means the taking of any vote on any resolution, rule, order, motion, regulation or ordinance or the setting of any official policy.

The Act requires public notice of all public meetings in a newspaper of general circulation and posting of notice in the principal office of the agency holding the meeting.

Intentional violation of this Act is a summary offense and carries up to a $100 fine.

19. Executive Order

The Governor of the Commonwealth of Pennsylvania has the power and it is his duty to take care that the laws of the Commonwealth are faithfully executed, Pa. Constitution of 1960, Article IV, Section 2; 71 P.S. Section 241 (1929).

In carrying out this power, the Governor may issue executive orders. There are three types of executive orders. The first type includes formal, ceremonial and political orders which are often issued as proclamations. The usual purpose of a proclamation is to declare some special day or week in honor of or in commemoration of some special thing or event. It is issued to make the public aware of the commemoration and usually has no legal effect. Shapp v. Butera, 22 Pa. Cmwlth. 229, 348 A2d 910, 913 (1975). The second type of executive order is intended for communication with subordinate officials in the nature of requests or suggested directions for the execution of the duties of the executive branch of the government. Like the first classification, this class is not legally enforceable. Shapp, supra, 348 A2d at 913. The third type includes those executive orders which serve to implement or supplement the Constitution or statutes. These executive orders have the force of law. Shapp, supra, 348 A2d at 913; U.S. v. Messer Oil Corp., 391 F. Supp 577 (D C Pa. 1975); Farmer v. Philadelphia Elec. Co. 329 F2d 3 (CA Pa. 1964).

Executive Order is the second type of order identified above. See Section 1 of this Appendix for the text of the Executive Order. Where this Executive Order suggests directions for the execution of duties, it is administratively enforceable. However, for purposes of Program approval the Executive Order is not required since all enforceable policies are implemented by the Department of Environmental Resources.

20. Memoranda of Understanding

The statutory basis for agreements between agencies is the Administrative Code of 1929, Act of April 9, 1929, P.L. 177, as amended (71 P.S. Section 181) which provides:

> Coordination of Work: The several administrative departments, and the several independent administrative and departmental administrative boards and commissions, shall devise a practical and working basis for cooperation and coordination of work, thereby eliminating duplication and overlap of functions, and shall, so far as practical,

cooperate with each other in the use of employees, land, buildings, quarters, facilities, and equipment. The head of any administrative department, or any independent administrative or departmental administrative board or commission, may empower or require an employee of another such department, board, or commission, subject to the consent of the head of such department or of such board or commission, to perform any duty which he or it might require of the employees of his or its own department, board, or commission; provided, however, that employees shall not be assigned to another department, board or commission in order to circumvent appropriation limits. See Section 2 of this Appendix for the text of the Memoranda of Understanding and Section 2-A which includes the appendix to the Memorandum of Understanding. This appendix details how the various State agencies will participate in the implementation of the management program. Agencies participating in the Memorandum of Understanding with the Department of Environmental Resources are the Pennsylvania Fish Commission (2-A.1) and the Historical and Museum Commission (2-A.2). The Public Utility Commission will also participate in a Memorandum of Understanding with the Department. Their Memorandum of Understanding is presented in Section 2-B. However, for purposes of Program approval the Memorandum of Understanding are not required since all enforceable policies are implemented by the Department of Environmental Resources.

SECTION 1

EXECUTIVE ORDER

PENNSYLVANIA COASTAL ZONE MANAGEMENT PROGRAM

WHEREAS, the Commonwealth of Pennsylvania is one of the foremost states in the nation in leading the battle to improve the quality of our environment; and

WHEREAS, there is a need to ensure the wise utilization of the valuable and unique natural resources of the Commonwealth of Pennsylvania's coastal areas which are currently being threatened by competing development interests; and

WHEREAS, there is a need to ensure that the inherent economic and social potential of the Commonwealth of Pennsylvania's coastal areas be wisely utilized; and

WHEREAS, the Department of Environmental Resources, with the advice of local governments, the general public, industry groups, other branches of State government and appropriate Federal agencies, has been developing the Pennsylvania Coastal Zone Management Program; and

WHEREAS, the Federal Coastal Zone Management Act of 1972 provides funds to states who voluntarily implement a Federally approved Coastal Zone Management Program; and

WHEREAS, pursuant to Federal regulations, one condition of Coastal Zone Management Program approval is demonstration that the program, as approved, is enforceable; and

WHEREAS, several State departments and agencies have authority for enforcing the Commonwealth of Pennsylvania's Coastal Zone Management Program and for making rules affecting the program's enforcement.

THEREFORE, by virtue of the authority vested in me as Governor of the Commonwealth and in furtherance of the purposes and policies of Pennsylvania Constitution, Article I, Section 27; Bluff Recession and Setback Act, Act of May 13, 1980; The Dam Safety Act, Act of November 26, 1978, P.L. 1375, as amended, (32 P.S. Sections 693.1 et seq.); Stormwater Management Act, Act of October 4, 1978, P.L. 864 (32 P.S. Sections 680.1 et seq.); Soil Conservation Law, Act of May 15, 1945, P.L. 547, as amended (3 P.S. Sections 849 et seq.); The Floodplain Management Act, Act of October 4, 1978, P.L. 851 (32 P.S. Sections 679.101 et seq.); Schuylkill River Pollution/Siltation Law, Act of June 4, 1945, P.L. 383, as amended (32 P.S. Sections 751.1 et seq.); Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended (35 P.S. Sections 691.1 et seq.); The Fish Law of 1959, Act of December 15, 1959,

P.L. 1779, as amended (30 P.S. Sections 200 et seq.); Open Space Lands, Act of January 19, 1968, P.L. (1967) 992 (32 P.S. Sections 5001 et seq.); Historic Preservation Act, Act of November 22, 1978, P.L. 1160 (71 P.S. Sections 1047.1 et seq.); The Solid Waste Management Act, Act of July 31, 1968, P.L. 788, as amended (35 P.S. Sections 6001 et seq.); The Air Pollution Control Act, Act of January 8, 1960, P.L. (1959) 2119, as amended (35 P.S. Sections 4001 et seq.); Radiation Control Act, Act of January 28, 1966, P.L. (1965) 1625, (73 P.S. Sections 1301 et seq.); Gas Operations, Well Drilling, Petroleum and Coal Mining Act, Act of November 30, 1955, P.L. 756, as amended (52 P.S. Sections 2101 et seq.); Act of July 1, 1978, Public Utility Code, No. 1978-116, as amended; The Sewage Facilities Act, Act of January 24, 1966, P.L. (1965) 1535, as amended (35 P.S. Sections 750.1 et seq.); Open Meeting Law, Act of July 19, 1974, P.L. 486 (65 P.S. Sections 261 et seq.); The Administrative Code of 1929, Act of April 9, 1929, P.L. 177, as amended (71 P.S. Sections 181, 194, 241, 510-1, 510-2, 510-4, 510-5, 510-6, 519-8, 510-17, 510-20.

I hereby endorse the policies of the Pennsylvania Coastal Zone Management Program and direct the following steps be taken:

1. The Department of Environmental Resources, Coastal Zone Management Branch, is designated as the lead agency for implementing and administering the Federal Coastal Zone Management Program for the Commonwealth of Pennsylvania; and

2. To the maximum extent permitted by law, all administrative departments, independent administrative boards and commissions, and other State agencies shall, upon Federal approval of the Pennsylvania Coastal Zone Management Program, enforce and act consistently with the goals, policies and objectives of that Coastal Zone Management Program; and

3. To the maximum extent permitted by law, all administrative departments, independent administrative boards and commissions, and other State agencies shall, upon Federal approval of the Pennsylvania Coastal Zone Management Program, provide for adequate consideration of the national interest involved in planning for and siting of facilities, and the use of resources in the coastal zones when such planning, siting, and uses are of more than local interest.

4. Each administrative department, independent administrative boards and commissions, and other State agencies shall, upon Federal approval of the Pennsylvania Coastal Zone Management Program and thereafter, notify the Department of Environmental Resources, Coastal Zone Management Branch, pursuant to the policies distributed to members of the Coastal

Zone Advisory Committee of any and all proposed activities having an effect on the coastal resources; and

5. The Department of Environmental Resources, Coastal Zone Management Branch, shall provide technical advice, assistance, and coordination to other agencies and act as a forum for conflict resolution between agencies in connection with their duties and responsibilities under this order; and

6. The Department of Environmental Resources shall be the single State agency to receive and administer the Federal Coastal Zone Management grants for implementing the management program.

7. Conflicts between the fiscal, developmental, service, or regulatory activities of State agencies which have a direct and significant impact on the coastal zone, that cannot be resolved through available administrative resolution mechanisms, shall be resolved by the Governor.

Section 2

INTERAGENCY
MEMORANDUM OF UNDERSTANDING
CONCERNING COASTAL ZONE MANAGEMENT

THIS AGREEMENT, entered into this _____ day of _____, 1980, between the Pennsylvania Department of Environmental Resources, hereinafter called "DEPARTMENT", and the

W I T N E S S E T H:

WHEREAS, the parties recognize and acknowledge the need to preserve, protect, develop, and where possible, restore or enhance the resources of the Pennsylvania's coastal areas for this and succeeding generations; and

WHEREAS, the parties further recognize the need for full governmental coordination and public involvement in the Commonwealth's Coastal Zone Management Program, and the need to give due consideration to the significance of coastal resources to Pennsylvania; and

WHEREAS, the DEPARTMENT has been designated by the Governor as the lead agency for implementation of the State Coastal Zone Management Program.

WHEREAS, the AGENCY recognizes that its programs and activities within Pennsylvania's coastal zones may have a direct and significant impact on the Commonwealth's coastal environment; and

WHEREAS, the Federal Coastal Zone Management Act of 1972 (P. L. 92-583, as amended) provides funds to states to implement Federally approved state coastal zone management programs; and

WHEREAS, pursuant to Federal regulations, one condition of coastal zone management program approval is demonstration that the program, as approved, will be implemented; and

WHEREAS, several State departments and agencies have authority for implementing the Commonwealth of Pennsylvania's Coastal Zone Management Program and for making rules affecting the Program's enforcement; and

WHEREAS, the parties contemplate the issuance of an Executive Order by the Governor requiring interagency cooperation in implementing the Pennsylvania Coastal Zone Management Program and the parties intend this AGREEMENT to express their respective duties and responsibilities in carrying out the purposes of that Executive Order.

WHEREAS, adoption and implementation of the Coastal Zone Management Program by the various agencies of the Commonwealth is authorized by the Pennsylvania Constitution, Article I, Section 27; Bluff Recession and Setback Act, Act of May 13, 1980, P.L. ___ (___ P.S. Sections ___ et seq.); The Dam Safety Act, Act of November 26, 1978, P.L. 1375, as amended, (32 P.S. Sections 693.1 et seq.); Stormwater Management Act, Act of October 4, 1978, P.L. 864 (32 P.S. Sections 680.1 et seq.); Soil Conservation Law, Act of May 15, 1945, P.L. 547, as amended, (3 P.S. Sections 849 et seq.); The Floodplain Management Act, Act of October 4, 1978, P.L. 851 (32 P.S. Sections 679.101 et seq.); Schuylkill River Pollution/Siltation Law, Act of June 4, 1945, P.L. 383, as amended, (32 P.S. Sections 751.1 et seq.); Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended, (35 P.S. Sections 691.1 et seq.); The Fish Law of 1959, Act of December 15, 1959, P.L. 1779, as amended, (30 P.S. Sections 200 et seq.); Open Space Lands, Act of January 19, 1968, P.L. (1967) 992 (32 P.S. Sections 5001 et seq.); Historic Preservation Act, Act of November 22, 1978, P.L. 1160 (71 P.S. Sections 1047.1 et seq.); The Solid Waste Management Act, Act of July 31, 1968, P.L. 788, as amended, (35 P.S. Sections 6001 et seq.); The Air Pollution Control Act, Act of January 8, 1960, P.L. (1959) 2119, as amended, (35 P.S. Sections 4001 et seq.); Radiation Control Act, Act of January 28, 1966, P.L. (1965) 1625 (73 P.S. Sections 1301 et seq.); Gas Operations, Well Drilling, Petroleum and Coal Mining Act, Act of November 30, 1955, P.L. 756, as amended, (52 P.S. Sections 2101 et seq.); Act of July 1, 1978, Public Utility Code, No. 1978-116, as amended; The Sewage Facilities Act, Act of January 24, 1966, P.L. (1965) 1535, as amended, (35 P.S. Sections 750.1 et seq.); Open Meeting Law, Act of July 19, 1974, P.L. 486 (65 P.S. Sections 261 et seq.); The Administrative Code of 1929, Act of April 9, 1929, P.L. 177, as amended, (71 P.S. Sections 181, 194, 241, 510-1, 510-2, 510-4, 510-5, 510-6, 519-8, 510-17, 510-20).

NOW, THEREFORE, the DEPARTMENT and the AGENCY in accordance with these considerations, pursuant to Section 501 of the Administrative Code (71 P.S. Section 181), and in furtherance of the purposes and policies of Pennsylvania Constitution, Article I, Section 27 and the statutes cited above, as applicable, do hereby agree as follows:

A. To the maximum extent permitted by law, the AGENCY agrees to

1. Act consistently with the Commonwealth's Coastal Zone Policies set forth in the Commonwealth of Pennsylvania Coastal Zone Management Program.

2. In managing its programs having an affect on the coastal areas; (a) fully consider the DEPARTMENT'S adopted positions and coastal policies; (b) fully consider the national interest in the siting of facilities that are other than local in nature, through intergovernmental coordination; and (c) act appropriately upon these considerations.
3. Fully consider the compatibility of its plans and programs with the policies of the DEPARTMENT'S Coastal Zone Management Program and notify the DEPARTMENT of any incompatibility.
4. Provide an agency staff representative to serve on the Coastal Zone Advisory Committee of the DEPARTMENT'S Coastal Zone Management Program.
5. Advise the DEPARTMENT'S Coastal Zone Management Program of the initiation and status of projects or programs likely to have a direct and significant impact on the coastal environment.
6. Give due consideration to comments and/or recommendations of the DEPARTMENT as they relate to AGENCY actions affecting the Coastal Zone Management Program.
7. Provide access, through the Coastal Zone Advisory Committee representative, to AGENCY staff and information gathered by the AGENCY in order to allow the DEPARTMENT to obtain the best information available for its decision-making process.
8. Review and comment on all policies, plans and other actions of the DEPARTMENT'S Coastal Zone Management Program that apply to the AGENCY.

B. The DEPARTMENT shall:

1. Solicit comments from the AGENCY for due consideration concerning the implementation of coastal zone policies and programs that relate or could relate to the policies, programs, and statutory responsibilities of the AGENCY.
2. As it deems appropriate or when so requested by the AGENCY, comment in a timely manner on proposed projects and programs likely to have an impact on the coastal environment, including proposed facilities and resources in which there may be a national interest.
3. Encourage and facilitate coordinated activities by Federal, State, and local agencies whose activities affect the coastal environment.
4. Provide a forum, when appropriate, for the resolution of conflicts between the AGENCY and Federal, State, or local agencies whose activities affect the coastal environment, when no such forum exists by law.

C. The DEPARTMENT and the AGENCY may, by mutual agreement, supplement this AGREEMENT to provide for particular activities, programs, or projects necessary to assist in implementing one or more of the Coastal Zone Management Program policies.

D. This AGREEMENT shall become effective on Federal approval of the Commonwealth of Pennsylvania's Coastal Zone Management Program, and shall continue in full force for a period of one (1) year and be automatically renewed thereafter in successive one (1) year terms unless and until either party have given three (3) months written notice of its intention to terminate this AGREEMENT or request a revision of the terms and conditions of this AGREEMENT.

IN ADDITION, the DEPARTMENT and the AGENCY agree to be bound by the terms of Appendix A attached hereto and incorporated herein.

Appendix A
Section 2-A.1

THIS APPENDIX A is a part of the INTERAGENCY MEMORANDUM OF UNDERSTANDING concerning COASTAL ZONE MANAGEMENT for the PENNSYLVANIA COASTAL ZONE MANAGEMENT PROGRAM entered into on this _____ day of _____, 1980, between the Pennsylvania Department of Environmental Resources, hereinafter called "DEPARTMENT", and the Pennsylvania Fish Commission, hereinafter referred to as the "AGENCY".

W I T N E S S E T H:

1. The AGENCY agrees to use its legal and administrative authorities to the fullest extent possible to actively address the problems of water quality through cooperation and coordination with the DEPARTMENT. The AGENCY will help ensure through monitoring and project review that coastal waters shall not contain substances attributable to point or nonpoint source waste discharges in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected as specified in Chapter 95 of the Department Rules and Regulations (25 PA. Code Section 95.1 et seq.) or to human, animal, plant, or aquatic life including cold water, warm water and migratory fishes.
2. The AGENCY agrees to use its legal and administrative authorities to the fullest extent possible to actively augment native stocks and introduce appropriate species, only after careful consideration, such as muskellunge in the Delaware Estuary, and coho salmon in Lake Erie in order to provide diverse, unique and bountiful catches for the Commonwealth's coastal recreational anglers.
3. The AGENCY agrees to use its legal and administration authorities to the fullest extent possible to improve access to the Delaware Estuary and the Lake Erie waterfronts through the acquisition of new sites and/or the expansion of existing sites including the Coastal Zone Management Program's Geographic Areas of Particular Concern nominated as areas of significant natural value and areas of historical, cultural, or recreational significance.
4. The AGENCY agrees to give priority consideration to the undertaking of detailed technical studies of coastal fisheries, their aquatic habitat and associated issues that impact their management.
5. The AGENCY agrees to actively assist the DEPARTMENT in undertaking comprehensive studies aimed at improving the regulatory permitting process in the Commonwealth's coastal zones.

IN WITNESS WHEREOF, intending to be legally bound hereby, the parties hereto have caused these presents to be executed the day and year first above written.

ATTEST:

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

_____
(Title)

_____
Clifford L. Jones, Secretary

Approved as to legality and form:

_____
Assistant Attorney General
Department of Environmental Resources

ATTEST:

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION

_____
(Title)

_____
Ralph W. Abele, Executive Director

Approved as to legality and form:

_____
Assistant Attorney General
Pennsylvania Fish Commission

Appendix A
Section 2-A.2

THIS APPENDIX A is a part of the INTERAGENCY MEMORANDUM OF UNDERSTANDING concerning COASTAL ZONE MANAGEMENT for the PENNSYLVANIA COASTAL ZONE MANAGEMENT PROGRAM entered into on this _____ day of _____, 1980, between the Pennsylvania Department of Environmental Resources, hereinafter called "DEPARTMENT", and the Pennsylvania Historical and Museum Commission, hereinafter referred to as the "AGENCY".

W I T N E S S E T H:

1. The DEPARTMENT agrees to notify the AGENCY when it receives a permit application, which if approved, has the potential for significantly affecting an archeologically, architecturally, or historically significant site or structure in the Commonwealth's coastal zones.
2. The AGENCY agrees to provide timely comments to the DEPARTMENT, when it receives notices and appropriate background information that a permit application is being reviewed by the DEPARTMENT which if approved has the potential for significantly affecting an archeologically, architecturally, or historically significant site or structure in the Commonwealth's coastal zones.
3. The AGENCY agrees to provide when appropriate technical assistance in the identification, restoration, and preservation of archeologically, architecturally, and historically significant sites and structures in the Commonwealth's coastal zones.

IN WITNESS WHEREOF, intending to be legally bound hereby, the parties hereto have caused these presents to be executed the day and year first above written.

ATTEST:

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

_____
(Title)

_____
Clifford L. Jones, Secretary

Approved as to legality and form:

_____
Assistant Attorney General
Department of Environmental Resources

ATTEST:

COMMONWEALTH OF PENNSYLVANIA
HISTORICAL AND MUSEUM COMMISSION

_____
(Title)

_____
William Wewer, Executive Director

Approved as to legality and form:

_____
Assistant Attorney General
Historical and Museum Commission

Appendix A
Section 2-B

INTERAGENCY
MEMORANDUM OF UNDERSTANDING
CONCERNING COASTAL ZONE MANAGEMENT

THIS AGREEMENT, entered into this _____ day of _____, 1980, between the Pennsylvania Department of Environmental Resources, hereinafter called "DEPARTMENT", and the Public Utility Commission hereinafter referred to as "AGENCY".

W I T N E S S E T H:

WHEREAS, the parties recognize and acknowledge the need to preserve, protect, develop, and where possible, restore or enhance the resources of the Pennsylvania's coastal areas for this and succeeding generations; and

WHEREAS, the parties further recognize the need for full governmental coordination and public involvement in the Commonwealth's Coastal Zone Management Program, and the need to give due consideration to the significance of coastal resources to Pennsylvania; and

WHEREAS, the DEPARTMENT has been designated by the Governor as the lead agency for implementation of the State Coastal Zone Management Program.

WHEREAS, the AGENCY recognizes that its programs and activities within Pennsylvania's coastal zones may have a direct and significant impact on the Commonwealth's coastal environment; and

WHEREAS, the Federal Coastal Zone Management Act of 1972 (P. L. 92-583, as amended) provides funds to states to implement Federally approved state coastal zone management programs; and

WHEREAS, pursuant to Federal regulations, one condition of coastal zone management program approval is demonstration that the program, as approved, will be implemented; and

WHEREAS, several State departments and agencies have authority for implementing the Commonwealth of Pennsylvania's Coastal Zone Management Program and for making rules affecting the Program's enforcement; and

WHEREAS, adoption and implementation of the Coastal Zone Management Program by the various agencies of the Commonwealth is authorized by the Pennsylvania Constitution, Article I, Section 27; Bluff Recession and Setback Act, Act of May 13, 1980; The Dam Safety Act, Act of November 26, 1978, P.L. 1375, as amended, (32 P.S. Sections 693.1 et seq.); Stormwater Management Act, Act of October 4, 1978, P.L. 864 (32 P.S. Sections 680.1 et seq.); Soil Conservation Law, Act of May 15, 1945, P.L. 547, as amended,(32 P.S. Sections 849 et seq.); The Floodplain Management Act, Act of October 4, 1978, P.L. 851 (32 P.S. Sections 679.101 et seq.); Schuylkill

River Pollution/Siltation Law, Act of June 4, 1945, P.L. 383, as amended, (32 P.S. Sections 751.1 et seq.); Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended, (35 P.S. Sections 691.1 et seq.); The Fish Law of 1959, Act of December 15, 1959, P.L. 1779, as amended, (30 P.S. Sections 200 et seq.); Open Space Lands, Act of January 19, 1968, P.L. (1967) 992 (32 P.S. Sections 5001 et seq.); Historic Preservation Act, Act of November 22, 1978, P.L. 1160 (71 P.S. Sections 1047.1 et seq.); The Solid Waste Management Act, Act of July 31, 1968, P.L. 788, as amended, (35 P.S. Sections 6001 et seq.); The Air Pollution Control Act, Act of January 8, 1960, P.L, (1959) 2119, as amended, (35 P.S. Sections 4001 et seq.); Radiation Control Act, Act of January 28, 1966, P.L. (1965) 1625 (73 P.S. Sections 1301 et seq.); Gas Operations, Well Drilling, Petroleum and Coal Mining Act, Act of November 30, 1955, P.L. 756, as amended, (52 P.S. Sections 2101 et seq.); Act of July 1, 1978, Public Utility Code, No. 1978-116, as amended; the Sewage Facilities Act, Act of January 24, 1966, P.L. (1965) 1535, as amended (35 P.S. Sections 750.1 et seq.); Open Meeting Law, Act of July 19, 1974, P.L. 486 (65 P.S. Sections 261 et seq.); the Administrative Code of 1929, Act of April 9, 1929, P.L. 177, as amended, (71 P.S. Sections 181, 194, 241, 510-1, 510-2, 510-4, 510-5, 510-6, 519-8, 510-17, 510-20).

NOW, THEREFORE, the DEPARTMENT and the AGENCY in accordance with these considerations, pursuant to Section 501 of the Administrative Code (71 P.S. Section 181), and in furtherance of the purposes and policies of Pennsylvania Constitution, Article I, Section 27 and the statutes cited above, as applicable, do hereby agree as follows:

A. To the maximum extent permitted by law, the AGENCY agrees to:

1. In managing its programs having an affect on the coastal areas, the AGENCY will consider the DEPARTMENT'S adopted positions and coastal policies including any national interest incorporated into those positions and coastal policies.
2. If the AGENCY becomes aware that its plans and programs or decisions may be inconsistent with the DEPARTMENT'S Coastal Zone Management Program, the AGENCY will notify the DEPARTMENT of any inconsistency.
3. Provide an agency staff representative to serve on the Coastal Zone Advisory Committee of the DEPARTMENT'S Coastal Zone Management Program, who will advise the DEPARTMENT'S Coastal Zone Management Program of the initiation and status of projects or programs likely to have a direct and significant impact on the coastal environment.
4. Provide access, through the Coastal Zone Advisory Committee representative, to AGENCY staff and information gathered by the AGENCY in order to allow

the DEPARTMENT to obtain the best information available for its decision-making process.

5. Review and comment on all policies, plans and other actions of the DEPARTMENT'S Coastal Zone Management Program that apply to the AGENCY.

B. The DEPARTMENT shall:

1. Solicit comments from the AGENCY for due consideration concerning the implementation of coastal zone policies and programs that relate or could relate to the policies, programs, and statutory responsibilities of the AGENCY.

2. As it deems appropriate or when so requested by the AGENCY, comment in a timely manner on proposed projects and programs likely to have an impact on the coastal environment, including proposed facilities and resources in which there may be a national interest.

3. Encourage and facilitate coordinated activities by Federal, State, and local agencies whose activities affect the coastal environment.

C. The DEPARTMENT and the AGENCY may, by mutual agreement, supplement this AGREEMENT to provide for particular activities, programs, or projects necessary to assist in implementing one or more of the Coastal Zone Management Program policies.

D. This AGREEMENT shall become effective on Federal approval of the Commonwealth of Pennsylvania's Coastal Zone Management Program, and shall continue in full force for a period of one (1) year and be automatically renewed thereafter in successive one (1) year terms unless and until either party have given three (3) months written notice of its intention to terminate this AGREEMENT or request a revision of the terms and conditions of this AGREEMENT.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed the day and year first above written.

ATTEST:

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

_____
(Title)

_____
Clifford L. Jones, Secretary

Approved as to legality and form:

_____
Assistant Attorney General
Department of Environmental Resources

ATTEST:

PUBLIC UTILITY COMMISSION

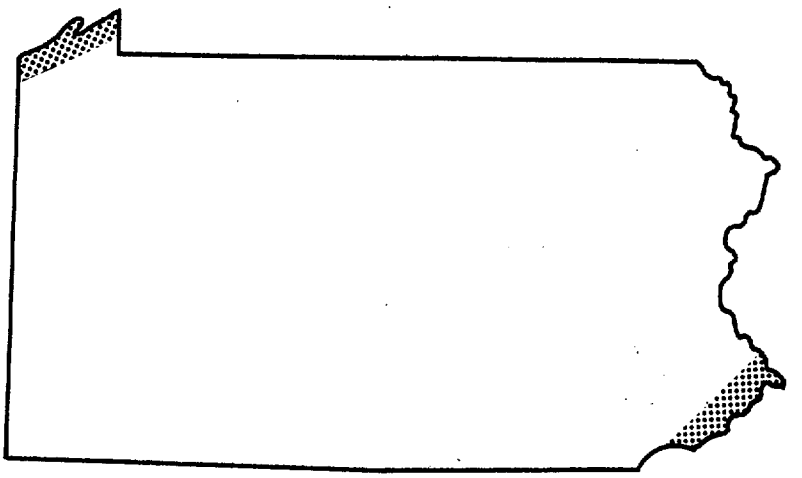
_____
(Title)

_____
Susan M. Shanaman, Chairperson

Approved as to legality and form:

_____
Chief Counsel

Appendix B



Key Program Regulations

INTRODUCTION

This Appendix contains new proposed rulemakings and revisions to the rulemaking which will be used to carry out the major State authorities (Bluff Recession and Setback Act, and the Dam Safety Act) networked into Pennsylvania's Coastal Zone Management Program. The proposed rulemakings are for:

Title 25 DER Regulations (Subpart C), Chapter 85
Bluff Recession and Setback

Title 25 DER Regulations (Subpart C), Chapter 105
Dam Safety and Waterway Management

The proposed rulemaking for these regulations along with revisions made in response to written comments and public hearing testimony constitute the proposed final rulemaking for both these regulations. It should be noted that these regulations are proposed but should become final prior to Federal program approval. It should be noted that the proposed revisions included at the end of the Bluff Recession and Setback Regulations and within the Dam Safety and Waterway Management Regulations of this Appendix indicate the [deletion] by brackets and the <u>additions</u> by underline.

No approval of the Pennsylvania Coastal Zone Management Program will be granted without adoption of adequate final regulations for Chapters 85 and 105. Changes made between the proposed final regulations appearing in the FEIS and the final regulations as adopted will be reviewed by the Office of Coastal Zone Management for both degree and substance of change. Substantial changes to the Chapters 85 or 105 regulations will result in distribution of the final regulations and commencement of a new 30-day period prior to approval of the Pennsylvania Coastal Zone Management Program.

RESPONSIBILITIES OF THE CAREGIVER

A caregiver shall be responsible for the direct care, supervision and guidance of the child.

A caregiver shall provide the care as agreed to during a joint interview with the parent and service worker.

A caregiver shall be responsible for notifying the parent(s) if unable to care for the child(ren).

A caregiver is required to report immediately any child suspected of being abused to the Child Line and Abuse Registry operated by the Department pursuant to the Child Protective Service Law (P. L. 438, Act 124). The report shall be made on the Child Line using the Statewide-toll free telephone number, 800-932-0313, or the caregiver shall notify the service worker.

Nutritionally adequate meals and appropriately timed snacks shall be served. No child shall be permitted to be without a meal or snack for more than 4½ hours.

Infants and toddlers shall be provided physical stimulation through being held, rocked, and played with, as well as through being fed, bathed, and carried.

At no time shall children under six years of age be left unsupervised indoors or out. Older children shall be permitted play without supervision as long as their whereabouts is known at all times.

A caregiver shall keep the parent(s) informed of the child's behavior or any change in physical condition. The caregiver shall report to the parent(s) and service worker any physical, behavioral or learning problems.

No medication of any type shall be administered to a child without written consent of the parent.

Children shall be safe-guarded from any animal or pet which may present a health or safety hazard.

The caregiver shall complete appropriate social service forms, if required to do so by the service worker.

The caregiver shall provide the parent with a completed PA 112 Receipt for Payment of Child Care.

EMERGENCY SITUATIONS

The caregiver shall act responsibly in any emergency or unusual situation with the first concern being the child's welfare and health and the second being the responsibility to contact the parent(s) or service worker.

The caregiver shall record and have readily available the telephone numbers of the parent(s) and of an alternate person to call if the parent(s) cannot be reached for use in emergency situations.

The caregiver shall administer appropriate emergency treatment while arranging to transport the child to the doctor, hospital or emergency medical center.

The caregiver shall make arrangements for an individual, at least 18 years of age, to assume care of the other children while the caregiver accompanies the child to a source of emergency care. If such arrangements cannot be made, then all children must accompany the caregiver to the source of emergency care.

RESPONSIBILITIES OF THE PARENT

The parent shall select a reliable caregiver using the help of the service worker as needed.

The parent shall prepare the child(ren) for care by another person.

The parent prior to the joint interview with the caregiver and service worker shall make preliminary arrangements with the caregiver as to hours of care needed, cost of care, meals to be served, nap periods if needed, health problems such as allergies, etc.

If child care is provided in the child's home, the parent shall provide an adequate food supply for the child and caregiver.

The parent shall plan for emergency situations with the caregiver: phone number where parent or another contact person can be reached, name and number of family doctor or hospital, medical health plan number, etc.

The parent shall arrange, if possible, for another person who can be called on if the regular caregiver is ill or otherwise unable to fulfill the child care duties.

The parent shall pay the caregiver promptly, obtaining a receipt (PA 112) for each payment. The receipts shall be forwarded to the CAO Income Maintenance Unit (IMU) worker at the end of each month as verification of continued financial need for a child care cost grant.

[Pa. B. Doc. No. 80-802. Filed May 30, 1980, 9:00 a.m.]

DEPARTMENT OF ENVIRONMENTAL RESOURCES

ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CH. 85]

Bluff Recession and Setback

Notice is hereby given that the Environmental Quality Board, under the authority contained in the Bluff Recession and Setback Act, act of May 13, 1980 (P. L. , No. 48) (P. S.) proposes to adopt a new Chapter 85, sections 85.1 — 85.4, 85.11 — 85.15, 85.21 — 85.26, 85.31 — 85.37, 85.41 — 85.44, 85.51 — 85.55 and 85.61 (relating to bluff recession and setback) as set forth in Annex A hereto.

The proposed regulations will encourage the development of a comprehensive and coordinated program to regulate development activities through the use of setback ordinances in bluff recession hazard areas, designed to preserve and restore the natural ecological systems, and prevent continuing destruction of private property and structures.

A public hearing to consider the proposed regulations will be held on Monday, June 9, 1980 at 6 p.m. to 9 p.m. in the Council Chambers, Room 103, City Hall, 626 State Street, Erie, Pa.

Persons interested in testifying at this hearing should contact the Environmental Quality Board, P. O. Box 2063, Harrisburg, Pa. 17120 (717-787-4526) prior to the hearing date. Other interested persons are invited to submit written comments, suggestions or objections to the same address with a copy to E. James Tabor, Manager, Coastal Zone Management, Department of Environmental Resources, P. O. Box 1467, Harrisburg, Pa. 17120. Comments must be received within seven days of the hearing date in order to be considered.

In addition to the written comments, interested persons may also submit a summary of their comments to both the Board and Mr. Tabor. The summary will be distributed to each member of the Board in the agenda packet distributed prior to each meeting. The summary shall not exceed one

page in length and must also be received within seven days of the hearing in order to be considered.

By the Environmental Quality Board

CLIFFORD L. JONES,
Chairman

Fiscal Note: EQB 80-11. (1) General Fund and Federal Augmentation Fund; (2) General Fund — $8,000, Federal Fund — $32,000, Local Fund — $20,000; (3) General Fund — $6,000, $6,600, $7,300, $8,000, $8,800, Federal Fund — $32,000, $24,000, $26,400, $29,000, $32,000, $35,200, Local Fund — $20,000 for each year; (4) 1979-80 — $400,000, final planning grant periods, 1978-79 — $60,000, beginning final planning grant period, 1977-78 — $40,000, completion of third planning grant period; (7) General Fund Appropriation Act of 1980; and Federal Augmentation Appropriation Act of 1980, both yet to be enacted; (8) recommends adoption. These proposed regulations implement Act 48 of 1980 and provide standards and criteria of structural setbacks in bluff recession hazard areas in the Commonwealth to limit property damage and prevent increased recession. Program costs are provided in the Governor's Budget Request for Fiscal Year 1980-81, and through grants from the Federal Coastal Zone Management. Local Government costs only effect seven municipalities situated along the Lake Erie Shoreline.

Annex A

TITLE 25. ENVIRONMENTAL RESOURCES

PART I. DEPARTMENT OF ENVIRONMENTAL RESOURCES

Subpart C. PROTECTION OF NATURAL RESOURCES

CHAPTER 85. BLUFF RECESSION AND SETBACK

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GENERAL PROVISIONS

§ 85.1. Definitions.

The following words and terms, when used in this chapter, shall have, unless the context clearly indicates otherwise, the following meanings:

Act — The act of May 13, 1980 (P. L.____, No. 1980-48) (____P. S. §§ ____ — ____).

Bluff — Any high bank or bold headland with a broad precipitous cliff face overlooking a lake.

Bluff line — The edge or crest of the bluff.

Bluff recession — The loss of material along the bluff face caused by the direct or indirect action by one or a combination of groundwater seepage, water currents, wind generated water waves, or high water levels.

Bluff recession hazard area — An area or zone where the rate of progressive bluff recession creates a substantial threat to the safety or stability of nearby existing or future structures or utility facilities.

Bluff setback ordinance and regulations — Building codes, zoning ordinances, subdivision regulations, health regulations, special purpose ordinances, and other applications of the police power, which provide standards for the location of structures and facilities in bluff recession hazard areas.

Department — The Department of Environmental Resources of the Commonwealth.

Development —

(i) The improvement of one lot or two or more contiguous lots, tracts, or parcels of land for any purpose including but not limited to:

(A) a group of two or more buildings; and

(B) the division or allocation of land or space between or among two or more existing or prospective occupants by means of or for the purpose of streets, common areas, leaseholds, condominiums, building groups, or other features; or

(ii) A subdivision of land.

High bank — Any bank over five feet high.

Lake — A body of fresh water covering at least 9,000 square miles.

Market value — The value of a structure determined by a certified appraisal or by determining the assessed value of a structure and applying the assessment ratio of the county in which the structure is located.

Minimum bluff setback distances — The shortest horizontal distance from any point on the bluff line to any point on a structure.

Municipality — A county, city, borough, town, or township or any other governmental unit when acting as an agent thereof or any combination thereof acting jointly.

Persons — An individual, partnership, public or private association or corporation, firm, trust estate, municipality, governmental unit, public utility or any other legal entity which is recognized by law as the subject of rights and duties. When used in any section prescribing or imposing a penalty, the term shall include members of a partnership; officers, members, servants, and agents of an association; and officers, agents, or servants of a corporation but shall exclude any department, board, bureau, or agency of the Commonwealth.

Parcel — A piece of ground that existed as an independent tax lot on the records of the county prior to its inclusion in a municipality's designated bluff recession hazard areas.

Plat — A map, drawing, or print accurately drawn to scale showing the proposed or existing location of all structures.

Structure — Any man-made object having an ascertainable stationary location on or in land whether or not affixed to the land; structures are classified into three categories: residential, commercial, and light and heavy industrial.

(i) Residential structures are de-

fined as a place providing habitation for an individual or group of individuals. Structures in this category include, but are not limited to single family homes, duplexes, and summer cottages as well as any secondary structures associated with the residential structure.

(ii) Commercial structures are defined as a place where commodities are exchanged, bought, or sold. Structures in this category include, but are not limited to grocery stores, hardware stores, clothing shops, and pharmacies as well as any secondary structure that is associated with the commercial structure.

(iii) Light and heavy industrial structures are defined as a place where materials are refined, produced, or fabricated and stored prior to shipment to commercial establishments. Structures in this category include but are not limited to factories, power plants, and warehouses, as well as any secondary structure that is associated with the industrial structure. Hospitals, nursing homes, schools, and other public service facilities — because of the dangers inherent in bluff recession — will for purposes of setback requirements be considered light and heavy industrial structures.

Structure Life Span — The useful life of the structure considering both economic and physical factors.

Substantial improvement —

(1) Any:

(A) repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure either:

(I) before the improvement or repair is started; or

(II) if the structure has been damaged and is being restored, before the damage occurred; or

(B) repair, reconstruction, or improvement of a structure occurring over a five-year period, the aggregate cost of which equals or exceeds 50% of the market value of the structure either:

(I) before the first improvement or repair is started; or

(II) if the structure has been damaged and is being restored, before the damage occurred.

(ii) Substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structure part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include any project for improvement of a structure to comply with existing State or local health, sanitary, or safety specifications which are solely necessary to assure safe living conditions or any alteration of a structure listed on the National Register of Historic Places or a State inventory of historic places.

Quality Board — The Environmental Quality Board of the Commonwealth.

§ 85.2. Scope.

The provisions of this chapter are adopted in accordance with the duties placed on the Department by the act, and they shall apply to all municipalities designated as having bluff recession hazard areas and to all persons constructing, installing, or engaging in substantial improvement to any structure or utility facility within bluff recession hazard areas.

§ 85.3. Purpose.

The basic purposes of the act and this chapter are as follows:

(1) Encourage planning and development in bluff areas which is consistent with sound land use practices.

(2) Protect people and property in bluff areas from the dangers and damages associated with the inevitable recession of bluffs.

(3) Prevent and eliminate urban and rural blight which results from the damages of bluff erosion and recession.

(4) Minimize the expenditure of public and private funds for shoreline protection and bluff stabilization structures and activities.

(5) Authorize a comprehensive and coordinated program: to regulate development activities through the use of setback ordinances in bluff recession hazard areas, to preserve and restore the natural ecological systems, and to prevent continuing destruction of property and structures.

(6) Encourage local administration and management of bluffs consistent with the Commonwealth's duty as trustee of natural resources, and the people's constitutional right to the preservation of the natural, scenic, aesthetic, and historic values of the environment.

§ 85.4. Violations.

A municipality that fails to adopt and submit a bluff setback ordinance and regulations or fails to properly administer the provisions of this chapter will be found in violation of the act and will be subject to the penalties of the act. A person who violates the provisions of the act or a municipal ordinance will be subject to the appropriate penalties of the act.

Subchapter A. PROCEDURE FOR DESIGNATION OF AREAS WITH BLUFF RECESSION HAZARDS

§ 85.11. General requirements.

The Department is authorized by section 4 of the act (____P. S. § ____) to identify areas in this Commonwealth which have bluff recession hazard areas. Prior to formal designation by the Quality Board, the tentatively identified municipality will be invited to submit comments to the Department concerning the designation.

§ 85.12. Identification of bluff recession hazards.

(a) Pursuant to section 4 of the act (____ P. S. § ____), studies will be conducted when necessary to identify bluff recession hazard areas in this Commonwealth. Studies prepared for these purposes shall do all of the following:

(1) Identify the geographic location of the potential hazard area; County, Township, and so forth.

(2) Define and evaluate the bluff recession hazard in relation to geophysical processes such as recession and erosion-related phenomena and examine the causative factors.

(3) Review and evaluate existing and potential damage to property and structures caused by progressive bluff recession.

(4) Develop a recession rate based on historical evidence.

(5) Develop conclusions and recommendations based on the findings of the studies.

(b) To prevent the unnecessary expenditure of public funds, the Department will inventory, identify, and evaluate previous studies that may have already been completed. If the studies meet the requirements of this chapter, such studies may be utilized for purposes of section 4 of the act (____ P. S. § ____).

§ 85.13. Department notification to municipalities.

Following completion of the study, the Department will, by certified letter, notify the governing body of the municipality that it has been tentatively designated as possessing a bluff recession hazard area. The letter will contain all of the following information:

(1) The geographic location of the hazard area.

(2) A summary of the findings of the Department's study.

(3) The historic recession rate and the process used to calculate this rate.

(4) The minimum bluff setback distances that will be required by the Department.

(5) A request for comments from the municipality concerning the tentative designation and setback distances.

(6) Specification of the time limits for comment.

(7) Notice that a public hearing will be held concerning the designation of bluff recession hazard areas by the Quality Board prior to formal designation.

§ 85.14. Municipal response on designation.

Each municipality tentatively identified by the Department as possessing a bluff recession hazard area will be invited to submit written comments concerning the tentative designation to the Department within 60 days of receiving the Department's notification letter.

§ 85.15. Department notification of the Environmental Quality Board.

(a) When the Department receives comments from a tentatively designated municipality, it will prepare and transmit to the Quality Board a request for formal designation of the municipality's bluff recession hazard area and the establishment of bluff setback distances in the bluff recession hazard area. The request will contain, at a minimum, all of the following:

(1) The Department's findings concerning the location and determination of the bluff recession hazard area in the municipality.

(2) The nature of the existing and potential damage to property and structures.

(3) All comments received from the affected municipality.

(4) A recommendation, incorporating consideration of the comments received from the municipality, that the area be designated as a bluff recession hazard area(s) and subject to Subchapter C of this chapter.

(b) In the event a municipality disagrees with the Department's letter tentatively designating it as possessing a bluff recession area and the required setback distances and has not submitted comments acceptable to the Department, the appropriate representatives of the Department will contact and offer to meet with representatives of the municipality to review, discuss, and attempt to resolve the differences. This meeting will be held within 30 days from the date of the letter received from the municipality.

(c) In the event a municipality fails to comment within the time prescribed in § 85.13(6) of this title (relating to Department notification to municipalities), the Department will assume the municipality is in agreement and will note that municipality provided no comment concerning the designation and the required setback distance within the allotted time.

(d) Following transmittal of the Department's request to the Quality Board, the Quality Board will give public notice and hold public hearings on the request to formally designate areas within municipalities as bluff recession hazard areas.

(e) Following public hearings, the Department will consider the comments received at the public hearing and make appropriate revisions to the request and resubmit it to the Quality Board for final action. Following an affirmative action by the Quality Board, the Department will notify the municipality that it must within six months comply with the provisions of the act and this chapter.

Subchapter B. BLUFF RECESSION HAZARD AREAS DESIGNATION AND SETBACK REQUIREMENTS

§ 85.21. General requirements.

Pursuant to section 5 of the act (____ P. S. § ____), this subchapter provides procedures for calculation of minimum bluff setback distances and the limitations of activities within minimum bluff setback distances in designated bluff recession hazard areas.

§ 85.22. Methods of determining minimum bluff setback distances.

(a) The Department will develop minimum bluff setback distances for each municipality tentatively designated as having a bluff recession hazard area by applying the following formula:

Rate of Bluff Recession	X	Appropriate life span of structure	=	Minimum Bluff Setback Distance

(1) The rate of bluff recession is the average rate of recession for all the municipality's bluff as calculated by the Department.

(2) The appropriate life span of structure is 50 years for residential homes; 75 years for commercial structures, and 100 years for light and heavy industrial structures.

(b) In no case shall the minimum bluff setback distance be less than 50 feet. When use of the formula identified in subsection (a) of this section would produce a minimum bluff setback distance of less than 50 feet, the formula will not apply and 50 feet will be the minimum bluff setback distance.

§ 85.23. Modification of minimum bluff setback distances.

A minimum bluff setback distance for a municipality may be modified upon presentation of formal studies acceptable to the Department documenting annual recession rates at variance with the Department's recession rate data. Upon Department review and acceptance of the data as accurate and compatible with the objectives of the act, a new minimum bluff setback distance will be calculated. The Department will request the Quality Board to amend the designation in accordance with the provisions of this subchapter concerning the minimum bluff setback distances.

§ 85.24. Activities within a bluff recession hazard area.

In any bluff recession hazard area, no person shall construct, install or engage in substantial improvement to any structure or any utility facility such as water, sewage, electric, gas, oil or telephone within the minimum bluff setback distances established pursuant to § 85.22 of this title (relating to methods of determining minimum bluff setback distances) except as provided under § 85.25 (relating to variances granted by the Department) or § 85.37(4) of this title (relating to contents of ordinance and regulations submitted by municipality).

§ 85.25. Variances granted by the Department.

(a) During the period between Quality Board designation of a bluff recession hazard area and the Department's approval of a municipality's bluff setback ordinance and regulations, the Department may grant variances to the bluff setback requirements for all construction in a designated bluff recession hazard area. A property owner shall file an application with the Department for a variance to allow construction on his property.

(b) When the Department receives the completed application, it will review the application based on the criteria for a variance pursuant to § 85.37 (4) of this title (relating to con-

tents of ordinance and regulations submitted by municipality) within 45 days and send a registered letter to the applicant approving or disapproving the variance. A copy of this letter will be sent to the municipality for its permanent record. If the Department does not take action regarding the application within 45 days, the application will be deemed approved.

§ 85.26. Minimum bluff setback distances of a designated municipality.

The minimum bluff setback distance for the various categories of structures will be adopted by the Quality Board based on the Department's report.

Subchapter C. MUNICIPAL BLUFF SETBACK ORDINANCE AND REGULATIONS

§ 85.31. General requirements.

As required by section 6 of the act (____ P. S. § ____), designated municipalities shall adopt and implement a bluff setback ordinance and regulations. This subchapter outlines the procedures for meeting these requirements.

§ 85.32. Time limit for municipal adoption of bluff setback ordinance and regulations.

Each municipality, following formal Quality Board designation of a bluff recession hazard area, shall within six months of receiving notification amend or adopt and implement a bluff setback ordinance and regulations which are consistent with the requirements of § 85.37 of this title (relating to contents of ordinance and regulations submitted by municipality).

§ 85.33. Municipal adoption and administration.

Each designated municipality is required to adopt and administer a bluff setback ordinance and regulations in a manner consistent with the provisions of the Pennsylvania Municipalities Planning Code (53 P. S. §§ 10101 — 11202) or other applicable enabling legislation.

§ 85.34. Geographic limit of bluff setback ordinance and regulations.

A municipality may adopt a bluff setback ordinance and regulations for a bluff recession hazard area without adopting an ordinance and regulations governing any other area of the municipality notwithstanding any provision of the Pennsylvania Municipalities Planning Code (53 P. S. §§ 10101 — 11202) or other applicable enabling legislation.

§ 85.35. Municipal adoption of more restrictive ordinance.

No provision of the act shall be construed as in any way limiting the power of any municipality to adopt more restrictive ordinances, codes, or regulations governing construction and development in bluff recession hazard areas that are established pursuant to §§ 85.22 — 85.24 of this title (relating to bluff recession hazard area designation and setback requirements).

§ 85.36. Procedures for submission of an ordinance and regulations by a municipality.

(a) A municipality in developing a bluff setback ordinance may use an existing ordinance and regulations, amend an existing ordinance and regulations, or develop a new ordinance and regulations.

(1) When an existing ordinance and regulations is utilized, the municipality shall forward one copy of the proposed ordinance and regulations to the Department along with comments on how the ordinance and regulations meet the requirements of the act and this chapter.

(2) When an existing ordinance and regulations are amended to meet the requirements of the act, the municipality shall forward one copy of the ordinance and regulations and amendments to the Department along with comments on how the proposed amendment to the ordinance and regulations meet the requirements of the act and this chapter.

(3) When the municipality develops a new ordinance and regulations, the municipality shall forward one copy of the ordinance and regulations to the Department along with comments on how the proposed ordinance and regulations meet the requirements of the act and this chapter.

§ 85.37. Contents of ordinance and regulations submitted by municipality.

(a) The ordinance and regulations submitted by a municipality to the Department shall include at a minimum the following components:

(1) A setback ordinance and regulations shall meet the minimum requirements and contain a minimum setback distance for each class of structure pursuant to this chapter.

(2) The municipality shall provide a mechanism for permitting all proposed construction, installation, or substantial improvement of structures or any utility facilities such as water, sewage, electric, gas, and telephone in designated bluff recession hazard areas. This bluff setback permitting process may be incorporated into any existing permitting process administered by a municipal building code or zoning officer. At the request of the municipality, the Department will provide assistance to the municipality in developing this procedure.

(3) A municipality shall provide a procedure, as a part of the ordinance and regulations, that enables monitoring of substantial improvements to structures bisected by or within the bluff setback distance. The procedure must ascertain the market value of the property prior to the first improvement and document subsequent improvements to the structure to ensure that they do not exceed 50% of the market value for a consecutive five-year period. At the request of the municipality, the Department will provide assistance to the municipality in developing this procedure.

(4) The municipality shall provide for a variance to its bluff setback ordinance and regulations only in the following cases:

(i) When an established setback distance prevents construction on a parcel of land in a bluff recession hazard area, a variance may be applied for. The variance shall be granted only when the following criteria are met.

(A) The structure and all associated structures and utilities facilities shall be located on the property as far landward of the bluff line as allowed by other municipal ordinances.

(B) The structure shall be designed and constructed to be movable in accordance with proper engineering standards and building moving restrictions applicable to the subject area prior to damage by bluff recession. Structures in this category may include trailers or modular homes. Review and approval of the design shall be incorporated into the municipalities permit process. All construction materials including foundations shall be removed or disposed of as part of the moving operation. Access to and from the structure site shall be of sufficient width and acceptable grade to allow for moving of the structure.

(ii) When a structure or utility facility requires access to a lake over or through the bluffs for operating purposes.

(A) A variance granted under this section shall apply only to the discharge and withdrawal lines — infrastructure — that provide the facility with lake water for operating purposes. All other structures must observe the local setback distance.

(B) During the construction, the applicant or persons engaged in the actual placement of the infrastructure must utilize sound land use practices which will reduce disruption of the

bluff edge and bluff face. These sound land use practices include but are not limited to methods to minimize stormwater run-off, increased soil erosion, changes to local drainage patterns, and changes to protective vegetative cover.

(C) The infrastructure providing the utility facility or structure access to the lake shall be designed and constructed so that it is adequately protected from the dangers of bluff recession and does not increase bluff recession. To achieve adequate protection of the bluff, the construction of the infrastructure shall occur in a manner that minimizes potential adverse or long-term disruption of the bluff face and in conformance with the provisions of Chapter 102 of this title (relating to erosion control).

(5) The municipality shall provide a procedure to amend municipal setback ordinances. The Department will, at the request of the affected municipality, provide assistance in incorporating revisions to this chapter into the municipal ordinance and regulations.

(6) The Department will suggest an administrative procedure for maintaining records of all correspondence, applications for permits, and issuance and denial of such permits. On February 28 of each year, a copy of the records from the preceding calendar year shall be submitted to the Department for its review and permanent record. This procedure shall require that all necessary records include the name and address of the applicant and the location and description for the following activities:

(i) Construction, installation, or engagement in any substantial improvement to structures affected by the minimum bluff setback distance.

(ii) Improvement projects for any existing structure located within the minimum bluff setback distance.

(iii) Variances granted by the municipality in bluff recession hazard areas.

(7) The municipality has alerted and shall continue to alert permit applicants, when permits are granted, that the bluff setback requirements are at best a minimum distance and, because of variations in local bluff recession rates, cannot guarantee that a property located in a bluff recession hazard area will not be endangered by bluff recession within its useful life span.

Subchapter D. DEPARTMENT OVERSIGHT OF MUNICIPAL COMPLIANCE

§ 85.41. General requirements.

As required by section 7 of the act (____ P. S. § ____) the Department will adopt procedures and regulations for the review and approval of municipal ordinance and regulations.

§ 85.42. Department review and approval of a municipal setback ordinance and regulations.

(a) The Department will, within 90 days of receiving a written request to approve a municipality's bluff setback ordinance and regulations, review the proposal pursuant to the requirements contained in § 85.37 of this title (relating to contents of ordinance and regulation submitted by municipality).

(b) The Department will, upon ascertaining that the proposed bluff setback ordinance and regulations meet the minimum requirements set forth in § 85.37 of this title (relating to contents of ordinance and regulations submitted by municipality), notify the municipality by certified letter of the approval of the ordinance and regulations.

(c) Should the Department fail to respond within the allotted 90-day time limit, the ordinance and regulations shall be deemed to be approved and the municipality shall use that ordinance and regulations to enforce the provisions of the act.

(d) Should the Department, during the review of the proposed ordinance and regulations, find that the ordinance and regulations do not meet the minimum requirements of this chapter, the Department will disapprove the ordinance and regulations and will notify the municipality. The letter will contain the reasons for disapproval and suggestions for correcting the problem. Upon receipt of this letter, the municipality shall have 30 days to correct the problem and resubmit the proposed ordinance and regulations. If the municipality disagrees with the Department's findings, the municipality may appeal the Department's decision pursuant to the procedures outlined in this chapter.

(e) If the municipality fails to adopt or submit a bluff setback ordinance and regulations to the Department, the Department may institute an action in *mandamus* to compel the municipality to comply with the requirements of the act and this chapter.

§ 85.43. Department review of implementation and administration of municipal setback ordinance and regulations.

(a) The Department will review the implementation and administration of the municipal bluff setback ordinance and regulations at least once a year to assure coordinated and consistent enforcement of its bluff setback ordinance and regulations. The review will occur on a date and location mutually agreed upon by the representative of the Department and the appropriate municipal officials.

(b) If the Department finds that a municipality has failed to implement and enforce in a consistent and effective manner the bluff setback ordinance and regulations required by the act and this chapter, then the municipality shall be subject to the sanctions provided in the act. The municipality will be deemed to have implemented and enforced in a consistent and effective manner the bluff setback ordinance and regulations when in any area designated as having a bluff recession hazard no person shall have constructed, installed, or engaged in a substantial improvement to any structure or any utility facility in violation of the bluff setback requirements established pursuant to the act and this chapter.

(c) When the Department finds that a municipality has failed to implement and enforce the bluff setback ordinance and regulations as required by subsection (b) of this section, the Department will, as it deems necessary, conduct additional reviews of the municipality's implementation and enforcement of the bluff setback ordinance and regulations to ensure that the appropriate changes have been made which assure coordinated, consistent, and effective enforcement of the municipal ordinance and regulations.

§ 85.44. Coordination with environmental protection programs.

The Department and all municipalities designated as having a bluff recession hazard area are still subject to requirements of other environmental protection programs. These programs include but are not limited to: erosion and sedimentation control, water obstruction, clean water, sewage treatment facilities, gas-well drilling, stormwater management, and floodplain management.

Subchapter E. GRANTS AND REIMBURSEMENTS TO MUNICIPALITIES

§ 85.51. General requirements.

The Department is authorized by section 11 of the act (____ P. S. § ____) to administer grants to municipalities to assist or reimburse them for costs incurred in complying with requirements of the act. Grants and reimbursements shall be made available from and to the extent of the Federal funding augmentation under 16 U.S.C.

§§ 1451 — 1464, as appropriated by the General Assembly for such purposes.

§ 85.52. Limitation of grants and reimbursements.

Grants shall be available from the Department to municipalities to reimburse them for allowable costs incurred in complying with the requirements of the act. Grants shall be limited to:

(1) Seventy-five percent of the costs incurred for the development and implementation of a bluff setback ordinance and regulations required by these regulations as well as 75% for the costs incurred by a municipality in revising a setback ordinance and regulations established prior to the act to comply with the requirements of this chapter.

(2) Fifty percent of the allowable costs for the ongoing administration of an ordinance incurred by a municipality. Allowable costs for administration of bluff setback ordinance shall not include those costs which are offset by reasonable permit fees imposed by the municipality.

§ 85.53. Applications for grants and reimbursements.

(a) All applications for grants shall be made on forms provided by and in a manner prescribed by the Department and shall contain and be supplemented with such information as may be required by the Department.

(b) Applications will only be accepted by the Department during the first quarter of the Commonwealth's fiscal year. The Department will notify the municipality, during the fourth quarter of the preceding fiscal year that grant funds for the upcoming fiscal year will be available for the administration of their bluff setback ordinance and regulations.

§ 85.54. Disclaimer for grants and reimbursements.

Nothing in this section shall be construed to impair or limit application of this act to any municipality or person or to relieve any municipality or person of duties imposed under this act.

§ 85.55. Records and audits.

(a) Municipalities shall maintain books, records, documents, correspondence, and other evidence pertaining to the costs and expenses incurred pursuant to § 85.52 of this title (relating to limitation of grants and reimbursements) to the extent and in such detail as will properly reflect all costs — direct and indirect — of labor, materials, equipment, supplies, and services and other costs and expenses of whatever nature for which funding has been provided under the provisions of the grant. Such records shall be maintained in accordance with generally accepted accounting principles. A detailed explanation of the accounting procedures and types of records are contained in the "Manual of Accounting and Related Financial Procedures for Pennsylvania Municipalities," published and distributed by the Department of Community Affairs.

(b) It will be necessary for a municipality to maintain accounting records and supporting documentation which identify all revenue and costs from the effective date to expiration date of the grant. As a minimum, the following books of account shall be used:

(1) Cash receipts journal.

(2) Cash disbursement journal.

(3) Payroll journal.

(4) General journal.

(c) In the event a municipality records transactions by the accrual method of accounting, additional records are required.

(d) The following documentation should be retained in file: copies of revenue documents, original vendor invoices, payroll records, cancelled checks, worksheets used to prepare grant reports, and other related grant information. All records should be retained for a period of three years from the grant expiration date or until all pending matters are resolved.

Subchapter F. APPEALS

§ 85.61. Appeals.

(a) Any person or municipality aggrieved by an action of the Department shall have the right within 30 days of the receipt of the notice of such action to appeal such action to the Environmental Hearing Board, pursuant to 2 Pa. C. S. §§ 501 — 508 and 701 — 704.

(b) An appeal of any action under the act shall not act as a *supersedeas*. A *supersedeas* may be granted by the Environmental Hearing Board upon a showing by the petitioner:

(1) that irreparable harm to the petitioner or other interested parties will result if *supersedeas* is denied;

(2) that there is a likelihood of the petitioner's success on the merits; and

(3) that the grant of a *supersedeas* will not result in irreparable harm to the Commonwealth.

[Pa. B. Doc. No. 80-838. Filed May 30, 1980, 9:00 a.m.]

Annex A

TITLE 25. ENVIRONMENTAL RESOURCES

PART I. DEPARTMENT OF ENVIRONMENTAL RESOURCES

Subpart C. PROTECTION OF NATURAL RESOURCES

CHAPTER 85. BLUFF RECESSION AND SETBACK

§ 85.26. Designated municipalities and minimum bluff setback distances for identified categories of structures.

(a) Pursuant to § 85.15 of this title (relating to Department notification of the Environmental Quality Board), the municipalities identified in subsection (c) of this section have been designated as possessing a bluff recession hazard area.

(b) The municipalities designated in subsection (c) of this section are required to adopt and implement a bluff setback ordinance and regulations which incorporate the bluff setback distances listed in subsection (c) of this section.

(c) Designated municipalities and setback distances in feet are as follows:

Municipality	*Residential*	*Commercial*	*Light and Heavy Industrial*
Springfield Township Erie County	100'	150'	200'
Girard Township Erie County	60'	90'	120'
Lake City Borough Erie County	60'	90'	120'
Mill Creek Township Erie County	50'	75'	100'
Fairview Township Erie County	50'	75'	100'
Lawrence Park Township Erie County	50'	75'	100'
Harborcreek Township Erie County	50'	75'	100'
North East Township Erie County	50'	75'	100'

[Pa. B. Doc. No. 80-1120. Filed July 25, 1980, 9:00 a.m.]

ANNEX A

TITLE 25 ENVIRONMENTAL RESOURCES

PART I. DEPARTMENT OF ENVIRONMENTAL RESOURCES

SUBPART C. PROTECTION OF NATURAL RESOURCES

CHAPTER 85. BLUFF RECESSION AND SETBACK

Section 85.4. Violations.

A municipality that fails to adopt and submit a bluff setback ordinance and regulations or fails to properly administer the provisions of this chapter will be found in violation of the act and will be subject to the [penalities of] sanctions provided for in the act. A person who violates the provisions of the act [or a municipal ordinance will be subject to the appropriate penalities of the act], these regulations, or municipal ordinance or the regulations promulgated thereunder will also be subject to the sanctions provided for in the act.

Section 85.15. Department notification [of] to the Environmental Quality Board.

Subchapter 13. BLUFF RECESSION HAZARD AREA [DESIGNATION AND] SETBACK REQUIREMENTS

Section 85.22(a)(1) The rate of bluff recession is the average annual rate of recession for all the municipality's bluff as calculated by the Department.

Section 85.37(a)(6) The [Department] municipality [will] shall [suggest] provide (the Department will assist if requested) an administrative procedure . . .

Section 85.37(a)(6)(i) Construction, installation, or engagement in any substantial improvement to structures affected by the minimum bluff setback distance [.], including the information collected as a result of the monitoring procedure established in (3) above.

TITLE 25. RULES AND REGULATIONS
PART I. DEPARTMENT OF ENVIRONMENTAL RESOURCES
Subpart C. PROTECTION OF NATURAL RESOURCES
ARTICLE II. WATER RESOURCES

CHAPTER 105. DAM SAFETY AND WATERWAY MANAGEMENT

Authority

The provisions of this Chapter 105 issued under Act of November 26, 1978, P.L. 1375, Sections 5, 7, 10, 11, and 17, as amended, (32 P.S. Sections 693.5, 693.7, 693.10, 693.11, and 693.17); Act of October 4, 1978, P.L. 851, Sections 302 and 402 (32 P.S. Sections 679.302 and 679.402); Act of June 14, 1923, P.L. 704, Section 7 (32 P.S. Section 597); Act of June 22, 1937, P.L. 1987, Sections 5 and 402 (35 P.S. Sections 691.5, 691.402); and Administrative Code, Act of April 9, 1929, P.L. 177, as amended, Sections 514, 1901-A, 1908-A, 1917-A, and 1920-A (71 P.S. Sections 194, 510-1, 510-8, 510-17, and 510-20).

* * *

Subchapter A. GENERAL PROVISIONS

§105.1. Definitions.

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise:

"Appurtenant works." Structures or materials incident to or annexed to dams or water obstructions which are built or maintained in connection with such dams or water obstructions and are essential to their proper functioning. For dams, appurtenant works include but are not limited to such structures as spillways, either in the dam or separate therefrom; low level outlet works; and conduits such as tunnels, pipelines or penstocks through the dam or its abutments.

"Body of water." Any natural or artificial lake, pond, reservoir, swamp, marsh or wetland.

"Bridge." A structure and its appurtenant works erected over the regulated waters of this Commonwealth.

"Commercially navigable waters of the Delaware River and its navigable tributaries." Those portions of the Delaware River from the Delaware border in the south to the railroad bridge at Morrisville in the north and those portions of the Schuylkill River below Fairmount Dam; Chester Creek below Ninth Street; Crum Creek below the Route 291 (Industrial Highway) Bridge; Darby Creek below 84th Street; Neshaminy Creek below the Route 13 Bridge; Pennypack Creek below the Frankford Avenue Bridge; and Ridley Creek below the Baltimore and Ohio Railroad Bridge in Chester.

"Construct." To erect, build, place or deposit, including preliminary preparation of a site for construction.

"Course." The path taken by a stream, floodway or body of water.

"Cross section." The area from the top of the bank to the top of the opposite bank of a stream [channel] or body of water as cut by a vertical plane passed at a right angle to the course of the stream.

"Culvert." A structure with appurtenant works which carries a stream under or through an embankment or fill.

"Current." The rate or velocity of flow of water in a stream, floodway or body of water.

"Dam." Any artificial barrier, together with its appurtenant works, constructed for the purpose of impounding or storing water or any other fluid or semifluid; or any refuse bank, fill, or structure for highway, railroad, or other purposes which does or may impound water or any other fluid or semifluid.

"Dam Safety and Encroachments Act." The Act of November 26, 1978 (P.L. 1375, No. 325), as amended, (32 P.S. §693.1 - 693.27).

"Department." The Department of Environmental Resources of the Commonwealth.

"Design flood." A specified discharge for which the hydraulic capacity of a structure is designed.

"Discharge of dredged material." Any addition, deposit, disposal, or discharge of dredged material into the regulated waters of the Commonwealth, including but not limited to, the addition of dredged material to a specific disposal site located in the regulated waters of the Commonwealth and the runoff or overflow of dredged material from a contained land or water disposal area. The term does not include plowing, cultivating, seeding and harvesting for the production of food, fiber, and forest products.

"Discharge of fill material." Any addition, deposit, disposal, or discharge of fill into the regulated waters of the Commonwealth, including, but not limited to the following activities: placement of fill that is necessary to the construction of any structure in any regulated waters of the Commonwealth; the building of any structure or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; dams and dikes; artificial islands; property protection and/or reclamation devices such as riprap, groins, seawalls, breakwaters, and revetments; levees, fill for structures such as sewage treatment facilities; intake and outfall pipes associated with power plants and subaqueous utility lines; and artificial reefs. The term does not include plowing, cultivating, seeding and harvesting for the production of food fiber and forest products.

"Dredge." To remove sand, gravel, mud, or other materials from the beds of regulated waters of the Commonwealth.

"Dredged material." Any material that is excavated or dredged from the regulated waters of the Commonwealth.

"Encroachment." Any structure or activity which in any manner changes, expands or diminishes the course, current or cross-section of any watercourse, floodway or body of water.

"FEMA." The Federal Emergency Management Agency.

"Fill." Sand, gravel, earth or other material placed or deposited so as to form an embankment or raise the elevation of the land surface; includes material used to replace an area with aquatic life with dry land or to change the bottom elevation of any regulated waters of the Commonwealth.

"Flood." A general but temporary condition of partial or complete inundation of normally dry land areas from the overflow of streams, rivers or other waters of this Commonwealth.

"Flood Plain Management Act." The act of October 4, 1978 (P.L. 851, No. 166) (32 P.S. §§679.101 - 679.601).

"Floodplain." The lands adjoining a river or stream that have been or hereafter may be expected to be inundated by flood waters in a 100-year frequency flood.

"Floodway." The channel of the watercourse and those portions of the adjoining floodplains which are reasonably required to carry and discharge the 100-year flood. Unless otherwise specified, the boundary of the floodway is as indicated on maps and flood insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the 100-year floodway, it is assumed, absent evidence to the contrary, that the floodway extends from the stream to fifty (50) feet from the top of the bank of the stream.

"Freeboard." The vertical distance between the water surface elevation experienced during the design flood and the crest elevation of a dam levee, floodwall, or other embankment.

"Height of dam." The vertical measurement expressed in feet as measured from the downstream toe of the dam at its lowest point to the elevation of the top of the dam.

"Levee." An earth embankment or ridge constructed along a water-course or body of water to confine water within prescribed limits; it is also known as a dike.

"Limited [Water] Power and [Power] Water Supply Act." The act of June 14, 1923, P.L. 704, as amended, (32 P.S. §§591-625).

"Maintenance dredging." Dredging conducted as part of consturction of a dam, water obstruction or encroachment, and periodic dredging conducted in order to:

(1) maintain adequate depths for navigation;

(2) assure proper passage of ice and flood flows; or

(3) preserve the safety, stability and proper operation of the facility.

"Mitigation." Mitigation, an action or actions: (a) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (b) rectifying the impact by repairing, rehabilitating or restoring the impacted environment; (c) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action or if (a) - (c) cannot be achieved, (d) compensating for the impact by replacing or providing substitute resources or environments.

"Navigation Commission." The Navigation Commission for the Delaware River or its navigable tributaries.

"100-year frequency flood." The flood magnitude expected to be equaled or exceeded on the average of once in 100 years; it may also be expressed as the flood having a 1.0% chance of being equaled or exceeded in any given year.

"Operation." Elements of the use, control and functioning of a facility during the lifetime of the facility, including its removal, which may affect primarily the storage, release or flow of water, the structural safety of a facility, or navigation, with due consideration of the other purposes of the Dam Safety and Encroachments Act.

"Owner." Any person who owns, controls, operates, maintains, or manages a dam or reservoir, water obstruction or encroachment.

"Person." Any natural person, partnership, association, corporation, public utility, municipality, municipal authority, political subdivision of the Commonwealth, receiver, trustee, and any department, board, commission or authority of the Commonwealth.

"Political subdivision." Any county, city, borough, incorporated town, township, school district, authority, or other governmental unit or any combination thereof acting jointly.

"Probable maximum flood or PMF." The flood that may be expected from the most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in an area; the PMF is derived from the probable maximum precipitation (PMP) as determined on the basis of data obtained from the National Oceanographic and Atmospheric Administration (NOAA).

"Public service corporation or public utility." A corporation, association, or other corporate body having any of the powers and privileges of corporations not possessed by individuals or partnerships which entity renders a public utility service; the term shall not include any municipality or municipal authority.

"Public service line." Includes, but is not limited to, electric transmission lines, gas pipelines, telephone lines, water lines, railroad trackage, and other facilities owned or operated by public service corporations.

"Public utility service." The rendering of the following services for the public:

(1) gas, electricity, or steam production, generation, transmission or distribution;

(2) water diversion, pumping, impoundment or distribution;

(3) railroad transportation of passengers or property;

(4) operation of a canal, turnpike, tunnel, bridge, wharf or similar structure;

(5) transportation of natural or artificial gas, crude oil, gasoline or petroleum products, materials for refrigeration or other fluid substances by pipeline or conduit;

(6) telephone or telegraph communications; and

(7) sewage collection, treatment or disposal.

"Regulated waters of the Commonwealth." All watercourses, streams or bodies of water, and their floodways, wholly or partly within, or forming part of the boundary of this Commonwealth.

"Reservoir." Any basin, either natural or artificial, which contains or will contain the water or other fluid or semifluid impounded by a dam.

"Safety." Security from the risk or threat of significant loss or injury to life, health, property and the environment.

"Solid Waste Management Act." The Pennsylvania Solid Waste Management Act (35 P.S. §§6001-6017).

"Spillway." Any device which safely conveys the design flood of a dam without endangering its safety or integrity.

"Storage capacity." The volume as expressed in acre-feet of the impounded water to the maximum storage level, that is, the top of the dam.

"Storm Water Management Act." The act of October 4, 1978 (P.L. 864, No. 167) (32 P.S. §§680.1 - 680.17).

"Stream." See the definition of watercourse.

"Stream crossings." Any pipeline, aerial cable, or similar structure which is placed in, along, under, across, or over the regulated waters of the Commonwealth.

"Stream enclosure." Any bridge, culvert, or other structure in excess of 100 feet in length upstream to downstream and which encloses any regulated waters of the Commonwealth.

"Submerged lands of the Commonwealth." All waters and permanently or periodically inundated lands owned [or held in trust] by the Commonwealth, including all lands in the beds of navigable lakes and rivers and beds of streams declared public highways, which are owned and held in trust by the Commonwealth.

"Water Obstruction." Any dike, bridge, culvert, wall, wingwall, fill, pier, wharf, embankment, abutment or other structure located in, along, across or projecting into any watercourse. floodway, or body of water.

"Watercourse or stream." Any channel of conveyance of surface water having a defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

"Water Obstructions Act." The act of June 25, 1913, (P.L. 555, No. 355) (32 P.S. §§681-691), repealed by section 27 of the Dam Safety and Encroachments Act.

"Wetlands." Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs and similar areas. For purposes of this Chapter, wetlands include, but are not limited to, wetland areas listed in the State Water Plan, the U. S. Forest Service Wetlands Inventory of Pennsylvania, the Pennsylvania Coastal Zone Management Plan, and any wetland area designated by a river basin commission.

§105.2 Purposes.

The purposes of this Chapter are to:

(1) Provide for the comprehensive regulation and supervision of dams, reservoirs, water obstructions and encroachments in the Commonwealth in order to protect the health, safety, welfare, and property of the people.

(2) Assure proper planning, design, construction, maintenance, monitoring and supervision of dams and reservoirs, including such preventative measures as are necessary to provide an adequate margin of safety.

(3) Assure proper planning, design, construction, maintenance and monitoring of water obstructions and encroachments, in order to prevent unreasonable interference with water flow and to protect navigation.

(4) Protect the natural resources, environmental rights and values secured by Article I, Section 27 of the Pennsylvania Constitution, and conserve and protect the water quality, natural regime and carrying capacity of watercourses.

§105.3. Scope.

The following structures or activities are regulated pursuant to the Dam Safety and Encroachments Act and section 302 of the Flood Plain Management Act (32 P.S. §679.302):

(1) All dams on a natural or artificial watercourse, other than those licensed pursuant to the Federal Power Act (16 U.S.C. §§791a et seq.) where:

(i) The contributory drainage area exceeds 100 acres; or

(ii) the greatest depth of water (measured at upstream toe of the dam) at maximum storage elevation exceeds 15 feet; or

(iii) the impounding capacity at maximum storage elevation exceeds 50 acre-feet.

(2) All dams used for the storage of water not located on a watercourse and which have no contributory drainage, where the greatest depth of water measured at upstream toe of the dam at maximum storage elevation exceeds 15 feet and the impounding capacity at maximum storage elevation exceeds 50 acre-feet.

(3) All dams used for the storage of fluids or semifluids other than water, the escape of which may result in air, water or land pollution, or may result in danger to persons or property.

(4) All water obstructions and encroachments other than dams, located in, along, across or projecting into any watercourse, floodway or body of water, whether temporary or permanent.

(5) All flood control projects constructed, owned or maintained by a governmental unit.

§105.4. Delegations to Local Agencies.

(a) Pursuant to section 17 of the Dam Safety and Encroachments Act, and subject to the provisions of this section, the Department may by written agreement delegate to a county conservation district or other county agency one or more of its regulatory functions including enforcement and the power to permit, inspect, and monitor [the following] specified categories of water obstructions and encroachments[: any category of water obstruction or encroachment, including culverts, fills, streambank retaining devices, stream crossings, outfalls and headwalls, which do not have the potential of endangering public safety or property or causing significant damage to the environment].

(b) No delegation shall be made affecting the following categories of activities:

(1) any dam;

(2) any water obstruction or encroachment [extending below the low water mark of] located in or across any navigable stream[;] , except for commercially navigable waters of the Delaware River and its navigable tributaries located within a City of the First Class;

(3) any water obstruction or encroachment located in, along or across any stream or reach of stream included in the Federal Wild and Scenic Rivers System or State Wild and Scenic Rivers System;

(4) any flood control structure constructed, owned, or maintained by a governmental unit;

[(5) any structure involving the handling or storage of any toxic or hazardous material as defined by the Federal Clean Water Act or Federal Resource Conservation and Recovery Act.]

(5) any commercial dredging activities governed by Subchapter I of this Chapter.

(c) No delegation shall be made of the authority to issue permits for any water obstruction or encroachment constructed, owned or maintained by the Commonwealth, any political subdivision, or any public utility. Delegations may be made of the powers to inspect and monitor such activities, providing that the Department retains final authority to approve or disapprove permits, and concurrent authority to inspect, monitor and enforce the provisions of this act.

(d) To the extent delegated by the agreement, such delegations may include the authority to enforce the Dam Safety and Encroachments Act and regulations adopted thereunder, and to exercise such other powers and duties otherwise vested in the Department to implement the act, with respect to the categories of water obstructions and encroachments covered by the delegation.

(e) Each delegation agreement shall:

(1) specify the powers and duties to be performed by the delegated agency;

(2) specify the categories of water obstructions and encroachments activities to be covered by the delegated agency;

(3) provide for the commitment by the delegated agency of sufficient trained staff and resources to perform the powers and duties to be delegated;

(4) require the delegated agency to maintain records of activities performed under the delegation;

(5) provide for monitoring and supervision by the Department of performance by the delegated agency of the functions delegated under the agreement.

(f) Any permit for a water obstruction or encroachment issued by a delegated agency shall be subject to review by the Department, unless the right of review is waived by the Department. A permit issued by a delegated agency shall become effective 30 days following the receipt of notice by the Department of issuance, unless the permit is disapproved by the Department or an appeal is filed with the Department pursuant to section 17 of the Dam Safety and Encroachments Act.

(g) Where the Department delegates one or more of its regulatory functions to a local agency, the Department shall in all cases retain the concurrent power to inspect and monitor all categories of water obstructions and encroachments, and to enforce the Dam Safety and Encroachments Act and regulations adopted thereunder.

PERMIT APPLICATIONS

§105.11. Permit Requirements.

(a) No person shall construct, operate, maintain, modify, enlarge or abandon any dam, water obstruction, or encroachment without first obtaining a written permit from the Department.

(b) Any existing dam, water obstruction, or encroachment constructed pursuant to a license or permit issued in compliance with the provisions of the Act of June 8, 1907 (P.L. 496, No. 322), entitled "An act to establish a Board of Commissioners of Navigation for the river Delaware and its navigable tributaries; regulating their jurisdiction over ships,

vessels, and boats, and wharves, piers, bulkheads, docks, slips, and basins; and exempting cities of the first class from certain of its provisions; and making an appropriation therefor," or the Water Obstructions Act, shall be deemed to comply with the construction and operating permit requirements of this section. All such projects shall hereafter comply with the operating, maintenance, monitoring and other requirements of this Chapter.

(c) The owner of any existing dam, water obstruction, or encroachment who does not hold a permit issued pursuant to the Act of June 8, 1907 (P.L. 496, No. 322), or the Water Obstructions Act, shall apply for and receive a permit <u>to operate and maintain the facility</u> pursuant to the Dam Safety and Encroachments Act on or before January 1, 1981. <u>For these purposes, any limited power permit issued pursuant to the Limited Power and Water Supply Act was and is deemed to have been issued pursuant to the Water Obstructions Act.</u> All such projects shall comply with the operating, maintenance, monitoring and other requirements established pursuant to the Dam Safety and Encroachments Act.

(d) Any permit issued by the department after the effective date of the Dam Safety and Encroachments Act for the construction and operation of a water obstruction or encroachment shall incorporate authorization for normal repairs and maintenance of permitted structures conducted within the original specifications for the water obstruction or encroachment. Any repairs or maintenance involving modification of the water obstruction or encroachment from its original specifications and any repairs or reconstruction involving a substantial portion of the structure, shall require the prior written permit of the department pursuant to subsection (a) of this section.

§105.12. Waiver of Permit Requirements.

(a) [The following structures or activities do not require a dam or encroachments permit, pursuant to Section 7 of the Dam Safety and Encroachments Act:]

Pursuant to Section 7 of the Dam Safety and Encroachments Act, the requirements for a permit are waived for the following structures or activities, regardless of when commenced:

(1) [The construction of a] Any dam not exceeding three feet in height in a stream not exceeding fifty feet in width, where such dam is constructed for the sole purpose of creating a pool for fish and fishing purposes.

(2) [The placing of any] Any water obstruction in a stream with a drainage area of 320 acres or less [after] if the Department [has determined,] determines on the basis of preliminary data submitted by the applicant, that the water obstruction cannot imperil life or property, have a significant effect on coastal resources, or adversely affect the environment.

(3) Any aerial crossing of a non-navigable stream by electric, telephone or communications lines, which are not located in a federal wilderness area or watercourse or body of water designated as a wild or scenic river pursuant to the National Wild and Scenic Rivers Act of 1968 or the Pennsylvania Scenic Rivers Act, Act of December 5, 1972, P. L. 1277.

(4) Any dam subject to the requirements of the Mine Safety and Health Administration, 30 C.F.R. 77.216-1 and 77.216-2, if the Department determines on the basis of preliminary data submitted by the applicant, that the dam is of Size Classification C, and Hazard Potential Classification 3 as defined in §105.91 of this Chapter, and is not located in a watercourse or body of water designated as a wild and scenic river pursuant to the National Wild and Scenic Rivers Act of 1968 or the Pennsylvania Scenic River Act, Act of December 5, 1972, P. L. 1277.

(b) The requirements for a permit for existing structures or activities, as provided in section 6(c) of the Dam Safety and Encroach-

ments Act, are waived for the following structures or activities, if construction was commenced prior to July 1, 1979:

(1) Any dam not exceeding five (5) feet in height in a non-navigable stream, operated and maintained for water supply purposes;

(2) Any dam which the Department determines, on the basis of preliminary data submitted by the applicant, that the dam is of Size Classification C, and Hazard Potential Classification 3, as defined in §105.91 of this Chapter, and does not have a significant effect on coastal

resources or adversely affect the environment;

(3) Any fills not located on submerged lands of the Commonwealth;

(4) Any streambank retaining devices;

(5) Any stream crossings, other than crossings by pipelines for conveyance of petroleum products and gas;

(6) Any outfalls, headwalls, or water intake structures;

(7) Any culvert on a watercourse, where the drainage area of the watercourse above the culvert is five square miles or less. Provided that, if the Department, upon complaint or investigation, finds that any such structure has a significant effect upon safety or the protection of life, health, property or the environment, it may require the owner of the structure to apply for and obtain a permit pursuant to this Chapter.

[(b)] (c) All such structures and activities shall meet the construction, operating, maintenance, monitoring and other requirements of this Chapter. No other permits which may be required under any law other than the Dam Safety and Encroachments Act are waived by this section.

§105.13. Permit Applications—Information and Fees.

(a) Application for permits pursuant to this chapter shall be submitted to the Department in writing, upon forms provided by the Department.

(b) Each application for a permit pursuant to this Chapter, except applications submitted by Federal, State, county or municipal agencies or a municipal authority for a dam, water obstruction or encroachment shall be accompanied by a check payable to "Commonwealth of Pennsylvania" in accordance with the following schedule:

1. DAMS

Class A	$200	(Based on Size Classi-
Class B	$200	fication as defined
Class C	$ 50	in §105.91)

2. WATER OBSTRUCTIONS and ENCROACHMENTS

Bridges Over 15 foot Span	$100
Stream Enclosures	$100
Channel Changes	$100
Commercial Dredging	$100
All other Water Obstructions and Encroachments	$ 50

(c) A single application may be submitted, or a single permit may be issued, for multiple structures and activities which are part of a single project or facility or part of related projects and facilities, located in a single county, constructed, operated or maintained by the same person or persons. Where a single application covers multiple structures or activities (other than a single structure and related maintenance dredging), the application fee shall be the sum of fees set forth in subsection (b) for the applicable structures and activities, but shall not exceed $600. All stream crossings located within a single county for the installation of a public service line shall be treated as a single structure or activity.

[(c)] (d) Each application for a permit shall be accompanied by such information, maps, plans, specifications, design analyses, test reports, and other data as may be specifically required by the provisions of this chapter and such additional information as may be required by the Department to determine compliance with the provisions of this chapter.

[(d) Each application for the following categories of activities shall include an environmental assessment, on a form established by the Department:

(1) Any dam or reservoir for the storage of water of size classification A or B, or hazard classification 1 as defined in §105.91.

(2) Any dam or reservoir used for the storage of fluids or semifluids other than water, the escape of which may result in air,

water or land pollution, or may result in danger to persons or property.

(3) Any dam, bridge, culvert, stream crossing, stream enclosure, dike, levee, flood wall, or stream relocation located in, along or across a stream identified candidates for or included in the Federal or State wild and scenic river systems.

(4) Any stream enclosure, stream relocation or any other activity or facility which the Department determines may have a significant impact on the environment.

(e) Based on the results of the environmental assessment, the Department may require the submission of an environmental report. The environmental report shall contain studies, analyses, maps, or other information regarding one or more of the following, as found necessary by the Department:

(1) The potential impacts to the extent applicable of the proposed activity on water quality, stream flow, fish and wildlife, aquatic habitat, Federal and State forests, parks, recreation, instream and downstream water uses, prime farmlands, areas or structures of historic significance, streams which are identified candidates for or included within the Federal or State wild and scenic river system and other relevant significant environmental factors.

(2) Alternatives to the proposed action, including alternative locations, routings or designs to avoid or reduce significant adverse environmental impacts;

(3) Actions to be taken, through design, location, or operation of the proposed structure or other activities, to mitigate any unavoidable significant environmental impacts created by the proposed project.]

[(f)] (e)All applications for permits pursuant to this chapter shall be accompanied by an erosion and sedimentation control plan for all activities in the stream and all earthmoving activities, which plan shall conform to the requirements contained in Chapter 102 of this title (relating to erosion

control) and which shall include a copy of a letter from the conservation district in the county where the project is located, indicating that the district has reviewed the applicant's erosion and sediment control plan and considered it to be satisfactory.

(f) Applications should be submitted by the person or persons who own, control, operate, maintain or manage a dam or reservoir, water obstruction or encroachment. In the case where a person, other than the person who owns a dam or reservoir, water obstruction or encroachment, has primary responsibility for the construction, control, operation, maintenance and management of the dam or water obstruction for a period of 15 years or longer, the application may be submitted by the person who has such primary responsibility; provided that the owner of a dam or reservoir, water obstruction or encroachment shall shall in no event thereby be relieved of any legal duties or responsibilities for the structure or activity as imposed by the Dam Safety and Encroachments Act or this Chapter.

(g) Each application shall be signed by the owner or owners of the [proposed dam or water obstruction] dam or reservoir, water obstruction or encroachment, or the person or persons [undertaking the regulated activity.] exercising primary responsibility for the dam or reservoir, water obstruction or encroachment. In the case of a partnership, one or more members of the partnership authorized to sign on behalf of the entire partnership shall sign the application. In the case of a corporation, it shall be signed by the president, vice-president, or other responsible official empowered to sign for the corporation, with the corporate seal or other proof of authorization to sign for the corporation affixed. In the case of a political subdivision, it shall be signed by the chief officer or officers of the political subdivision, or other responsible

official empowered to sign for the political subdivision, with the seal affixed and attested by the clerk.

[§105.14. Engineer's Certification.]

(h) All plans, specifications, and reports accompanying applications for dams, bridges, and such other obstructions which would pose a threat to human life and property in the event of failure shall be affixed with the seal of a registered professional engineer and his certification, which shall read as follows:

"I (name) do hereby certify to the best of my knowledge, information and belief, that the information contained in the accompanying plans, specifications, and reports has been prepared in accordance with accepted engineering practice, is true and correct, and is in conformance with Chapter 105 ofthe rules and regulations of the Department of Environmental Resources."

§105.14. Review of Applications.

(a) All applications shall be reviewed in accordance with prevailing practices in the engineering profession.

(b) In reviewing any permit application under this chapter for construction or substantial modification of a dam or reservoir, water obstruction or encroachment, the Department will consider the following factors:

(1) Potential threats to life or property created by the project.

(2) Potential threats to safe navigation created by the project.

[(2)] (3) The effect of the proposed project on the property or riparian rights of owners above, below, or adjacent to the project.

[(3)] (4) The effect of the proposed project on the regimen and ecology of the watercourse or other body of water, water quality, stream flow, fish and wildlife, aquatic habitat, instream and downstream uses, and other significant environmental factors.

[(4)] (5) The impacts of the proposed project on any nearby national wildlife refuge, national natural landmark, national or state park or recreation area, or national or state historical site.

[(5)] (6) Compliance by the proposed project with all applicable laws administered by the Department, the Pennsylvania Fish Commission, and any river basin commission created by interstate compact.

[(6)] (7) The need for the proposed project to be located in, or in close proximity to, the water, and alternatives in location, design and construction which are available to minimize the adverse impact of the project upon the environment and to protect the public natural resources of the Commonwealth.

[(7)] (8) Present conditions and the effects of reasonably foreseeable future development within the affected watershed above and below the project [which can be expected during the lifetime of the structure]:

(i) Any dam, water obstruction, or encroachment shall be designed, constructed, and operated so as to assure adequacy and compliance with the rules and regulations of this chapter [throughout its lifetime], taking into account [all] reasonably foreseeable development within the affected watershed.

(ii) In assessing the impact of future development upon a dam, water obstruction, or encroachment, the Department may require the applicant to submit data regarding estimated development potentials and municipal, county, and regional planning related to the affected watershed.

[(8)] (9) Consistency with state and local floodplain and storm water management programs, the State Water Plan, and the Coastal Zone Management Plan.

[(9)] (10) Consistency with the designations of wild, scenic and recreational streams under the National Wild and Scenic Rivers Act of 1968 or the Pennsylvania Scenic Rivers Act, Act of December 5, 1972, P. L. 1277.

(c) In reviewing any permit applications under §105.11(c) of this Chapter and §6(c) of the Dam Safety and Encroachments Act for the operation and maintenance of any existing dam, water obstruction or encroachment, the Department shall consider the following factors:

(1) Potential threats to life, property or safe navigation created by the continuing operation or maintenance of the project.

(2) Any substantial adverse impacts on stream flow, water quality or the environment which might be reduced or mitigated by reasonable changes in the operation of the project.

(3) Compliance of the operation and maintenance of the project with all applicable laws administered by the Department, the Pennsylvania Fish Commission, and any river basin commission created by interstate compact.

(d) The Department may review permit applications for the operation and maintenance of existing projects without regard to the design criteria and construction requirements set forth in Subchapters B - J of this Chapter; provided that if the Department finds that any existing dam, water obstruction or encroachment is unsafe or adversely affects property or the environment, it may consider application of such criteria and requirements as may be reasonably necessary to correct such conditions.

§105.15. Environmental Evaluation.

(a) Each application for construction of the following catergories of activities shall include an environmental assessment, on a form established by the Department:

(1) Any dam or reservoir for the storage of water of size classification A or B or hazard classification 1 as defined in §105.91.

(2) Any dam or reservoir used for the storage of fluids or semifluids other than water, the escape of which may result in air, water or land pollution, or may result in danger to persons or property.

(3) Any dam, bridge, culvert, stream crossing, stream enclosure, dike, levee, flood wall or stream relocation located in, along or across a stream identified candidates for or included in the federal or state wild and scenic river systems.

(4) Any stream enclosure, stream relocation or any other activity or facility which the Department determines may have a significant impact on the environment.

(b) Based on the results of the environmental assessment, the Department may require the submission of additional information regarding one or more of the following, as found necessary by the Department:

(1) The potential impacts to the extent applicable of the proposed activity on water quality, stream flow, fish and wildlife, aquatic habitat, Federal and State forests, parks, recreation, instream and downstream water uses, prime farmlands, areas or structures of historic significance, streams which are identified candidates for or included within the federal and state wild and scenic river systems and other relevant significant environmental factors.

(2) Alternatives to the proposed action, including alternative locations, routings or designs to avoid or reduce significant adverse environmental impacts;

(3) Actions to be taken, through design, location, or operation of the proposed structure or other activites, to mitigate any unavoidable significant environmental impacts created by the proposed project.

§105.16. [Public Benefits.] Environmental Social and Economic Balancing

(a) The determination of whether the potential for significant environmental harm exists will be made by the Department after consultation with the applicant and other concerned governmental agencies. If the Department determines that there may be a significant impact on natural, scenic, historic or aesthetic values of the environment, the Department will consult with the applicant to examine ways to reduce the environmental harm to a minimum. If, after consideration of mitigation measures, the Department finds that significant environmental harm will occur, the Department will evaluate the public social and economic benefits of the project to determine whether the harm outweighs the benefits.

[(a)] (b) No application for a permit under the provisions of Subchapter D (relating to stream enclosures), for a channel change under Subchapter E (relating to channel changes and dredging for facility construction and maintenance), [Subchapter F (relating to fills, levees, floodwalls and streambank retaining devices), Subchapter I (relating to commercial dredging),] and Subchapter J (relating to discharges of dredged or fill material) of this Chapter, or for any structure or activity which the Department determines will have a significant adverse impact on the environment or public natural resources, shall be approved by the Department unless the applicant demonstrates, and the Department finds, that the public benefits of the proposed project outweigh the harm to the environment and public natural resources.[and that the

project is consistent with the conservation and maintenance of public natural resources.] Public benefits shall include, but are not limited to:

(1) Correction and prevention of pollution;

(2) Protection of public health and safety;

(3) Reduction of flood damages;

(4) Development of energy resources;

(5) Creation or preservation of significant employment;

(6) Provision of public utility services;

(7) Other essential social and economic development which benefits a substantial portion of the public.

[Where the Department finds that a proposed project may have significant adverse impacts on the environment or public natural resources, alternatives to the proposed project shall be considered, and mitigation shall be provided by the applicant for all unavoidable adverse impacts on public natural resources.]

[(b)] (c) No application for a permit shall be approved by the Department in the following areas unless the applicant demonstrates, and the Department finds, that the project will have no significant adverse impact upon the public natural resources when:

(1) Any project located in or within 100 feet of any watercourse or body of water that has been designated as a national or state wild or scenic river in accordance with the National Wild and Scenic Rivers Act of 1968 or the Pennsylvania Scenic Rivers Act, Act of December 5, 1972, P. L. 1277.

(2) Any project located in or within 100 feet of a federal wilderness area designated in accordance with the Federal Wilderness Act of 1964 or the Federal Eastern Wilderness Act of 1975.

(3) Any Project located within an area which serves as a habitat of a rare or endangered species protected by the Federal Endangered Species Act of 1973.

[(4) Any project located in a Special Protection Watershed, as designated in 25 Pa. Code, Code Chapter 93.]

[(c)] (d) In reviewing permit applications, it will be the policy of the Department to encourage development that protects the natural condition of the watercourse or other body of water.

§105.17. [Projects Affecting Commercially Navigable Waters of the Delaware Basin.] Special Criteria for Projects Affecting Important Wetlands.

(a) [No permit will be granted for work in or within 300 feet of any wetlands or otherwise affecting any wetlands unless the applicant demonstrates, and the Department concludes, that the public benefits of the project outweigh the damage to the wetlands resource and that the project is necessary to realize the public benefits. In evaluating whether a particular project is necessary, the Department shall consider whether the wetlands perform any of the following functions important to the public interest:] Important wetlands shall be those wetlands which perform any of the following functions important to the public interest:

(1) Wetlands which serve important natural biological functions, including food chain production, general habitat, and nesting, spawing, rearing and resting sites for aquatic or land species;

(2) Wetlands set aside for study of the aquatic environment or as sanctuaries or refuges;

(3) Wetlands, the destruction or alteration of which would affect detrimentally natural drainage characteristics, sedimentation patterns,

salinity distribution, flushing characteristics, natural water filtration processes, current patterns, or other environmental characteristics;

(4) Wetlands which are significant in shielding other areas from wave action, erosion, or storm damage. Such wetlands are often associated with barrier beaches, island, reefs and bars;

(5) Wetlands which serve as valuable storage areas for storm and flood waters;

(6) Wetlands which are prime natural recharge areas. Prime recharge areas are locations where surface and ground water are directly interconnected.

(b) No permit will be granted for work in or within 300 feet of any important wetlands or otherwise affecting any important wetlands unless the applicant demonstrates, and the Department concludes, that the public benefits of the project outweigh the damage to the wetlands resource and that the project is necessary to realize public benefits.

[(b)] (c) The Department shall consider whether feasible alternative sites not in close proximity to the aquatic environment are available. The applicant must provide sufficient information on the need to locate the proposed activity in the wetland or in close proximity to the aquatic environment and the wetland and must provide data on the basis of which the availability of feasible alternative sites can be evaluated.

[(c)] (d) In evaluating an application for work affecting important wetlands, the Department shall consider whether the cumulative effect of numerous such piecemeal changes may result in a major impairment of the wetland resources; the Department shall evaluate a particular wetland site for which an application is made with the recognition that it is part of a complete and interrelated wetland area.

[(d)] (e) Mitigation of a form approved by the Department shall be provided by the applicant for any unavoidable adverse impacts on important wetlands created by a project.

§105.18. [Projects Affecting Wetlands] Projects Affecting Commercially Navigable Waters of the Delaware Basin.

(a) No individual or general permit for a dam, water obstruction or encroachment in the commercially navigable waters of the Delaware River or its navigable tributaries shall be issued without notice to and approval by the Navigation Commission.

(b) When the Department receives a completed application containing sufficient information to determine compliance with the standards of this chapter, it shall provide notice to the Navigation Commission and forward a copy of the application to the Navigation Commission for review.

(c) The Navigation Commission may request from the applicant such additional information as the Commission determines is necessary to complete its review.

(d) Any individual permit application or general permit not acted upon by the Navigation Commission within 60 days following notice to the Commission, or within 60 days following receipt of any additional information required by the commission, shall be deemed approved by the Navigation Commission.

(e) A record of all permits issued for facilities in the commercially navigable waters of the Delaware River or its navigable tributaries shall be forwarded by the Department to the Navigation Commission.

§105.19. Complete Applications.

(a) The Department shall publish a notice in the Pennsylvania Bulletin upon receipt of a complete application for a permit and again upon the issuance of a permit by the Department.

(b) No application for a permit is complete until all necessary information and requirements under the Dam Safety and Encroachments Act and this Chapter, including Proof of Financial Responsibility, have been satisfied by the applicant.

(c) Whenever the Department determines that an application is incomplete or contains insufficient information to determine compliance with the standards of this chapter, it will notify the applicant in writing. The applicant shall then have sixty (60) days to complete his application, or the Department will return the application to the applicant as incomplete.

§105.20. Proof of Financial Responsibility.

(a) Prior to the approval of any permit under this chapter for construction or modification of a [for any] dam, water obstruction, or encroachment which may present a substantial potential risk to life or property, the Department will require proof of financial responsibility or security for continued operation and maintenance during the lifetime of the facility. Categories of dams, water obstructions, or encroachments which are subject to the proof of financial responsibility requirement include, but are not limited to, Category 1 [and 2] dams, (Hazard Potential Classification, as defined in §105.91), stream enclosures, and bridges.

(b) As proof of such responsibility or security, the Department may require one or more of the following:

(1) A Certificate of Public Convenience from the Public Utility Commission if the owner of the proposed facility is subject to

regulation under the Act of May 28, 1937, P.L. 1053, No. 286 (66 Pa. C.S. §§101-3315), known as the "Public Utilities Law," and 66 Pa. C.S. §§101-3315.

(2) Ownership or management of the facility by an agency of the Federal, Interstate compact, State, county, or municipal government.

(3) A bond or other legal device of a form acceptable to the Department, payable to the Commonwealth, which guarantees proper construction, repair, operation, and maintenance, inspection and monitoring of the facility and removal, if necessary. The amount of such shall be sufficient to cover all costs of entry, repair, correction, operation, maintenance, inspection, monitoring, or removal of the facility by the Commonwealth in the event of failure of the owner to comply with orders of the Department, terms and conditions of the permit, the provisions of this Chapter, and the laws under which this Chapter is adopted.

PERMIT ISSUANCE, TRANSFER, AND REVOCATION

§105.21. Issuance of Permits.

(a) The Department may grant a permit if it determines that:

(1) the application is complete;

(2) the proposed project or action complies with the standards and criteria of this chapter and title, and with all other laws administered by the Department, the Pennsylvania Fish Commission and any river basin commission created by interstate compact;

(3) The proposed project or action will adequately protect public health, safety, and the environment.

(4) the proposed project or action is consistent with the environmental rights and values secured by Article I, §27 of the Constitution, and with the Commonwealth's duties as trustee to conserve and maintain Pennsylvania's public natural resources.

(b) Any permit issued pursuant to this Chapter shall be subject to such general and special conditions regarding construction, operation, maintenance, inspection and monitoring of a project or action as the Department may deem necessary to assure compliance with the requirements and purposes of the chapter, the Dam Safety and Encroachments Act, the Flood Plain Management Act, and other laws administered by the Department, the Pennsylvania Fish Commission and any river basin commission created by interstate compact.

§105.22. Denial of Permits.

The reason for denial of any permit application and appeal procedures shall be communicated in writing to the applicant.

§105.23. Compliance With Other Applicable Statutes.

Receipt of a permit under the provisions of this chapter shall not relieve the permittee of the obligation of complying with all Federal, Interstate compact, and State laws, regulations, and standards applicable to the construction, operation, or maintenance of the dam or water obstruction.

§105.24. Coordination of Permits.

(a) The Department will establish a system to coordinate the application for and issuance of permits under this Chapter with permit processes conducted pursuant to other statutes and regulations administered by the Department, and with permit processes administered by other federal and state agencies.

(b) Where possible, the Department will develop joint permit application forms to facilitate the submission of information on related activities of a project regulated under statutes and regulations administered by the Department, and other federal and state agencies, in order to reduce duplicate and repetitious application requirements.

at the option of the applicant, such joint application forms may be used in lieu of individual applications for the required permits.

[§105.24.] §105.25. Transfer of Permits.

(a) Permits may be reissued in a new name if there is a change of ownership of the dam, water obstruction, or encroachment.

(b) A permit may be transferred only upon application to and approval by the Department.

(c) No permit shall be transferred if a violation of this Chapter exists at the time of application for transfer unless the transfer will expedite correction of the violation.

(d) The applicant for a transfer shall expressly agree to abide by all permit conditions and shall provide the Department with proof of financial responsibility and security in accordance with §105.20 of this title (relating to proof of financial responsibility).

(e) The original permittee shall not be relieved of any obligation to comply with the provisions of this chapter, the terms and conditions of the permit, or any order issued by the Department until the transfer has been approved.

[§105.25.] §105.26. Revocation and Suspension of Permits.

(a) Failure to comply with any provision of this chapter, any order of the Department, or any term or condition of a permit issued pursuant to this chapter shall be cause for the Department to revoke or suspend any permit.

(b) The Department shall issue to the permittee a written notice of the suspension or revocation of a permit. Any such notice shall be subject to the procedure for appeal and hearing before the Environmental Hearing Board, as provided by section 24 of the Dam Safety and Encroachments Act, Section 1921-A of the Administrative Code and the Administrative Agency Law.

SUBMERGED LANDS OF THE COMMONWEALTH -
LICENSES AND ANNUAL CHARGES

§105.31. Property Rights.

(a) Except as provided in §§105.32 and 105.33 of this title (relating to licenses for public service corporations), no permit issued pursuant to the provisions of this chapter shall give any real or personal property rights nor grant any exclusive privileges, nor shall it be construed to grant or confer any right, title, easement, or interest in, to, or over any lands belonging to this Commonwealth.

(b) No permit for a dam, water obstruction or encroachment to occupy submerged lands of the Commonwealth [extending below the low water mark of a navigable river or stream] shall be issued by the Department until the applicant has first obtained:

(1) an easement, right-of-way, license or lease from the Department pursuant to section 15 of the Dam Safety and Encroachments Act (32 P.S.§693.15) and §105.32 of this Chapter;

(2) a license pursuant to section 514 of The Administrative Code of 1929 (71 P.S. §194) and §105.33 of this title (relating to licenses for public service corporations); or

(3) a license, easement, right-of-way, or other interest in the submerged lands [below the low water mark] of the Commonwealth granted pursuant to specific statutory authority from the General Assembly.

(c) For purposes of this section, "to occupy submerged lands of the Commonwealth" includes:

(1) The placement of a physical structure on, under or over submerged lands of the Commonwealth;

(2) The use or control of the space overlying submerged lands of the Commonwealth, associated with use of a structure, with

such regularity and in such manner as to substantially restrict or prevent navigation, fishing, recreation or other public trust uses by the general public on or over such lands.

§105.32. Projects Affecting Submerged Lands of the Commonwealth - Proper Purpose.

(a) If the applicant does not have an estate or interest in the submerged lands of the Commonwealth pursuant to other specific authority from the General Assembly at the time of application for a permit pursuant to the Dam Safety and Encroachments Act, the Department may, with the approval of the governor, grant an easement, right-of-way, license or lease to occupy submerged lands of the Commonwealth in any navigable lake or river or stream declared a public highway, for any dam, water obstruction, or encroachment regulated under this Chapter which is constructed for the purpose of:

(1) improving navigation or public transportation;

(2) recreation, fishing or other public trust purposes;

(3) protecting public safety or the environment;

(4) providing water supply, energy production or waste treatment;

(5) providing a public utility service by a government agency or subdivision, public utility or electric cooperative; or

(6) other activities which require access to water.

(b) The total area of land which any such project may occupy under one or more easements, rights-of-way, licenses or leases granted by the Department pursuant to this Section shall not exceed twenty-five acres.

§105.33. Licenses for Public Service Corporations.

In accordance with section 514 of The Administrative Code of 1929 (71 P.S. §194), any permit issued to a public service corporation to place a public service line upon, in, or over submerged land of this Commonwealth shall incorporate a license for the privilege of crossing Commonwealth lands.

§105.34. Navigation and Public Trust.

No easement, right-of-way, lease or license will be granted by the Department if it may adversely affect navigation or significantly impair the public's right in lands held in trust by the Commonwealth.

§105.35. Charges for Use and Occupation of Submerged Lands of the Commonwealth.

(a) Except as provided in subsections (b) and (c), the following charges shall apply to the granting of an easement, right-of-way, license or lease to occupy submerged lands of the Commonwealth issued pursuant to section 15 of the Dam Safety and Encroachments Act and section 105.32 of this Chapter:

(1) For commercial utility and other dams, water obstructions, and encroachments (except as listed below):

(a) [Charge for preparation of agreement and related papers - $100.]

[(b)] Annual rental charges:

(i) For areas occupied by facilities - $50 per acre, determined in tenths of an acre;

(ii) For barge fleeting <u>and mooring</u> areas - [$25] <u>$10</u> per acre, determined in tenths of an acre;

(iii) Minimum annual charge - $25.

(2) For private recreation docks, for use by no more than three boats, owned and used solely by the owners of adjacent riparian property (unless the project is otherwise authorized by a general permit issued pursuant to §7 of the Dam Safety and Encroachments Act) an annual charge of $25.

[(3) No charge shall be imposed for the following:

(a) Any project constructed or operated primarily for the benefit of a State building or State institution, or constructed or operated by the Commonwealth;

(b) Any project or activity constructed or operated to provide access by the general public to waters for purposes of recreation, where such access is provided without charge or on a non-profit basis;

(c) Any project or activity constructed or operated by a political subdivision which relates to a service for which no charge or fee is collected by the political subdivision.]

(b) Licenses for public service lines crossing or occupying submerged lands of the Commonwealth, issued pursuant to section 15 of the Dam Safety and Encroachments Act or section 514 of the Administrative Code, shall be subject to the following schedule of annual charges:

Length of Crossings (in feet)	Charges (in dollars)
Less than 500	$ 25
500 to 999	50
1000 to 1499	100
1500 to 1999	150
2000 to 2499	200
2500 to 2999	250
3000 to 3499	300
3500 to 3999	350
4000 to 4499	400
4500 to 4999	450
5000 and over	500

(c) No charges shall be imposed pursuant to section 15 of the Dam Safety and Encroachments Act or section 514 of the Administrative Code for the following categories of activities and structures:

(1) Any activity or structure constructed, owned or operated by a department, commission or agency of the Commonwealth or Federal government;

(2) Any [facility] <u>project or activity</u> constructed or operated primarily for the benefit of a state building or state institution;

(3) Any flood control project constructed, owned or operated by an agency of the Commonwealth, the Federal government, or a municipality;

(4) Any [facility] project or activity constructed, owned or operated by a political subdivision of the Commonwealth in connection with a service for which no fees or charges (other than general taxes) are imposed;

(5) Any facility to provide access to the general public to water for recreational boating, fishing, hunting, swimming or other recreation, [operated] where such access is provided without charge or on a non-profit basis;

(6) Any structure or facility constructed and operated exclusively to improve fish habitat, pursuant to a cooperative agreement with the Pennsylvania Fish Commission;

(7) Any private recreational dock constructed pursuant to a general permit.

(d) The annual charges imposed in subsections (a) and (b) of this §105.35 may be revised by the Environmental Quality Board at such future time after approval by the Governor and reasonable notice to the holder of any license issued under this section.

(e) This section shall not apply to any crossing contiguous to or in a State park or State forest lands. Easements for such crossings shall be administered in accordance with section 514 of The Administrative Code of 1929 (71 P.S. §194) and the park and forest land management practices of the Department.

(f) The removal of sand, gravel and other valuable minerals from submerged lands of the Commonwealth shall be subject to the royalty and agreement provisions established pursuant to section 1908-A of the Administrative Code and the Act of July 31, 1970 (P.L. 699, No. 225).

CONSTRUCTION REQUIREMENTS AND PROCEDURES

§105.41. Notices and Reports.

(a) The permittee shall notify the Department, in writing, of the proposed time for commencement of work, at least 5 days prior to the commencement of construction.

(b) The Department may require submission of such reports as it deems necessary on the status of construction.

§105.42. Acknowledgement of Conditions.

(a) The permittee shall fully inform any engineer or contractor responsible for the supervision and conduct of work covered by any permit issued pursuant to this chapter of all terms, conditions, restrictions, and covenants of the permit.

(b) Prior to the commencement of any construction, the permittee shall file with the Department in writing, on a form provided by the Department, a statement signed by the permittee and any individual responsible for the supervision or conduct of the construction work acknowledging and accepting the general and special conditions contained in the permit. Unless such acknowledgement and acceptance have been filed, the permit shall be null and void.

(c) A copy of the permit and the acknowledgement shall be available at the work site for inspection upon request by any officer or agent of the Department or any other Federal, State, county, or municipal agency.

§105.43. Time Limits.

(a) The Department will set such time limits for the commencement and completion of work pursuant to any permit issued under this chapter as it deems reasonable and appropriate to carry out the purposes of this chapter.

(b) If such work is not completed on or before the dates set by the Department, unless extended by the Department in writing, the permit shall become null and void without further notification being required.

§105.44. Implementation of Work According to Specifications.

(a) All work undertaken pursuant to a permit issued under this chapter shall be conducted in accordance with the maps, plans, profiles, and specifications as approved by the Department.

(b) No changes in the maps, plans, profiles, and specifications for work covered by a permit which would affect the waterway area or structural stability of the project shall be made except with the written approval of the Department. Upon written approval by the Department, such changes shall become part of the permit.

(c) The Department shall have the right during the progress of work to require such changes or modifications in the maps, plans, profiles, and specifications for work covered under any permit as it may determine are necessary and proper to protect the public health, safety, and the environment.

§105.45. Inspections.

All work, structures, and land covered under a permit issued pursuant to this chapter shall at all times be subject to inspection by representatives of the Department, and the permittee shall allow any representative of the Department to enter any property, premises, or place associated with such permit for the purposes of such inspection.

§105.46. Implementation of Erosion and Sedimentation Control Plans.

(a) At all times during the construction of any dam, water obstruction, or encroachment, the permittee shall follow the erosion and sedimentation control plan prepared in accordance with Chapter 102 of this title and submitted with and approved as part of his application.

(b) Construction shall be done in a manner so as to minimize erosion of banks and bed of the stream and disturbance of the regimen of the stream.

§105.47. Removal of Structures.

(a) If all construction work has not been completed within the time specified in the permit and the time limit specified in the permit has not been extended in writing by the Department or if a permit has been revoked for any reason, the permittee shall, at his own expense, in such manner as the Department may prescribe, remove all or any portion of the work as the Department requires and restore the water course and floodplain to their former condition.

(b) Prior to discontinuing use or abandonment, the owner of any structure covered by this chapter, regardless of whether or not it was constructed under a permit from this Department or its predecessors, shall remove all or part of the facility and take other actions as are necessary to protect safety and the environment in accordance with a permit issued by the Department.

[(c) The owner shall make no claim against the Commonwealth or any of its officers or agents on account of any such removal or alteration of any structure.]

OPERATION, MAINTENANCE, AND INSPECTION

§105.51. Operation and Maintenance.

(a) The permittee or owner of any dam, water obstruction, or encroachment shall at all times operate and maintain the facility and all appurtenant structures in a safe condition in accordance with all permit terms and conditions and the provisions of this Chapter, so that the facility cannot imperil life, health, safety, or property located above or below the facility.

§105.52. Inspection.

Regardless of the date of construction of a dam, water obstruction, or encroachment or whether or not it was permitted by the Department or its predecessors, it shall be the duty of the permittee or owner of a dam, water obstruction, or encroachment to evaluate the safety of the facility and all appurtenant structures and to modify the facility in accordance with the permit requirements of §105.11, to ensure [its safety] protection of life and property in accordance with changed conditions and current safety criteria.

§105.53. Inspections By Owners and Inspection Reports.

The permittee or owner of any dam, water obstruction, or encroachment shall inspect the facility and all appurtenant works according to the following schedule:

(a) All dams, reservoirs, and their appurtenant works shall be inspected at least once every three months.

(b) For all Category 1 or Category 2 dams, Hazard Potential Classification as defined in §105.91 of this Title, annual reports regarding the condition of the dam, certified by a registered professional engineer, shall be submitted to the Department on or before October 1 of each year. More frequent reports of dam conditions may be required by the Department, if in its discretion, conditions indicate such reports are necessary to assure adequate protection of health, safety, and property.

(c) For all local flood protection projects, annual reports regarding the condition of the flood protection facility shall be submitted to the Department on or before October 1 of each year.

(d) The owner of any water obstruction or encroachment shall conduct periodic inspections to ensure the safe operation, monitoring, and

maintenance of the facility in accordance with the rules and regulations of the Department, terms and conditions of the permit, and approved operating or monitoring plans.

(e) The owner shall retain records of such inspections, including records of actions taken to correct conditions found in such inspections. Copies of such records shall be provided to the Department on request.

(f) The Department may, through terms and conditions of the permit or by request at any time, require the owner to submit certified reports regarding the condition of the facility to the Department.

(g) In lieu of inspections conducted by the owner and certified reports submitted by the owner, the Department may accept reports of equivalent inspections conducted and prepared by governmental agencies. In addition, the Department may accept equivalent inspection reports certified by the owner and submitted to other governmental agencies.

§105.54. Monitoring Systems.

The permittee or owner of any dam, water obstruction, or encroachment shall set up and implement such monitoring systems as are required by the Department in the terms and conditions of the permit.

INVESTIGATION AND CORRECTION OF UNSAFE CONDITIONS—
EMERGENCY PROCEDURES

§105.61. Procedures for Investigations.

The Department may, if it finds there is reasonable cause to suspect the existence of conditions adversely affecting the safety of a dam, water obstruction, or encroachment, order the owner to conduct such investigations, studies, tests, and analyses as may be required to properly evaluate the safety of the structure. Such investigations, studies, tests, and analyses shall be accomplished under the supervision

of a registered professional engineer, experienced in the design, construction, operation, and maintenance of such facilities and approved by the Department, and in accordance with such methods as the Department may prescribe. Failure to provide such investigation results to the Department on request shall constitute adequate grounds for revocation or suspension of a permit.

§105.62. Correction of Unsafe Conditions.

(a) If the Department determines that any dam, water obstruction or encroachment is unsafe or adversely affects property or the environment or has not been properly constructed, operated, monitored, or maintained in compliance with all legal requirements, it may require the owner of the facility to repair, alter, maintain, or remove the facility or take such other action as necessary to carry out the purposes of this Chapter within such time as prescribed by the Department.

(b) The Department or its authorized agents may enter and conduct such investigations, tests, and analyses or take such corrective action as required to carry out the purposes of this Chapter if one or more of the following conditions exist:

(1) the owner cannot be ascertained or found;

(2) the owner refuses or fails to comply with an order issued by the Department pursuant to Section 14 of the Dam Safety and Encroachments Act or this section; or

(3) the condition of the facility is so dangerous as to require immediate remedial action.

The Department thereafter may recover from the owner, in the name of the Commonwealth, the expenses incurred in taking such action in the same manner as debts are recoverable by law.

§105.63. Emergency Procedures.

(a) The permittee or owner of any dam, water obstruction, or encroachment shall immediately notify the Department and responsible authorities in adjacent and downstream communities, including emergency management authorities, of any condition which may threaten the safety of the facility, and take all necessary actions to protect life and property, including any action required under an emergency plan or Department order issued pursuant to the Dam Safety and Encroachments Act.

(b) The permittee or owner of any dam or reservoir shall immediately notify the Department, and responsible Emergency Management authorities in adjacent and downstream communities of any conditions which may indicate a potential dam hazard emergency, including, but not limited to, any of the following conditions:

(1) Sliding of upstream or downstream slopes or abutments contiguous to the dam.

(2) Sudden subsidence of the crest of the dam.

(3) Longitudinal or transverse cracking of the crest of the dam.

(4) Unusual release of water from the downstream face and/or toe of the dam.

(5) Any other unusual conditions at the downstream slope of the dam.

(6) Significant landslides in the reservoir area.

(c) Telephone calls to the Department pursuant to this section should be directed to the following numbers:

Norristown Region - (215) 631-2422
For the following counties:

Berks	Delaware	Northampton
Bucks	Lehigh	Philadelphia
Carbon	Monroe	Pike
Chester	Montgomery	Schuylkill

Carnegie Region - (412) 276-111
For the following counties:

Allegheny	Crawford	Lawrence
Armstrong	Elk	McKean
Beaver	Erie	Mercer
Butler	Fayette	Potter
Cambria	Forest	Somerset
Cameron	Greene	Venango
Clarion	Indiana	Warren
Clearfield	Jefferson	Washington
		Westmoreland

Harrisburg Region - (717) 783-9726
For the following counties:

Adams	Franklin	Lancaster
Bedford	Fulton	Lebanon
Blair	Huntingdon	Mifflin
Cumberland	Juniata	Perry
Dauphin		York

Wilkes-Barre Region - (717) 826-2371
For the following counties:

Bradford	Luzerne	Sullivan
Centre	Lycoming	Susquehanna
Clinton	Montour	Tioga
Columbia	Northumberland	Union
Lackawanna	Snyder	Wayne
		Wyoming

(d) In the event that no contact is made with the Regional Office, calls should be directed to the Harrisburg Central Office at (717) 787-4467 or (717) 783-1384, or to the Pennsylvania Emergency Management Agency at the following number: (717) 783-8150.

SUBCHAPTER B. DAMS AND RESERVOIRS

GENERAL PROVISIONS

§105.71. Scope.

Except as provided in §§105.3 and 105.12 of this title (relating to scope and waiver of permit requirements), provisions of this subchapter shall govern the construction, alteration, enlargement, repair, maintenance, operation, and removal of any dam or reservoir regulated under the Dam Safety and Encroachments Act.

PERMITS

§105.81. Permit Applications for Construction & Modification of Dams and Reservoirs..

(a) In addition to the information required by §§105.13 and 105.14 of this [title] chapter (relating to permit application information and engineer's certification), all permit applications pursuant to this subchapter for the construction or modification of dams and reservoirs shall give the following information:

(1) The name and address of the applicant.

(2) The location, type, size, height, and purpose of the proposed dam and reservoir and appurtenant works.

(3) For projects involving storage of fluids or semi-fluids other than water, information concerning the chemical content, viscosity, and other pertinent physical characteristics of the fluid or semi-fluid impounded.

(4) The storage capacity and reservoir surface areas for normal pool and maximum high water.

(5) Plans for proposed permanent monitoring of performance by instrument installations in the dam, including the purposes of the instrumentation. If no instrumentation is considered necessary, reasons for this judgment shall be stated.

(6) As accurately as may be readily obtained, the area of the drainage basin, pertinent rainfall and streamflow records, and flood flow records and estimates.

(7) The proposed time for commencement and anticipated completion of construction.

(8) The method and schedule of operation of the dam, including an emergency warning system and operation plan, if required pursuant to §105.134.

(9) Plans for control of erosion and water pollution during the anticipated construction operations, including plans for adequate measures to limit the erosion of the soil from exposed slopes after completion of construction. Such plans shall indicate that adequate control measures will be taken during construction to protect the quality of stream flow below the project site. The application shall include a copy of a letter from the Conservation District in the county where the project is located indicating that the District reviewed the applicant's erosion and sediment control plan and considers it to be satisfactory.

(10) Proof of title or adequate flowage easements for all land area below the top of the dam elevation that is subject to inundation.

(11) Such other information as the Department may require.

(b) The application shall be accompanied by a design report, construction plans, and specifications, all in sufficient detail to evaluate the safety, adequacy, and suitability of the proposed work.

(c) The applicant shall conduct and submit the results of such investigations and tests as the Department, in its judgment, believes are necessary to determine the safety, adequacy, and suitability of design, including but not limited to:

(1) Data concerning subsoil and rock foundation conditions and the materials entering into the construction of the dam or reservoir.

(2) Data concerning exploratory pits, drilling, coring, and tests to determine seepage rates.

(3) Data concerning the strength tests necessary to measure the physical properties and behavior of foundation and embankment materials at the dam or reservoir site.

(4) Data concerning the geology of the dam or reservoir area, indicating possible hazards such as faults, weak seams, and joints.

(5) Data concerning availability and quality of construction materials.

(6) Such other information as may be necessary, including the design calculations for the dam, which shall be made available to the Department on request.

(d) All plans and specifications and the results of any tests or investigations shall be prepared under the supervision of and certified by a registered professional engineer experienced in dam design and construction and assisted by qualified engineers, geologists, and other specialists, when necessary.

§105.82. Permit Applications for Operation and Maintenance of Existing Dams and Reservoirs.

(a) In addition to information required by §§105.13 and 105.14 of this Chapter (relating to permit application information and engineer's certification), a permit application for the operation and maintenance of existing dams and reservoirs shall give the following information:

(1) The name and address of the applicant.

(2) The location, type, size, height and purpose of the existing dam and reservoir and appurtenant works.

(3) For projects involving storage of fluids or semifluids other than water, information concerning the chemical and physical characteristics of the fluid or semifluid impounded.

(4) The storage capacity and reservoir surface areas for normal pool and maximum high water.

(5) A description of facilities and plans for monitoring the performance of the dam.

(6) Information on the area of the drainage basin, rainfall and stream flow records, and flood flow records and estimates, where available.

(7) Such information as is readily available regarding the foundation, specifications and construction of the dam.

(8) The method and schedule of operation of the dam, if deemed necessary by the Department.

(9) The emergency warning plan for the dam or reservoir, if completed, or work plan to prepare and submit such an emergency warning plan in accordance with §§105.131 and 105.134 of this Chapter.

(10) Proof of title or flowage easements for all land areas below the top of the dam elevation that is subject to inundation.

(11) Reports of the most recent inspections of the dam conducted by the owner or by the state or federal government agencies.

(12) Such other information as the Department may require.

(b) The Department may waive or modify any of the application content requirements set forth in subsection (a), if the information required is not available and is not essential to determining the safety of the dam or reservoir or compliance by the dam or reservoir with the requirements of this Chapter.

CLASSIFICATION AND DESIGN CRITERIA

§105.91. Classifications of Dams and Reservoirs.

(a) Each dam or reservoir shall be [assigned a classification by the Department,] classified in accordance with [the] size and the hazard potential [damage] which might occur in the event of an operational

or structural failure. In [assigning such damage] approving a hazard potential classification, the Department will consider, without limitation:

(1) the height of the dam and storage capacity of the reservoir;

(2) the physical characteristics and degree of actual and projected development of the dam site and downstream areas; and

(3) the relationship of the site to existing or projected industrial, commercial, and residential areas and other land uses downstream which may be affected by a dam failure.

(b) The following shall be the classifications and descriptions as used in this Subchapter B:

SIZE CLASSIFICATION*

Class	Impoundment Storage (Acre Feet)	Dam Height (Feet)
A	Equal to or greater than 50,000	Equal to or greater than 100
B	Less than 50,000 but greater than 1000	Less than 100 but greater than 40
C	Equal to or less than 1000	Equal to or less than 40

*NOTE: Size classification may be determined by either storage or height of structure, whichever gives the higher category.

HAZARD POTENTIAL CLASSIFICATION

Category	Extent of Development: Loss of Life	Extent of Development: Economic Loss
1	Substantial	Excessive (extensive residential, commercial, agricultural and substantial public inconvenience)
2	Few (no rural communities or urban developments and no more than a small number of habitable structures)	Appreciable (damage to private or public property and short duration public inconvenience)
3	None expected (no permanent structure for human habitation)	Minimal (undeveloped or occasional structures with no significant effect on public convenience)

§105.92. Foundations.

(a) The foundation of any dam or reservoir shall be stable under all probable conditions.

(b) In analyzing the stability of the foundation of any proposed or existing dam or reservoir, the applicant must consider all of the following factors:

(1) The seismic forces at the site.

(2) The shearing strength of the foundation.

(3) Settlement and subsidence.

(4) Leakage, permeability, and solubility.

§105.93. Design Stress.

In the construction of all dams and reservoirs, allowable stresses shall conform to the current standards accepted by the engineering profession.

§105.94. Spillways.

(a) Every dam shall be provided with a spillway system which is capable of safely conveying the design flood of the dam without endangering the safety or integrity of the dam.

(b) Each spillway shall include a satisfactory means of dissipating the energy of flow at its outlet to assure conveyance of flow without endangering the safety and integrity of the dam or the natural environment of the stream.

§105.95. Freeboard.

Sufficient freeboard shall be provided to prevent overtopping of the dam during the design flood of the dam and to allow for wave and ice action.

§105.96. Outlet Works.

(a) All dams shall include a device to permit the draining of the reservoir within a reasonable period of time as determined by the Department, unless the Department determines that an outlet works is not feasible for a specific dam.

(b) In determining the reasonable time period for drainage of the reservoir, the Department may consider, without limitation, the following factors:

(1) The damage potential posed by possible failure of the dam.

(2) The risk and nature of potential failure and the time likely to be available to avert such failure after notice of conditions threatening the safety or stability of the dam.

(3) The purpose of the dam and reservoir.

(4) The capacity and stability of available drainage courses to convey the waters released from the reservoir in the event of emergency drainage.

(5) The influence of rapid drawdown on the stability of the dam, its appurtenant works, and the upstream natural slopes of the reservoir.

(c) Each outlet works shall include a means of dissipating the energy of flow at its outlet to assure conveyance of flow without endangering the safety and integrity of the dam or the natural environment of the stream.

§105.97. Stability of Structure.

(a) All dams shall be structurally sound and shall be constructed of sound and durable materials. The completed structure shall be stable under all probable conditions of operation.

(b) In reviewing the stability of a structure, the Department may consider, without limitation, the following:

(1) The physical properties of the materials available for construction.

(2) The seismic and hydraulic forces affecting the structure.

(3) The methods of construction.

(4) The conditions of operation of the dam and reservoir.

§105.98. Design Flood Criteria.

(a) The discharge capacity or storage capacity, or both, should be capable of safely accommodating the recommended design flood for the size and hazard potential classification of the dam as determined by §105.91 of this title (relating to classification of dams and reservoirs). The design flood is intended to represent the largest flood that need be considered in the evaluation of a given project. Where a range of design flood is indicated, the magnitude that most closely relates to the size and hazard potential should be selected. Design flood criteria shall be as indicated in the following table:

Size and Hazard Potential Classification	Design Flood
A-1, A-2, B-1	PMF
A-3, B-2, C-1	1/2 PMF to PMF
B-3, C-2	100 year to 1/2 PMF
C-3	50 year to 100 year frequency

(b) The Department may, in its discretion, require consideration of a minimum design flood for any class of dams or reservoirs in excess of that set forth in subsection (a) of this section where it can be demonstrated that such a design flood requirement is necessary and appropriate to provide for the integrity of the dam or reservoir and to protect life and property with an adequate margin of safety.

(c) The Department may, in its discretion, consider a reduced design flood for any class of dams or reservoirs where it can be demonstrated that such design flood provides for the integrity of the dam or reservoir and protects life and property with an adequate margin of safety.

§105.99. Dams in Subdivision Developments.

Wherever a dam or reservoir is proposed to be constructed in or as a part of any existing or proposed subdivision development, the Department will include in the permit such conditions as are necessary to prevent construction of structures on lands which may be subject to flooding caused by the maximum pool of the dam and to require the permittee to adequately inform potential buyers or lessees of such restrictions.

CONSTRUCTION REQUIREMENTS AND PROCEDURES

§105.101. Notices and Reports.

At least 15 days prior to commencement of construction, the permittee shall notify the Department, in writing, of the proposed time for commencement of work. Thereafter, a detailed report on the status of construction shall be submitted monthly to the Department of Environmental Resources, Division of Dam Safety, P.O. Box 2357, Harrisburg, Pa., 17120, until all construction work has been completed.

§105.102. Personnel and Supervision.

(a) All work shall be conducted under the [direction] oversight and supervision of a competent engineer, approved by the Department, and such engineer or a competent representative shall be on the work site at all times during significant construction activities [and] until completion of the dam.

(b) The permittee shall file with the Department at least 15 days prior to the commencement of construction a statement setting forth the name of the contractor or contractors conducting the work authorized by the permit and the names and employers of all personnel responsible for the supervision of construction.

§105.103. Weather and Ground Conditions.

(a) No earth or other embankment material which is in a frozen condition shall be covered or placed in embankments.

(b) Masonry and concrete shall not be placed in freezing weather, except under conditions approved by the Department.

§105.104. Removal and Disposal of Vegetation.

(a) All work shall be conducted in such a manner as to minimize the destruction of, or damage to trees and other vegetation on and adjacent to the construction site.

(b) Vegetation cleared and removed from the site shall be disposed of in accordance with all applicable laws and regulations.

§105.105. Collection and Disposal of Waste Materials.

All waste materials, scrap, or excess construction materials shall be collected, stored, and disposed of in accordance with the Solid Waste Management Act and Chapter 75 of this title (relating to solid waste management). In no event shall waste or scrap materials be stored or disposed of in or along any stream or other body of water or in a manner which could cause pollution of the air and waters of this Commonwealth.

§105.106. Activities and Facilities on The Construction Site.

All activities and facilities on the construction site shall be conducted and operated in such manner as to avoid pollution of the air and waters of this Commonwealth and in accordance with all applicable laws and the provisions of this title.

§105.107. Completion Certificate and Final Plans.

(a) Within 30 days after the completion of all work authorized by a permit issued under this subchapter, the permittee shall file with the Department a certified statement, signed by the supervising engineer and by the permittee, that all work has been performed in accordance with the terms and conditions of the permit; with the approved maps, plans, profiles, and specifications; and with all applicable laws and the provisions of this title.

(b) Within 90 days after the completion of all work, the permittee shall file with the Department a set of final "as built" plans for the project, showing all changes from the original plans and specifications.

WATER STORAGE AND DISCHARGE

§105.111. Commencement of Water Storage.

The permittee shall notify the Department, in writing, at least one week in advance of the date proposed for the commencement of water storage in the reservoir or pond created by the dam for which the permit is issued. The Department may, at its discretion, require that a representative of the Department be at the site before or during the filling of the pond or reservoir.

§105.112. Stream Flow During Construction, Filling, and Repair.

During the period of construction, alteration, enlargement, or repair and during the period that the pond or reservoir is being filled, the permittee shall allow a sufficient flow of water, as determined by the Department, into the stream below the dam to support fish and other aquatic life and to preserve the water quality in the stream.

§105.113. Releases.

(a) The Department will impose such general and special conditions regarding release rates in any permit for a dam or reservoir as it deems necessary to maintain stream flows for the purposes of protection of public health, water quality control, conservation of fisheries and aquatic habitat, improvement of recreation [creation], and protection of instream and downstream water uses. The appropriate release rates for such dams and reservoirs shall be established in accordance with subsections (b) and (c).

(b) For [all] dams or reservoirs constructed after August 28, 1978:

(1) The minimum release rate (unless modified in accordance with subsection (b)(2)) shall be the average consecutive seven-day flow having a recurrence interval of once in ten years (Q 7-10) plus an additional release rate determined by the following formula;

Release rate (csm)	=	Q 7-10 + PDF (.25 csm - Q 7-10 csm)
where PDF	=	the percentage factor based on the storage capacity of the reservoir measured as percent of average annual runoff retained in the reservoir. This factor is explained in Planning Principles, State Water Plan SWP-1 (March, 1975).
.25 csm	=	.25 cubic feet per second of flow per square mile of watershed.
Q 7-10 csm	=	The seven-day, ten-year low flow, in cubic feet per second per square mile of watershed.

The minimum release rate determined by this formula shall not exceed 0.25 cubic feet per square mile of watershed.

(2) [The release rate may be modified or additional releases required by the Department to provide for the purposes stated in subsection (a), and to satisfy particular stream requirements or downstream, riparian rights.] The Department may modify the minimum release rate, or provide variable schedules of releases, considering the following factors:

(i) The purposes states in subsection (a);

(ii) particular stream requirements, including the particular needs of instream and downstream water uses and riparian rights;

(iii) the particular uses and purposes of the dam or reservoir;

(iv) the particular engineering, hydrologic and economic factors affecting the ability of the dam or reservoir to provide such releases.

(c) For dams and reservoirs constructed prior to August 28, 1978, the Department shall determine a reasonable schedule for release rates, considering:

(1) The purposes stated in subsection (a), and the particular needs of instream and downstream water uses on the affected stream;

(2) The capacity of existing release works at the dam, and feasibility of potential modification of such release works;

(3) The yield of the reservoir, and its capability to meet release requirements and satisfy the purposes and uses of the reservoir.

(d) Every dam shall at all times be operated in such manner as to allow the required flow of water into the stream below the dam, as established pursuant to this section, and as otherwise necessary to support fish and other aquatic life and to assure compliance with the water quality criteria set forth in Chapter 93 of this title (relating to water quality criteria), and to provide for other instream uses for the affected stream or streams.

PROTECTION AND RESTORATION OF AQUATIC LIFE

§105.121. Fishways.

Upon the request of the Fish Commission, the permittee shall install and maintain such chutes, slopes, fishways, gates, or other devices as the Fish Commission may require pursuant to the provisions of section 185-187 of The Fish Law of 1959 (30 P.S. §§185-187).

§105.122. Drawdown of Impounded Waters.

Impounded waters which are inhabited by fish shall not be drawn down except with the written approval of the Fish Commission issued in accordance with section 191 of The Fish Law of 1959 (30 P.S. §191).

§105.123. Restoration of Aquatic Life.

If the Department finds that construction of a dam or reservoir has so substantially disrupted aquatic life as to preclude natural restoration of the stream ecology within a reasonable period of time, the permittee shall be required to submit and implement a plan to restore the aquatic life of the stream to its prior condition, to the maximum extent possible. The plan shall be subject to review and modification by the Department in consultation with the Fish Commission and shall include but not be limited to:

(1) placement of bed gravel;

(2) stabilization of banks and bed;

(3) installation of stream improvement devices;

(4) revegetation of stream and banks; and

(5) stocking of fish and other aquatic life.

OPERATION, MAINTENANCE, AND EMERGENCIES

§105.131. Operation and Monitoring Plans.

(a) In addition to the requirements of §§105.51 through 105.54 of this Title, the permittee or owner of any dam or reservoir shall at all times follow the method and schedule of operation of the dam or reservoir, including the emergency warning system and operation plan, if required by §105.134, as approved by the Department, and shall implement any plan approved by the Department for permanent monitoring of performance by instrument installation in the dam.

(b) No permittee or owner of any dam or reservoir shall modify or cease implementation of all or part of the approved plans and methods of operation or monitoring without the prior approval of the Department.

§105.132. Inspection.

The permittee or owner of any dam or reservoir shall follow the inspection schedule set forth in §105.53 of this Title.

§105.133. Directed Repairs.

The permittee shall immediately take any and all such steps as the Department may prescribe as necessary to preserve the structural stability and integrity of the dam and protect health, safety, and property.

§105.134. Emergency Warning System and Operation Plan.

(a) The owner of any dam or reservoir that may cause loss of life or serious damage to property should a failure of the dam occur shall develop an emergency warning system and operation plan to be followed in the event of a dam hazard emergency. The emergency warning system and operation plan shall be submitted to and approved by the Department and local emergency management officials prior to commencement of water storage in the reservoir or pond created by the dam during any stage of construction of the dam. The emergency warning system and operation plan shall, at a minimum, contain the following elements:

[(a)] (1) An identification of the area below the dam which may be threatened with loss of life or serious damage to property should a failure of the dam occur.

[(b)] (2) A listing of key municipal and emergency management officials and their telephone numbers. Such list shall be readily available at the dam site near a telephone or other means of communication, if available.

[(c)] (3) An identification of handicapped or other persons who may have difficulty evacuating the area which may be threatened should a failure of the dam occur. Procedures for identifying and evacuating such people in a dam hazard emergency should be developed in cooperation with local and emergency management officials.

(b) For any existing dam or reservoir that may cause loss of life or serious damage to property should failure of the dam occur, an emergency warning system and operation plan shall be submitted to and approved by the Department and local emergency management officials on or before January 1, 1983.

§105.135. Dam Hazard Emergencies.

(a) For the purposes of this section, a dam hazard emergency shall mean any condition which the Department, permittee, or owner of the dam reasonably finds constitutes an imminent threat to life or property above or below a dam, whether arising from the condition of the dam and appurtenant works or extraordinary natural conditions, affecting the safety and stability of the dam, including, but not limited to, flood, earthquake, fire, and ice jam.

(b) The emergency procedures and the emergency warning system and operation plan required by §§105.63 and 105.134 of this title shall be followed by the permittee and owner of any dam or reservoir in the event of any actual or potential dam hazard emergency.

(c) If a dam hazard emergency exists, the Department and the permittee or owner of the dam shall immediately notify appropriate emergency management officials of the existence of the hazard and [advise] request such authorities [of] to initiate appropriate [steps to be taken] action to assure protection of life and property; and

(d) The [Department will notify or order the] permittee or owner shall immediately [to] take such steps as [the Department determines] are necessary to prevent dam failure or loss of life or property, including, but not limited to, the following:

(1) Draw down of the reservoir;

(2) Reinforcement of the dam structure;

(3) Breach or removal of the dam;

(4) Removal of debris;

(5) Repair or installation of structures necessary to assure the stability and safety of the dam.

(e) The Department, upon determining that a dam hazard emergency exists, will notify the owner immediately to take such steps as the Department determines are necessary to prevent dam failure or loss of life or property.

§105.136. Unsafe Dams.

(a) For purposes of this section, an unsafe dam shall mean a dam which meets one or more of the following criteria:

(1) A dam with deficiencies of such a nature that if not corrected could result in the failure of the dam with subsequent loss of lives or substantial property damage. This determination is based on good engineering judgment or the application of the guidelines established for the National Dam Inspection Program.

(2) A dam classified as unsafe pursuant to the National Dam Inspection Program.

(3) A dam declared as unsafe by the Department.

(b) The owner of any unsafe dam shall:

(1) Immediately notify the Department upon receipt of any information indicating the dam is unsafe.

(2) Drain the dam as approved or required by the Department.

(3) Within time limits established by the Department, submit a plan for removal of the dam, a plan for repair of the dam, or an application for a permit authorizing modification of the dam pursuant to subsection (c) of this section.

(4) Following approval of the plan or permit by the Department, undertake and complete actions to remove or repair the dam or implement the modifications to the dam within the time limits set by the Department.

(c) The Department may issue a permit for modification of an unsafe dam, pursuant to §9 of the Act, which authorizes the owner of an unsafe dam to modify the dam within such time as prescribed in the permit to meet the requirements of the Dam Safety and Encroachments Act and this Chapter. Any such permit shall be conditioned upon:

(1) compliance by the owner of the dam with a prescribed schedule for correction or modification of the unsafe condition within the shortest time period technically feasible and economically achievable;

(2) implementation by the owner of the dam of such measures as are deemed necessary by the Department to reduce risks to health and safety pending correction or modification of the unsafe condition, including but not limited to special provisions relating to operation, emergency planning, monitoring and warning systems, and development of an alternative source of water supply, if the dam serves as a water supply dam.

(d) In determining whether to require removal of an unsafe dam or

to permit the owner to modify the dam, the Department shall consider whether there is a substantial adverse impact to the public health and safety which will result from the draining and removal of the dam, and whether that adverse impact outweighs the danger to public health and safety which will result in allowing the unsafe dam to remain until it has been modified.

(e) At the discretion of the Department, a public hearing may be held in the affected area prior to the issuance of any permit authorizing modification of an unsafe dam over a period of more than six months, to inform affected communities of the risks which may result from allowing the unsafe dam to remain standing or to impound water during the time necessary to complete the modifications.

(f) If, for any reason, the Department finds that conditions upon which the permit authorizing modification was issued have substantially changed or that the owner will not meet the schedule for modification contained in such permit, the Department shall review the status of the dam. An extension of the time period for completion of a modification may be issued by the Department, if the owner has proceeded in good faith with the previous schedule of modification and the requirements of subsections (c) and (d) of this §105.136 are mt.

(g) Nothing in this section shall be construed to limit the power of the Department to take immediate action, prior to public hearing, to:

(1) revoke or suspend any permit where deemed necessary by the Department to protect public health and safety.

(2) order correction or abatement of a dam hazard emergency pursuant to §105.135; or

(3) take any other action authorized by law.

Subchapter C. CULVERTS AND BRIDGES

GENERAL PROVISIONS

§105.141. Scope.

Except as provided in §§105.3 and 105.12 of this title (relating to scope and waiver of permit requirements), the provisions of this subchapter shall govern the construction, alteration, enlargement, repair, maintenance, and removal of any bridge or culvert located in, along, or across, or projecting into the regulated waters of the Commonwealth.

§105.142. Applicability of Stream Enclosure Rules.

Any culvert of greater than 100 feet in upstream to downstream length shall be considered to be a stream enclosure, subject to subchapter D of this title (relating to stream enclosures).

PERMITS

§105.151. Permit Applications for Construction or Modification of Culverts and Bridges.

In addition to the information required pursuant to [§]§105.13 [and 105.14] of this [title] Chapter (relating to permit application information and engineer's certification), all applications for permits pursuant to this subchapter for the construction or modification of culverts and bridges shall contain the following:

(1) Plans showing the location, type, size, and height of the proposed bridge or culvert and detailing the topographic features, elevations, and structures, so as to enable an appraisal of the hazard potential of the structure.

(2) A description of the character of the stream bed and banks and a profile of the stream for a reasonable distance above and below the proposed site, showing slopes of bed, normal water surface, and flood water surface.

(3) A hydrologic and hydraulic analysis which shall include: data on size, shape, and characteristics of the watershed; the amount and frequency of the design flood; the hydraulic capacity of the structure; the

hydraulic capacity of the channel upstream and downstream; and where flooding is a problem, flood damage and backwater analysis.

(4) Such other information as the Department may require.

§105.152. Permit Applications for Operation and Maintenance of Existing Culverts and Bridges.

(a) In addition to information required by §105.13 of this Chapter (relating to permit application information and engineer's certification) a permit application for the operation and maintenance of existing culverts and bridges shall give the following information:

(1) Plans showing the location, type, size, and height of the existing bridge or culvert and detailing the topographic features, elevations, and structures, so as to enable an appraisal of the hazard potential of the structure.

(2) A description of the character of the stream bed and banks and a profile of the stream for a reasonable distrance above and below the existing site, showing slopes of bed, normal water surface, and flood water surface.

(3) Such other information as the Department may require.

DESIGN CRITERIA FOR CONSTRUCTION OR MODIFICATION

§105.161. Hydraulic Capacity.

(a) Bridges and culverts shall be designed and constructed in accordance with the following criteria:

(1) The structure shall pass flood flows without loss of stability.

(2) The structure shall not create or constitute a hazard to life or property, or both.

(3) The structure shall not materially alter the natural regimen of the stream.

(4) The structure shall not so increase velocity or direct flow so as to result in erosion of stream bed and banks.

(b) In determining flood flows and frequencies for purposes of this subchapter, hydrologic analysis shall be by methods generally accepted in the engineering profession.

(c) The general criteria for design flows are as follows:

(1) Rural area - 25-year frequency flood flow.

(2) Suburban area - 50-year frequency flood flow.

(3) Urban area - 100-year frequency flood flow.

(d) The determination of flood flows for design shall be made with reasonable consideration of development which may alter the runoff characteristics of the watershed during the anticipated life of the structure. Specific design requirements in subsection (c) of this section may be varied to fit the conditions at the site and the requirements of flood plain management regulations and ordinances.

§105.162. Multiple Pipes and Spans.

Multiple pipes and multiple span bridges and culverts which may tend to collect debris, contribute to the formation of ice jams, and increase head losses shall be avoided to the maximum practicable extent. Crossings of less than 15 feet shall be by one span, except where conditions make it impractical to effect the crossing without multiple spans.

§105.163. Bridge Piers.

(a) Bridge piers shall be kept to a minimum in number and cross-sectional area and shall be designed to offer the least obstruction to the passage of water and ice, consistent with safety.

(b) Bridge piers in channels subject to unstable or super critical flow shall require special investigation and shall be so designed as to prevent the creation of excessive backwater and waves downstream of the pier.

§105.164. Bridge Abutments.

(a) Bridge abutments shall be set well into the banks, in such manner as to assure minimal increase in flood elevations.

(b) Bridge abutments shall be aligned with the flow of the stream. The Department may require, in its discretion, the construction of wing walls at the upstream side of the bridge to assist in directing flood flows through the bridge opening.

§105.165. Height of Bridges and Culverts.

All bridges and culverts shall be of sufficient height and clearance to allow the use of the stream or other body of water in its customary manner.

§105.166. Placement of Culverts.

(a) All culverts shall be aligned with the stream flow.

(b) Culverts shall be of sufficient width to minimize narrowing of the stream channel.

(c) The upstream side of all culverts shall be protected by wing walls or other structures sufficient to assist in directing flood flows to and through the culvert opening.

OPERATION AND MAINTENANCE

§105.171. Maintenance.

(a) The owner or permittee of any culvert or bridge shall be responsible for maintaining the structure opening thereof in good repair and assuring that the flood carrying capacity of the structure is maintained at all times. The owner or permittee shall inspect the opening and approach of the culvert or bridge at regular intervals of not less than once each year and shall, after obtaining the verbal or written approval of the Department, remove all silt and debris which might obstruct the flow of water through the structure. It shall be assumed that the flow of water is obstructed when there has been a reduction of the effective area of the structure opening of greater than 10%. All debris shall be disposed of in accordance with the provisions of the Solid Waste Management Act and Chapter 75 of this title (relating to solid waste management).

(b) No heavy equipment, such as bulldozers, drag lines, backhoes, bucket loaders, front-end loaders, and similar mechanized equipment, shall be used in the cleaning of structures or stream channels without the written approval of the Department.

(c) All cleaning and maintenance operations shall be so conducted as to minimize erosion and sedimentation resulting therefrom.

§105.172. Inadequate or Collapsed Structures.

(a) The owner or permittee of any bridge or culvert shall immediately inform the Department of the collapse of the structure or any portion thereof or of the existence of any unusual conditions threatening the structural integrity of the bridge or culvert, including, but not limited to, the following:

(1) Undercutting of piers or abutments.

(2) Excessive cracking of bridge or culvert surfacing.

(3) Severe deterioration of piers and supports.

(4) Diversion of all or part of the stream flow through a channel not within the normal span of the structure.

(b) Whenever a bridge or culvert or any portion thereof has collapsed or is in imminent danger thereof, the owner or permittee thereof shall immediately remove any and all collapsed portions to an area outside the floodplain of the stream and either:

(1) completely remove the structure; or

(2) repair the structure in accordance with plans submitted to and approved by the Department.

(c) If the Department finds that the inadequate size, improper placement, collapse or imminent collapse of any bridge or culvert creates such an immediate danger of stream obstruction and a hazard to life or property as not to permit the issuance of an order or notice to the owner or permittee or if the owner or permittee cannot be readily contacted in sufficient time to assure adequate protection of life or property, the Department may exercise its powers pursuant to section 14 of the Dam Safety and Encroachments Act (32 P.S. §693.14) to remove or repair such conditions and take such actions as it deems necessary to protect life and property and recover the cost and expense thereof from the owner or permittee.

Subchapter D. STREAM ENCLOSURES

GENERAL PROVISIONS

§105.181. Scope.

Except as provided in §§105.3 and 105.12 of this title (relating to scope and waiver of permit requirements), the provisions of this subchapter shall apply to the construction, alteration, enlargement, repair, and removal of any stream enclosure or any culvert in any of the regulated waters of the Commonwealth of upstream to downstream length in excess of 100 feet.

PERMITS

§105.191. Permit Applications for Construction or Modification of Stream Enclosures.

In addition to the information required by [§]§105.13 [and 105.14] of this [title] Chapter (relating to permit application information and engineer's certification), all applications for permits pursuant to this subchapter for the construction and modification of stream enclosures shall contain the following information:

(1) The location, type, size, and height of the proposed stream enclosure.

(2) A profile of the stream for a reasonable distance above and below the proposed site, showing slopes of bed, normal water surface, and flood water surface.

(3) Estimates of flood frequencies and flood flows at the site of the proposed structure, including such information as can be reasonably obtained regarding actual rainfall and flood flow records on the stream.

(4) An analysis of the hydraulic capacity of the proposed structure.

(5) A description of the purposes of the proposed structure.

(6) A complete listing and description of all other enclosures and all culverts, bridges, dams, and other water obstructions located a reasonable distance upstream and downstream of the proposed enclosure.

(7) Proof of title or adequate flowage and other easements for all lands included in the site of the proposed structure, including all lands which may be subject to flooding by backwater from such structure during a 100-year flood.

(8) Such other information as the Department may require.

§105.192. Permit Applications for Operation and Maintenance of Existing Stream Enclosures.

(a) In addition to information required by §105.13 of this Chapter (relating to permit application information and engineer's certification) a permit application for the operation and maintenance of existing stream enclosures shall give the following information:

(1) The location, type, size and height of the proposed stream enclosure.

(2) A profile of the stream for a reasonable distance above and below the existing site.

(3) An analysis of the hydraulic capacity of the existing structure.

(4) A description of the purposes of the existing structure.

(5) Such other information as the Department may require.

CRITERIA FOR APPROVAL OF CONSTRUCTION OR MODIFICATION

§105.201. Hydraulic Capacity.

All stream enclosures shall be so designed and constructed as to be capable, at a minimum, of passing without substantial hindrance the flows from a flood of 100-year frequency, based upon the degree of development of the contributing watershed projected throughout the lifetime of the structure; provided that the Department, at its discretion, may require capacity in excess of that necessary to carry the flows from a 100-year flood if it determines such capacity is necessary to protect the structure or to assure the safety of life and property above or below the enclosure.

§105.202. Local government approval.

No political subdivision shall issue any building or other permit which allows for the construction of a stream enclosure unless and until the Department has approved such enclosure.

MAINTENANCE

§105.211. Maintenance.

(a) All stream enclosures shall be maintained in accordance with §§105.171 and 105.172 of this title (relating to maintenance and collapsed structures).

(b) All stream enclosures shall include provisions for adequate access to allow maintenance of the entire length of the enclosure. Such access points shall be protected, to the maximum extent possible, in a manner which will prevent the entrance of unauthorized persons.

Subchapter E. CHANNEL CHANGES AND DREDGING FOR FACILITY CONSTRUCTION AND MAINTENANCE

§105.221. Scope.

Except as provided in §§105.3 and 105.12 of this title (relating to scope and waiver of permit requirements), the provisions of this subchapter apply to all channel changes in the regulated waters of the Commonwealth, and to dredging in the regulated waters of the Commonwealth conducted for purposes of construction, operation or maintenance of any dam, water obstruction, or encroachment.

PERMITS

§105.231. Permit Applications for Construction or Modification of Channel Changes and Dredging for Facility Construction and Maintenance.

(a) In addition to the information required by [§]§105.13 [and 105.14] of this title (relating to permit application information and engineer's certification), all permit applications pursuant to this subchapter for the construction or modification of channel changes shall contain the following information:

(1) The location and length of the proposed channel change [or] [dredging].

(2) A stream profile for a reasonable distance upstream and downstream of the proposed change [or dredging], showing bed slopes, normal water surface and depths, flood water surfaces, existing obstructions, and the location of public and industrial water supply intake.

(3) Such cross-channel sections as are necessary to indicate the scope of the proposed work.

(4) Estimates of flood frequencies and flood flows at the site of the proposed channel change [or dredging], including such information as is reasonably available regarding actual rainfall and flood flow records on the stream.

(5) A description of the purposes of the proposed channel change [or dredging].

[(6) A description of the equipment to be employed in any dredging operations, and its capabilities.]

[(7)] (6) A plan for the disposal of [dredge spoil] excavated material.

[(8)] (7) Proof of title or adequate flowage and other easements for all lands included in the site of the proposed channel change [or dredging].

[(b)] (8) The Department may require additional information or waive any of the above requirements [of subsection (a) of this section] in specific cases.

(b) In addition to the information required by §105.13 of this Chapter (relating to permit application information and engineer's certification), all permit applications for dredging for facility construction and maintenance pursuant to this subchapter shall contain the following information:

(1) The location and area of the proposed dredging.

(2) A stream profile for a reasonable distance upstream and downstream of the proposed dredging, showing normal water surface and depths.

(3) A description of the equipment to be employed in the dredging operation and a plan for the disposal of the dredge soil.

(4) Proof of title or easements for all lands included in the site of the proposed dredging.

(5) The Department may require additional information or waive any of the requirements of subsection (b) of this section in specific cases.

§105.232. Maintenance Dredging.

Permits issued for the construction, operation and maintenance of any dam, [dock, wharf, bulkhead, bridge, stream crossing, or flood control structure may] water obstruction or encroachment shall include specific authorization for [periodic] maintenance dredging [in order to:].

[(1) maintain adequate depths for navigation;]

[(2) assure proper passage of ice and flood flows; or]

[(3) preserve the safety, stability and proper operation of the] facility.]

§105.233. Removal of Sand, Gravel, and Other Valuable Minerals.

The removal of sand, gravel, or other valuable minerals from submerged lands of the Commonwealth in quantities which are commercially usable or marketable, in conjunction with a channel change or dredging permitted under this Chapter, shall be subject to the royalty and agreement provisions of the Act of July 31, 1970, (P.L. 699, No. 223) and Act of December 3, 1970 (P.L. 834, No. 275).

CRITERIA FOR APPROVAL [AND OPERATIONS] FOR CONSTRUCTION OR MODIFICATION

§105.241. Flood Effect.

No channel change which will create a flooding potential greater than that created by the natural conditions of the existing channel will be approved.

§105.242. Channel Alignment and Cross Section.

(a) Abrupt bends in channel changes shall be prohibited, unless necessitated by the alignment of existing bridges or encroachments.

(b) The relocated channel shall rejoin the natural channel of the stream at such point on the permittee's property as to insure that alignment of stream flow at the downstream property line is identical to the flow alignment prior to the channel change.

(c) Any grade of the changed channel shall not be significantly greater than or significantly less than the grade of the original channel, unless the length of the relocated channel prevents such.

(d) Where the width of a channel change is greater than the width of the preexisting channel, provision shall be made to assure proper depth and velocity of normal flows; subchannels, and installation of stream habitat improvement devices.

(e) In streams having substantial fisheries value, provision shall be made in all channel changes to maintain existing pool-riffle ratios.

§105.243. Temperature of Water and Shading.

All channel changes shall be so designed and implemented to assure that the water temperature will not substantially increase over that in the preexisting channel. Where necessary, provisions shall be made to provide adequate shading of the relocated channel to duplicate, to the maximum extent possible, the preexisting conditions.

§105.244. Protection of Fish Life.

A low flow channel and habitat improvement device will be required when, in the opinion of the Fish Commission, it is necessary to provide a satisfactory channel for maintenance of fish life.

§105.245. Disposal of Waste Materials.

(a) Discharge of dredged material into the regulated waters of the Commonwealth shall be subject to subchapter J of this Title (relating to discharges of dredged and fill material).

(b) Dredged spoil and sludge deposits collected during the operation shall be deposited in a location and a manner approved by the Department.

(c) Bilge, ballast, or wastewater from dredging operations shall not be discharged to the stream without removal of oils. petroleum products, or toxic or hazardous compounds, as defined by the Federal Conservation and Recovery Act, in a manner approved by the Department.

Subchapter F. FILLS, LEVEES, FLOODWALLS AND STREAMBANK RETAINING DEVICES

GENERAL PROVISIONS

§105.251. Scope.

Except as provided in §§105.[5] 3 and 105.12 of this title (relating to scope and waiver of permit requirements), the provisions of this subchapter shall apply to the construction, alteration, enlargement, repair, or removal of fills, levees, floodwalls, and stream bank retaining walls located in or along the regulated waters of the Commonwealth.

PERMITS

§105.261. Permit Applications for Construction or Modification of Fills, Levees, Floodwalls and Streambank Retaining Devices.

In addition to the information required by 105.13 [and 105.14] of this [title] Chapter (relating to permit application information and engineer's certification), all applications for permits for construction or modification of structures pursuant to this subchapter shall contain the following information:

(1) A plan detailing the location of all structures and properties 1000 feet upstream and downstream of the proposed fill, levee, or similar structure and within the flood plain of the flood of record on both sides of the stream or body of water.

(2) Basement and first floor elevations of structures indicated on the plan required by paragraph (1) of this subsection.

(3) A complete hydraulic and hydrologic report on the proposed project, including, if the Department so requires a backwater analysis of the project.

(4) Complete cross sections of the stream and floodway of the flood of record.

(5) Stream profiles, showing the bed slope and the normal and flood water elevations for points sufficiently upstream and downstream in effect on the project.

(6) The type of all materials to be used on the fill, levee or similar structure.

(7) Plans for the protection of the fill, levee, or similar structure from erosion, both during and after construction.

(8) The design flood for the fill, levee, or similar structure.

(9) A copy of the local flood plain management regulations or ordinances.

(10) Plans for interior drainage.

(11) Such other information as the Department may require.

§105.262 Permit Applications for Existing Fills, Levees, Floodwalls and Streambank Retaining Devices.

In addition to the information required by §105.13 of this Chapter (relating to permit application information and engineer's certification), all applications for permits for existing structures pursuant to this subchapter shall contain the following information:

(1) A plan detailing the location of the existing fill, levee floodwall or streambank retaining device.

(2) Cross sections of the stream and floodway.

(3) The type of all materials used in the fill, levee, floodwall or streambank retaining device.

(4) Plans of interior drainage, if available.

(5) Such other information as the Department may require.

DESIGN CRITERIA FOR APPROVAL FOR CONSTRUCTION OR MODIFICATION

§105.271. General Criteria.

(a) An application for any proposed levee, fill, or similar structure in or along the regulated waters of the Commonwealth will not be approved by the Department where:

(1) it will increase flood heights, either on the opposite bank or upstream, and flood easements or flood protection has not been provided;

(2) it will create erosive velocities in the stream and appropriate protection has not been provided;

(3) it will increase flood damages downstream through a loss of flood plain storage.

(b) An application for any proposed levee, fill, or similar structure within the floodway of a regulated water of the Commonwealth will not be approved by the Department, unless the applicant demonstrates that the project is consistent with local floodplain management programs.

§105.272. Waste Materials.

No waste materials of any type shall be used in the construction of fills, levees, or similar structures, except in accordance with the provisions of the Solid Waste Management Act and Chapter 75 of this title (relating to solid waste management).

§105.273. Slopes.

The slope of any fill, levee, or similar structure shall not be steeper than two horizontal to one vertical, unless special circumstances are demonstrated and adequate steps are taken to assure permanent stabilization of the slope.

§105.274. Top Width of Levees.

The top width of any levee shall not be less than ten feet.

§105.275. Interior Drainage.

Adequate facilities shall be provided to drain the interior area behind the levee or floodwall.

§105.276. Freeboard Allowance.

The height of a levee or floodwall shall provide an allowance for freeboard above the design flood of the structure.

MAINTENANCE AND REPAIR

§105.281. Maintenance and Repair of Levees or Floodwalls.

(a) The owner of any levee or floodwall shall inspect the levee or floodwall and all appurtenant structures, including drainage facilities, at least annually and shall comply with §105.53(c).

(c) Trees and other vegetation with deep roots shall not be allowed on any levee used for flood control purposes, and vegetation shall at all times be controlled.

§105.282. Maintenance of Fills.

Fills shall at all times be maintained in a manner to prevent erosion and to assure the stability of the slopes.

Subchapter G. STREAM CROSSINGS, OUTFALLS AND HEADWALLS

GENERAL PROVISIONS

§105.291. Scope.

Except as provided in §§105.3 and 105.12 of this title (relating to scope and waiver of permit requirements), the provisions of this subchapter shall apply to all stream crossings, outfalls, headwalls, pipelines, and aerial crossings and other analogous structures which are place in, along, across, over, or under the regulated waters of the Commonwealth.

PERMITS

§105.301. Permit Applications for Construction or Modification.

In addition to the information required pursuant to [§]§105.13 [and 105.14] of this [title] Chapter (relating to permit application information and engineer's certification), applications for stream crossings shall contain the following, where applicable:

(1) The shore lines of the affected body of water, including both high and low water marks.

(2) Existing structures and stream crossings in the vicinity of the proposed crossings.

(3) The alignment of the proposed pipe or cable.

(4) The depth of the proposed pipe or cable and the clear depth below the data plane to be afforded by the pipe or cable in navigable channels.

(5) [A profile, including the bottom] A cross section of the stream from bank to bank with the location of the stream crossing to be affixed thereon.

(6) In the case of outfalls, the discharge capacity of such structures.

(7) A statement indicating the purpose of the proposed stream crossing.

(8) The amount and type of cover material.

(9) Adequate provisions for shut-off in the event of break or rupture.

(10) Such other information as the Department may require.

§105.302. Permit Applications for Existing Stream Crossings by Pipelines for Conveyance of Petroleum Products and Gas.

In addition to the information required pursuant to §105.13 of this Chapter (relating to permit application information and engineer's certification) applications for existing stream crossings by pipelines for conveyance of petroleum products and gas shall contain the following:

(1) The shore lines of the affected body of water, including both high and low water marks.

(2) The alignment and depth of the pipe or cable, and the clear depth below the data plane afforded by the pipe in navigable channels.

(3) A cross section of the stream from bank to bank with the location of the pipeline affixed thereon.

(4) The amount and type of cover material.

(5) Provisions for shut-off in the event of break or rupture.

(6) Such other information as the Department may require.

CRITERIA FOR APPROVAL OF CONSTRUCTION OR MODIFICATION

§105.311. General Criteria.

In evaluating applications for stream crossings, outfalls, headwalls, pipelines, aerial crossings, and other analogous structures, the Department will not approve an application if:

(1) the stream crossings are placed in such a manner as to be displaced by flood waters;

(2) the stream crossing alters the cross section of the stream and its banks;

(3) there is unnecessary paralleling or crossing of streams by pipelines or cables; or

(4) pipelines or cables are placed on the bed of streams.

§105.312. Cover Material.

No waste material of any type shall be used as cover material for stream crossings.

§105.313. Pipelines Under Stream Beds.

(a) Pipelines under stream beds shall be located such that there will be a minimum of three feet of cover between the top of the pipe or encasement and the lowest point in the stream bed; provided, that if the pipeline is in rock, it shall have the depth of granular soil plus six inches for cover, but never less than one foot of total cover.

(b) Pipelines under the stream bed shall be as near to horizontal as possible.

(c) The Department may require additional information and/or waive the requirements of subsection (a) of this section in specific cases.

§105.314. Pipelines along streams.

Pipelines along streams shall be located a sufficient distance away from the bank to prevent damage to the bank as a result of erosion; pipelines shall be located a minimum of 25 feet away from the stream bank unless other erosion protection measures are approved by the Department.

Subchapter H. DOCKS, WHARVES AND BULKHEADS

GENERAL PROVISIONS

§105.321. Scope.

Except as provided in §§105.5 and 105.12 of this title (relating to scope and waiver of permit requirements), the provisions of this subchapter

Subchapter I. COMMERCIAL DREDGING

GENERAL PROVISIONS

§105.361. Scope.

Except as provided in §§105.3 and 105.12 of this title (relating to scope and waiver of permit requirements), the provisions of this subchapter shall apply to dredging in the regulated waters of the Commonwealth for sand, gravel, and other minerals for the purposes of commercial exploitation. The provisions of this subchapter shall not be construed to restrict the Department, in managing the Commonwealth's proprietary interests pursuant to the act of July 31, 1970 (P.L. 699, No. 225), repealed by the act of December 3, 1970 (P. L. 834, No. 275)(71 P. S. §468(d) (repealed 1970 - see Note following §§461-469 in 1978 Supp.)), Section 15 of the Dam Safety and Encroachments Act, and 1908-A(3) of The Administrative Code of 1929 (71 P.S. §510-8(3)), from exercising its discretion to issue or not to issue permit agreements or to impose such terms and conditions in permit agreements as it deems to be in the best interests of the Commonwealth; in the event, however, that the Department issues a permit agreement conveying the Commonwealth's proprietary interests in any such deposit of sand, gravel, or other minerals, the provisions of this subchapter shall constitute the minimum requirements for dredging pursuant to the Commonwealth's regulatory authority under the Dam Safety and Encroachments Act.

PERMITS

§105.371. Permits: Content of Application.

In addition to the requirements of [§]§105.13 [and 105.14] of this title (relating to permit application information and engineer's certification), all applications for commercial dredging permits shall contain the following information:

(1) The delineation of areas to be dredged, with reference to river miles of distances from fixed reference points or sufficient courses and distances referenced to permanent shore points to allow a fix to be made on the boundary points of a dredging area in a lake.

(2) Stream depths in the proposed dredging area (if known) or approximate estimated depths, if accurate measures are not available.

(3) The equipment to be employed in the dredging operation and its capabilities.

[(4) Test borings indicating the depth, extent, and nature of the deposit to be dredged.]

[(5)] (4) The proposed rate of production.

[(6)] (5) The location of public and industrial water supply intakes.

[(7)] (6) A plan for the disposal of solid waste, dredge spoil, and sewage from the dredging vessel.

[(8)] (7) Such other information as the Department may require.

§105.372. Prior Requisite Approvals.

Provided the other requirements of this subchapter are met, approval by the Department of dredging permit applications is conditioned upon the applicant's obtaining a permit/agreement under the act of July 31, 1970 (P.L. 699, No. 225), repealed by the act of December 3, 1970 (P.L. 834, No. 275) (71 P.S. §168(d) (repealed 1970 - see Note following §§461-469 in 1978 Supp.)), or an interest in land pursuant to Section 15 of the Dam Safety and Encroachments Act, where the bed of the regulated waters is owned by the Commonwealth.

OPERATIONAL CRITERIA

§105.381. Location of Dredging.

(a) Dredging shall not occur within 500 feet of any bridge piers or abutments.

(b) Dredging shall not occur within 5000 feet above any public water supply intake, unless the applicant can satisfactorily demonstrate to the Department that drinking water standards for turbidity shall not be exceeded and no other adverse effects on the operations of any water user shall occur. Water supplies within five miles downstream of the dredging operation shall be notified of proposed dredging or start up, or both, of operations. Applicant/permittee shall provide proof of such notification.

(c) Dredging shall not occur within a distance of the channel or island shore line at normal pool less than the depth of the dredging, but in no event, less than 50 feet.

(d) Dredging shall not occur in reaches of streams where water levels are controlled by dams if the water depth is less than six feet at normal pool.

(e) Dredging shall not occur in, encroach upon, or cause siltation in areas of riffles or shallow pools whenever such areas are contributing to the sustenance of game fish or rare and endangered species in any free-flowing reach of a stream. Game fish shall include all those species and varieties defined as such by section 10 of The Fish Law of 1959 (30 P.S. §10). Rare and endangered species shall include those species so defined by the Fish Commission, pursuant to section 251.1 of The Fish Law of 1959 (30 P.S. §251.1) or defined by 50 C.F.R. §17.12. A free-flowing reach of a stream shall include any reach, segment, or area of a stream except where a pool has been created by a dam.

§105.382. Washing and Classification of Materials.

(a) Wash water from the classification process shall not be returned to the stream, unless a permit in accordance with The Clean Streams Law (P.S. §§691.1-691.1001) has been obtained.

(b) Suspended material which has been removed from the wash water shall be disposed of in such a manner that will prevent discharge to waters of the Commonwealth.

§105.383. Disposal of Waste Materials.

(a) The permittee shall not throw, discharge, or deposit or cause or permit to be thrown, discharged, or deposited from or out of any ship, barge, or other floating craft employed in the dredging operation any refuse matter, including oil and petroleum products.

(b) Bilge, ballast, or wastewater pumped from barges shall not be discharged to the stream without acceptable removal of oils or toxic compounds, in a manner approved by the Department.

(c) Discharge of dredged material into the regulated waters of the Commonwealth shall be subject to the provisions of subchapter J of this title (relating to discharges of dredged or fill material).

(d) Dredge spoil and sludge deposits collected during the operation shall be deposited in a location and a manner approved by the Department.

(e) Litter, refuse, and sanitary waste from dredging vessels shall be disposed of in a manner approved by the Department.

§105.384. Protection of Stream Users.

(a) A dock or portage must be constructed around the upstream face of the operation in order to facilitate navigation of small craft where the dredging operation will substantially obstruct the waterway.

(b) The permittee shall post signs 1000 feet upstream of where the dredge is operating and 500 feet from the downstream end of the dredging area warning users of the stream that dredging operations are in progress; such warnings shall be in large block printing, readable at a distance of 300 feet, and contain the warning, "DANGER, DREDGING 1000 FEET AHEAD" or "DANGER, DREDGING 500 FEET AHEAD."

shall apply to the construction, operation, and maintenance of docks, wharves, and bulkheads in the regulated waters of the Commonwealth.

PERMITS

§105.331. Permit Applications.

In addition to the information required pursuant to [§]§105.13 [and 105.14] of this [title] Chapter (relating to permit application information and engineer's certification), applications for new and existing docks, wharves, and bulkheads shall contain the following information:

(1) The exact location of the structure.

(2) The dimensions of the structure.

(3) A plan indicating the relation of the structure to the banks and channel, neighboring structures, and the navigation channel.

(4) Cross sections indicating elevations of structures, location of pilings, and water depth.

(5) The purposes for which the structure will be used.

(6) Such other information as the Department may require.

§105.332. Riparian Property.

When an applicant proposes location of a structure on or in front of riparian property not owned by the applicant, the applicant shall obtain and furnish to the Department notarized and signed releases from the owners of all affected riparian property.

CRITERIA FOR APPROVAL

§105.341. Passage of Ice and Flood Waters.

Structures must be able to pass flood waters and ice without property damage and without increasing the upstream flood hazard.

OPERATION AND MAINTENANCE

§105.351. Removal of Structure.

Upon termination of the useful life of the structure, the owner shall remove it completely and restore the banks.

§105.385. Reporting.

The permittee shall submit to the Department an annual report indicating the amount of sand, gravel, or other minerals dredged from the stream bed during the preceding calendar year.

Subchapter J. DISCHARGES OF DREDGED OR FILL MATERIAL

GENERAL PROVISIONS

§105.391. Scope.

Except as provided in §§105.3 and 105.12 of this title (relating to scope and waiver of permit requirements), the provisions of this subchapter shall apply to the discharge of dredged or fill material into the regulated waters of the Commonwealth.

PERMITS

§105.401. Permit Applications.

In addition to the requirements of [§]§105.13 [and 105.14] of this title (relating to permit application information and engineer's certification) and other applicable requirements of this chapter, all applications for discharges of dredged or fill material into the regulated waters of the Commonwealth shall contain the following information:

(1) The location of any public water supply intakes located within one mile upstream and ten miles downstream;

(2) The location of any areas of shellfish production;

(3) The impact of the activity upon any threatened or endangered species as identified under the Endangered Species Act, and the critical habitat of such species;

(4) The impact of the activity upon those species of aquatic life indigenous to the waterbody;

(5) The amount or percentage of the discharge that will consist of toxic material regulated pursuant to Section 6 of the Toxic Substances Control Act, 15 U.S.C.A. §2605, or hazardous materials as defined by the

Federal Resource Conservation and Recovery Act in other than trace quantities; and

(6) Such other information as the Department may require.

CRITERIA FOR APPROVAL

§105.411. General Criteria.

The Department will not approve an application to discharge dredged or fill material, unless the applicant demonstrates to the Department a public benefit which outweighs the damage to the public natural resources, if:

(a) The discharge is to a spawning area during spawning season.

(b) The discharge would restrict or impede the movement of aquatic species indigenous to the waters or the passage of normal or expected high flows or cause the relocation of the waters (unless the primary purpose of the fill is to impound waters);

(c) The discharge is into wetlands areas; or

(d) The discharge is into breeding and nesting areas for migratory waterfowl.

OPERATION AND MAINTENANCE

§105.421. General.

Discharges of dredged or fill material shall be properly maintained to prevent erosion and other types of pollution.

§105.422. Use of Heavy Equipment.

Heavy equipment used in wetlands shall be placed on mats where practicable.

§105.423. Removal of Temporary Fill.

All temporary fill shall be completely removed.

Subchapter K. DISBURSEMENTS OF MONIES FROM THE DAMS AND ENCROACHMENTS FUND

§105.431. General Provisions.

(a) All fines collected under the penal provisions of the Dam Safety and Encroachments Act and all civil penalties collected under that act shall be paid into the Treasury of the Commonwealth in a special fund known as the Dams and Encroachments Fund.

(b) Monies paid into the Dams and Encroachments Fund may be disbursed at the Department's discretion for use in the elimination of hazards to life, property, and the environment resulting from unsafe dams, water obstructions, and encroachments. Such monies shall be available for use of the Bureau of Dams and Waterway Management in addition to funds otherwise available to it.

(c) For purposes of this chapter, the full and normal range of activities of the Bureau shall be considered to contribute to the elimination of hazards from unsafe dams, water obstructions, and encroachments pursuant to subsection (b) above. Disbursement of monies from the Dams and Encroachments Fund monies may therefore be made for, but shall not be limited to, the following purposes:

(1) Conducting of such investigations, tests and analyses as required to carry out the purposes of the Dam Safety and Encroachments Act, including costs of entry, testing and sampling, or examining books, papers, or records;

(2) Undertaking corrective action, repair work, or removal to eliminate any actual or potentially dangerous or hazardous condition of any dam, water obstruction, or encroachment as provided under Section 14(c) of the Dam Safety and Encroachments Act.

(3) Purchase of contractual services and consultation from firms and individuals with relevant expertise in the field of safety of dams, water obstructions, and encroachments.

(4) Purchase of materials, services, and travel necessary for personnel training and for provision of information and educational materials on the safety of dams, water obstructions, and encroachments to schools, colleges, institutions, and citizens.

(5) To cover any extraordinary costs of litigation arising out of the enforcement of dam safety and encroachments laws of the Commonwealth, such as the printing of briefs and records, taking of depositions, and expert witness fees.

§105.432. Authorization for Disbursement.

The Director of the Bureau of Dams and Waterway Management shall authorize the use of all monies disbursed from the Dams and Encroachment Fund, consistent with the Department's established policies and procedures. For disbursements from the fund not falling within the explicit categories established in §105.431, the Director of the Bureau of Dams and Waterway Management shall submit a request to the Secretary of the Department of Environmental Resources requesting an authorization to disburse the funds for the project in question.

Part III

Alternatives to the Proposed Action

PART III

PART III - ALTERNATIVES TO THE PROPOSED ACTION

Given the nature of the proposed action, which is approval of the Pennsylvania Coastal Program, all Federal alternatives involve a decision to delay or deny approval. In approving a coastal management program, the Assistant Administrator for the Office of Coastal Zone Management must find that a state has met over twenty requirements. Delay or denial of program approval could be based on failure of the Pennsylvania program to meet any one of the requirements of the Federal Coastal Zone Management Act (CZMA), as amended.

The Pennsylvania Coastal Zone Management Program is a network of State authorities designed to manage coastal resources according to a uniform set of State policies. Agencies responsible for administering the authorities are directed by an Executive Order and may agree through a Memorandum of Understanding to carry out their authorities in a way that is consistent with the policies of the management program. The major regulatory authorities that are to be incorporated into the program are: the Floodplain Management Act, the Dam Safety and Encroachments Act, and the Bluff Recession and Setback Act. The status of implementing regulations pursuant to these authorities is as follows:

- Floodplain Management Act - Proposed rules found in Appendix B of the DEIS have been adopted as final regulations on July 14, 1980. Final regulations are not published in the FEIS.

- Dam Safety and Encroachments Act - Proposed final regulations are printed in Appendix B of the FEIS. Consideration of proposed final regulations will be made by the Environmental Quality Board on September 16, 1980. Regulations must be adopted as final prior to approval of the Pennsylvania Coastal Zone Management Program.

- Bluff Recession and Setback Act - Proposed final regulations and bluff hazard area designations are printed in Appendix B of the FEIS. Consideration of proposed final regulations and designations will be made by the Environmental Quality Board on September 16, 1980. Regulations must be adopted and designations must be made prior to approval of the Pennsylvania Coastal Zone Management Program.

Throughout the development of the Pennsylvania Coastal Zone Management Program a variety of alternatives to specific elements of the program were considered. Many of these derived from comments received from involved local and State agencies, Federal agencies, local steering committees, and other interest groups. The consideration of alternative boundaries, management techniques, policies and guidelines has taken place since 1974.

The record of this process of reviewing substantive alternatives which were considered consists of thousands of pages. Any attempt in this environmental impact statement to consider all policy and programmatic alternatives would only repeat the detailed public record and cause unnecessary bulk and delays in the EIS process, problems that the new Council on Environmental Quality (CEQ) Regulations on implementation of the National Environmental Policy Act (NEPA) attempt to avoid. Federal Office of Coastal Zone Management believes that the review of alternatives during program developments and NEPA public participation standards have been built into Federal Office of Coastal Zone Management's requirements for program development.

Normally, at the time a program is submitted for approval, most of the substantive decisions regarding policies, how the program is to be implemented, etc., will have been made by State executive or legislative branches of government. That is not to say changes can no longer be made. In many instances in other states, changes have been made after State program approval. Federal Office of Coastal Zone Management's alternatives to program approval are to delay or deny approval for a number of reasons. These reasons are limited to those identified in the review process and those that the Federal Office of Coastal Zone Management feels are potentially valid reasons according to Federal Office of Coastal Zone Management regulations.

Additional valid alternatives are those which can be carried out by the State. They are to modify parts of the program or withdraw their applications for approval. Where these were not specifically elaborated on in the DEIS because the consequences coincide with those of the Federal alternative, they remain through the process as valid alternatives.

With respect to the "no action" alternative, Federal Office of Coastal Zone Management has generally considered that Federal denial or State withdrawal from the program and "no action" as synonymous. State participation under the Coastal Zone Management Act is voluntary; and when a State participates in program development, it decides whether or not program approval and implementation is in its best interests. A few states have chosen the alternative of nonparticipation. This alternative may be chosen by a state at any time.

The impacts of the "no action" alternatives were described in the DEIS in Part III, Alternatives to the Proposed Action, under the Loss of Federal Funds to Administer the Program, and the Loss of Consistency of Federal Actions with the Pennsylvania Coastal Zone Management Program and its Policies. Federal Office of Coastal Zone Management believes that these descriptions are sufficient for an understanding of the impacts associated with this particular alternative.

In order to elicit public and agency comment and assure that the Assistant Administrator's initial determination is correct, this

section identifies areas where there are possible deficiencies, and considers alternatives of delay or denial based upon each. Before examining the alternatives, the following section identifies the generalized impacts that would result from delay or denial on any basis.

1. Loss of Federal funds to administer the program. Under Section 306 of the CZMA, as amended, Pennsylvania would receive approximately $1.3 million per year to administer its coastal management program. Most basic to a loss of Federal funds will be the inability of the State to provide adequate staffing and administrative support to coordinate and evaluate State and Federal coastal actions and permits, to assure that government agencies operate consistently with coastal policies, to enforce State regulatory authorities (as described later in Part III) in the coastal area, and to provide funds to State agencies and local governments that will encourage port development, coastal access, development of local plans and zoning ordinances, and provide for technical assistance for solving coastal resource problems.

2. Loss of consistency of Federal actions with Pennsylvania's Coastal Zone Management Program and its policies. Program approval would mean that Federal actions, in or affecting the Pennsylvania coastal zone, would have to be consistent with the State's program under Section 307(c) of the CZMA. This consistency provision is of particular concern to the Commonwealth of Pennsylvania as its coastal zone, especially the Delaware River, is heavily influenced by Federal activity. Loss of Federal consistency in the State's coastal zone could have significant effects on the coastal resources by continuing the present practice of conducting Federal activities, issuing Federal licenses and permits, and providing Federal assistance in the coastal zone for potentially uncoordinated and conflicting objectives.

3. Loss of adequate consideration of the national interest in the siting of facilities which are other than local in nature as required by Section 306(c)(8) of the CZMA. By delaying or denying program approval, the State would be under no obligation to give adequate consideration to coastal resources and facilities that are of national interest. This could result in loss of public benefit that the use of such resources may provide. For example, failure to allow expansion of port facilities to accommodate transshipment of coal for energy production in the Port of Erie could result in the need for use of different energy sources. This may add to higher energy costs to the public. However, the national

interest also encompasses a concern for the protection of resources such as water, air, wetlands and wildlife. Consideration of the need for the national interest in facilities would take into account the impacts of facilities on these key resources.

Program approval would mean that the State could undertake increased technical assistance to local governments and improve implementation of existing State programs. This would give the State and local governments an opportunity to give balanced consideration to both facilities and resources in the national interest, through mechanisms such as the Environmental Quality Board for adoption of regulations, the Environmental Hearing Board for administrative appeals of State actions, and the courts for judicial appeals. Lacking program approval, these considerations affecting resources in the national interest might not be made.

4. Potential loss of eligibility of funds available under the Coastal Energy Impact Program(CEIP). No coastal state is eligible to receive financial assistance under the CEIP unless the state:

   a. Has a management program approved under Section 306 of the CZMA;

   b. Is receiving a grant under Section 305(c) or 305(d) of the CZMA; or

   c. Is making, in the judgment of the Assistant Administrator for Coastal Zone Management, satisfactory progress toward development of a management program which is consistent with the policies of Section 303 of the Coastal Zone Management Act.

The Pennsylvania Coastal Zone Management Program is currently operating under a grant pursuant to Section 305(c) of the CZMA. The grant is scheduled to expire on September 30, 1980. Since the authority to make grants under Section 305 has expired, the State will not be able to receive any more 305 grants. If OCZM is unable to find that the State has met all the requirements for program approval during the remainder of the 305 grant period, OCZM would be forced to delay or deny program approval. In order to then be eligible for CEIP funds, Pennsylvania would have to show that it was making satisfactory progress under Section 303 of the CZMA. This process could consume a long period of time during which the State would be ineligible to receive CEIP funding.

Alternative I - The Assistant Administrator could delay or deny program approval if there is no means to implement and enforce the management program.

As part of an earlier program proposal, Pennsylvania proposed a management scheme which involved a complex relationship between the State, counties, townships and municipal governments. As it was proposed, this scheme would not meet Federal program approval regulations for the following reasons:

1. A timetable for local adoption of erosion, floodplain and wetland controls pursuant to State legislation and State guidelines was not provided.

2. There was no provision for State enforcement of erosion, floodplain and wetland controls prior to certification by the State that local governments are able to implement these controls.

Three new authorities have been enacted since Pennsylvania made its initial program proposal. These provide a means for State protection of floodplains, wetlands, and bluff recession hazard areas. These are the Floodplain Management Act and the amendments to the Water Obstructions Act, or as it is now called as a result of the amendments, the Dam Safety and Encroachments Act and the Bluff Recession and Setback Act.

Under the provisions of the Floodplain Management Act, local governments which have been notified by the U.S. Department of Housing and Urban Development as having an area or areas subject to flooding are required to participate in the National Flood Insurance Program within six months of notification. Failure to comply with this requirement will result in legal action by the State against that municipality which has failed to comply. Under Section 302 of the same law, the Commonwealth is required to directly regulate certain obstructions such as public utility services in floodplains. This will provide a means of protecting State investments in public infrastructure in areas of the coastal zone subject to flooding.

Under the Dam Safety and Encroachments Act, the State exercises direct regulatory authority over water obstructions and encroachments that would occur or be placed in wetlands of the Commonwealth. Regulations to implement this new authority will be found in prpoosed final form in Appendix B of the FEIS. Final regulations will be adopted prior to program approval.

Under the Bluff Recession and Setback Act, the Department of Environmental Resources is responsible for identifying and designating bluff recession hazard areas. Each municipality designated as possessing such an area is required to implement ane enforce State approved ordinance and regulations which control construction and development activities in those areas subject to bluff recession hazards. The State may file suit to

restrain, prevent or abate violations of this Act or municipal ordinances or regulations designed to implement this Act. Prior to local implementation of ordinances and regulations in bluff recession hazard areas, the Commonwealth will control the placement of structures in these areas.

The Pennsylvania program relies on an Executive Order and Memoranda of Understanding between State agencies to require that all program policies and authorities are carried out in a uniform and consistent fashion. The Executive Order that will be issued to implement and enforce the policies of the coastal management program will direct State administrative departments and other State agencies under jurisdiction of the Governor to act consistently with the State authorities that are part of the management program. The Governor has the responsibility under the Pennsylvania Constitution to ensure that the laws of the Commonwealth are enforced, and the issuance of an executive order is one means by which the Governor can execute the laws of the Commonwealth. Enforcement of the program is facilitated because the Department of Environmental Resources, the lead agency, is authorized to enforce major program authorities.

In addition, Article I, Section 27 of the Pennsylvania Constitution, also known as the Environmental Rights Amendment, provides for the conservation and maintenance of public trust resources. In executing the laws which are incorporated into the management program, the State will also rely on Article I, Section 27 as a mandate to carry out and enforce the regulatory statutes in a manner that carries out the provisions of Article I, Section 27.

Under Pennsylvania law, three independent administrative agencies with responsibilities in the coastal zone are not administratively bound by an Executive Order. They are the Fish Commission, the Historical and Museum Commission, and the Public Utility Commission. Memoranda of Understanding will be developed between the DER and these agencies. The Memoranda developed between the agencies will outline the processes by which these agencies shall be consistent with the policies of the coastal program, fully consider the national interest in the siting of facilities that are other than local in nature, and report the status of its projects to the Coastal Zone Management Program.

Alternative II - <u>The Assistant Administrator could delay or deny program approval if regulations to implement the State authority over activities in wetlands have not been adopted</u>.

Pennsylvania has developed regulations as a basis for reviewing activities proposed to occur or be located in coastal wetlands. These regulations will delineate the specific criteria the State will use to issue or deny permit requests for activities in coastal wetlands and for other activities in the bed of Lake Erie and the Delaware River subject to the Dam Safety and

Encroachments Act. Proposed final regulations will be found in Appendix B of the FEIS. Prior to program approval, final regulations must be adopted.

Alternative III - The Assistant Administrator could delay or deny approval if the Commonwealth did not have the necessary authorities to deal with the significant problems and issues of the two Pennsylvania coastal areas.

During the development of the State's coastal management program, it became clear that the State would require additional authority to address development in wetlands, floodplains, erosion hazard areas, and activities in the Delaware River within the city limits of Philadelphia. Over the past two years, the Pennsylvania General Assembly has acted to close these substantive gaps in State authority. It passed the Floodplain Management Act, which was signed into law by the Governor on October 4, 1978. The Act mandates that municipalities which have an area or areas subject to flooding shall participate in the National Flood Insurance Program. In addition, it also provides that the State, acting through the Department of Community Affairs and the Department of Environmental Resources, shall regulate particular obstructions in the floodplain. These obstructions include hospitals, nursing homes, jails, new mobile home parks, subdivisions, or substantial additions to mobile home parks or subdivisions. Under the same act, the State Department of Environmental Resources has exclusive jurisdiction to regulate:

1. Any obstruction otherwise regulated under the Water Obstructions Act;

2. Any flood control project constructed, owned or maintained by a governmental unit;

3. Any highway or other obstruction, constructed, owned or maintained by the Commonwealth or a political subdivision thereof; and

4. Any obstruction owned or maintained by a person engaged in the rendering of a public utility service.

This law now provides the necessary State authority to manage activities in coastal area floodplains.

During the same session of the General Assembly, a bill amending the Water Obstructions Act was passed on November 26, 1978, enabling the State to regulate water obstructions and encroachments in coastal wetlands. Also, other amendments passed in 1979 clarified what the State must consider in promulgating the regulations pursuant to Chapter 105 of the Pennsylvania Code of Regulations relating to water obstructions and encroachments. (These amendments also changed the title of the bill to the Dam

Safety and Encroachments Act.) Included in these regulations must be consideration of:

1. The state of scientific and technological knowledge and good engineering practice relating to various types of water obstructions and encroachments;

2. The economic impact upon the Commonwealth and its citizens;

3. The relationship of water obstructions and encroachments to hydrologic management in the watershed as a whole; and

4. The impacts of water obstructions and encroachments upon water quality and the environment.

In addition, the 1978 amendments provide that the State shall have control over water obstructions and encroachments which in any manner changes, expands or diminishes the course, current or cross-section of any watercourse, floodway, or body of water within the city limits of Philadelphia. Under previous legislation, control over the Delaware River within the City of Philadelphia had been granted to the city. Because of significant coastal activities within the city along the Delaware River, this was identified as a gap in State authorities. As a result of the amendments to the Water Obstructions Act, the State now has direct control of activities in the Delaware River within Phialdelphia.

Finally, the State identified the need for legislation to deal with the problem of bluff recession along the shores of Lake Erie. The Bluff Recession and Setback Act was enacted May 13, 1980 in order for the Pennsylvania program to receive consideration for Federal approval and to provide the Commonwealth with the management tool to deal with the problem of bluff recession. The Act requires a setback of all new structures outside the erosion hazard area and generally prohibits reconstruction or improvements exceeding 50 percent of the market value of the structure. Prior to receiving program approval, bluff recession hazard areas must be designated and regulations implementing the bill must be adopted. Local governments have six months after designation of bluff recession hazard area and the adoption of State regulations to enact ordinances that meet the requirements of the Act. During the six month period, the Department of Environmental Resources will enforce provisions of the Act in any municipality which does not have its own ordinance which meets the requirements of the Bluff Recession and Setback Act.

With the enactment of this piece of legislation, the State has the necessary management authorities needed to address the scope of its program.

Alternative IV - The Assistant Administrator could delay or deny program approval if the coastal policies are not sufficiently specific.

Pennsylvania's coastal policies have undergone extensive review and examination to ensure that they provide persons affected by the program clear understanding of the content of the program and a clear sense of direction and predictability for decision-makers who must take actions pursuant to or consistent with the management program.

If the policies are not sufficiently specific, the likely results would be as follows:

1. A higher percentage of disputes between State and Federal agencies over actions which must be consistent with the management program or consistent to the maximum extent practicable.

2. Lack of clear understanding over what specific actions the program is trying to accomplish.

3. Conflict between the Commonwealth and the Office of Coastal Zone Management over funding proposals for program implementation and how such proposals are designed to carry out program policies.

4. Delay in the process of program approval as persons reviewing the program seek clarification and understanding of policies which are not specific.

Regulations which implement the State authorities over floodplains, erosion hazard areas, and wetlands will be adopted prior to approval of the management program. These regulations spell out in greater detail how the State will apply the authorities to carry out the policies of the management program.

Part IV

Affected Environment

PART IV

PART IV - AFFECTED ENVIRONMENT

Part II includes a chapter entitled Introduction and Overview, which includes sections on Coastal Character and Defining the Coastal Boundary. The following section presents a brief summary of those sections describing Pennsylvania's two coastal zones. Additional information may be found in Part II, which also includes maps of each coastal zone.

Delaware Estuary Coastal Zone

The Delaware Estuary coastal zone extends 57 miles from Marcus Hook, to Morrisville on the Pennsylvania side of the Delaware River. The coastal zone is irregular in shape, varying in width from 1/8 mile to urban areas like Philadelphia and Bristol, to over 3-1/2 miles in Falls Township, Bucks County. The Delaware Estuary coastal zone includes all or part of 20 municipalities. The 1970 population in the coastal zone was 33,500. Employment totaled 78,500 in 1970, with manufacturing and construction as the largest categories.

Philadelphia has the most completely developed waterfront with more extensive transportation facilities than the other two counties. A diverse mix of land uses occupies the rest of Philadelphia's riverfront, including manufacturing, utilities and military facilities. In Delaware County, a larger share of waterfront is devoted to manufacturing than in either Philadelphia or Bucks Counties. Tinicum Marsh, covering approximately 500 acres, is all that remains of the tidal wetlands which originally encompassed at least 13,000 acres between the Chester Creek in Delaware County and the Frankford Creek in Philadelphia County. Still, Tinicum Marsh contains Pennsylvania's largest tidal wetland area. The shoreline of Bucks County includes a wide variety of uses; and about five miles of riverfront are occupied by residential, recreational, or cultural uses, which are unusual in the other counties.

Notable features of the coastal zone in Bucks County include the 4,000 acre U.S. Steel site, which employes more than 8,000 workers; and the 2,300 acre man-made lakes created by sand and gravel extraction on property owned by the Warner Company.

Lake Erie Coastal Zone

The Lake Erie coastal zone covers 63 miles between the State's borders with New York and Ohio. The most outstanding feature of the Pennsylvania shoreline is the seven-mile long Presque Isle Peninsula which attracts three to four million recreational visitors each year. This 3,200 acre sand spit curves out into the lake forming Presque Isle Bay and shelters Erie, Pennsylvania's only Great Lakes port.

The beaches, dunes and lagoons of Presque Isle contrast sharply with the system of bluffs ranging in height from 10 to 170 feet which separates Lake Erie from the rest of Erie County. There are no major river systems flowing into Lake Erie in Pennsylvania; but there are 50 minor streams, some of which have cut deep gorges into the landscape.

The urban and suburban portions of the City of Erie roughly occupy the central third of the Lake Erie shoreline. The remaining land is sparsely developed with a more rural character. The two largest land uses are agriculture and forest/undeveloped.

The coastal zone is strongly influenced by its proximity to the lake. The climatic effect of Lake Erie extends the growing season, and moderates temperature variations which permit the production of specialty crops such as grapes and other orchard products. In the eastern portion of the Lake Erie coastal zone, almost one-third of the land is devoted to fruit production.

Part V

Environmental Consequences

PART V

PART V - ENVIRONMENTAL CONSEQUENCES

Direct Effects of Federal Approval

The intent of the Federal Coastal Zone Management Act is to promote the wise use of the Nation's coasts. The Act encourages states to achieve this goal through better coordination of government activities, recognition of the long-term consequences of development decisions, and the initiation of a more balanced decision-making process.

Most of the environmental and socioeconomic impacts that will result from Federal approval of Pennsylvania's program will be beneficial. This is initially guaranteed by the language of the Act itself and the regulations promulgated by the Office of Coastal Zone Management to guide program development and approval. The Coastal Zone Management Act makes it national policy to "preserve, protect, develop and, where possible, restore our coastal resources".

The Pennsylvania Coastal Zone Management Program provides a balanced approach to economic development and coastal resource protection. It is the first state program submitted to NOAA-OCZM that deals with two geographically distinct, widely separated and fundamentally different coastal zones. It is this tremendous diversity and the need to develop a common, statewide approach to coastal issues that has produced such a well-balanced program.

1. Program Funding - Federal approval will permit the Office of Coastal Zone Management to award program administrative grants (Section 306) to the Pennsylvania Department of Environmental Resources, Coastal Zone Management Branch. This funding, totaling approximately $1.3 million per year, will:

    a. Strengthen State resource management capability in the coastal zone by focusing management efforts on implementing State authorities, supplementing funds from other State and Federal programs to accomplish coastal objectives, and aggressively using the provisions of Federal consistency.

    b. Allow more efficient review of waterfront activities.

    c. Conduct technical and policy studies related to economic and natural resources and the overall management process in order to upgrade the information base on which coastal decisions will be made.

d. Permit Pennsylvania to continue to cooperate with neighboring coastal states (several of which have received Federal approval) on matters of mutual concern.

e. Provide funds to coastal municipalities and governmental agencies to plan for and manage the development of certain types of coastal related facilities (i.e., recreational access, ports, historical restoration) as prescribed in the Coastal Zone Policy Framework.

f. Allow the Pennsylvania Department of Environmental Resources to make grants available to coastal municipalities who wish to update comprehensive plans, zoning ordinances and other regulations in response to coastal zone management goals and objectives.

   Of the 30 municipalities in Pennsylvania's two coastal zones, several have never prepared comprehensive plans. Many of the plans and zoning ordinances that exist are more than 20 years old and do not reflect current ideas for coastal development, protection or wise use. Such comprehensive plans could be entirely revamped and modernized through assistance to local coastal governments.

In order for Pennsylvania to have eligibility for Section 308 Coastal Energy Impact Program funds and Formula Grants, the State must be actively participating in Sections 305 or 306 of the Coastal Zone Management Program, or be making adequate progress toward meeting the goals of Section 303. This Section 308 assistance could aid substantially in ameliorating the possible impacts of offshore (Outer Continental Shelf) oil and gas production on Pennsylvania's coastal areas. Grants for recreational facilities could do much to heighten the public's appreciation for, and awareness of, the coastal zone. Federal approval would ensure that Coastal Energy Impact Program grants would be administered annually by the Pennsylvania Department of Community Affairs.

Additional funding for interstate coordination, land acquisition, and rehabilitation of dilapidated urban water fronts and ports, for coastal access, also may become available if funding for these purposes is authorized in new legislation.

2. Federal Consistency - Federal approval and State implementation of Pennsylvania's Coastal Zone Management Program will have implications for Federal

agency actions. Approval of the State's program will lead to the implementation of the Federal consistency provisions of the CZMA (Section 307(c) and (d)). These provisions, and the manner in which Pennsylvania intends to implement them, are described in Chapter 5 of Part II.

The purpose of the Federal Consistency provisions is to require Federal actions to be consistent with State coastal policies as well as to allow closer cooperation and coordination among Federal, State, and local government agencies involved in coastal related activities and management. This desirable impact is one of the principal objectives of the CZMA.

3. National Interest - Federal approval of Pennsylvania's program will certify that the State has an acceptable procedure to ensure the adequate consideration of the national interest involved in the siting of facilities and management of areas that are of greater-than-local concern. National interest is described in Chapter 5 of Part II.

   This requirement of the Coastal Zone Management Act is intended to assure that national concerns related to facility siting are expressed and dealt with in the development and implementation of a state's coastal management program. The requirement should not be construed as compelling Pennsylvania to propose a program which accommodates certain types of facilities, but to assure that such national concerns are considered in the decisions of the management program. In the absence of an approved Coastal Zone Management Program, such considerations could be ignored or implemented haphazardly.

Indirect Impacts of Federal Approval

1. Socioeconomic Impacts - Pennsylvania's four years of participation in the development of a Coastal Zone Management Program has awakened people in both coastal areas to the possibilities that exist for protecting fragile environmental features, expanding waterfront access and promoting sound coastal development. Federal approval of Pennsylvania's program would have the indirect affect of allowing this understanding to spread more widely throughout the coastal zone and to attract the attention of citizens living in inland areas.

   Participation in the Coastal Zone Management Program will show Pennsylvania residents that both the Delaware River and Lake Erie are worthy of renewed

attention and emphasize their importance to the respective regions. With renewed interest and respect will come private investment, following the lead offered by public agencies. For example, once local governments invest in waterfront properties, local industries can be expected to do likewise. Coastal goals of multiple use should become easier to implement.

As the Coastal Zone Management Program restores faith in the value of shorefront properties,many land values will increase. Even in advance of Federal approval, knowledge of events occurring in other waterfront communities has spurred development and redevelopment plans. However, the value of some coastal properties subject to the Floodplain Management Act, the Dam Safety and Encroachments Act, and/or the Bluff Recession and Setback Act may decrease due to restrictions to development these laws may impose (see Appendix B of the DEIS and the FEIS). These laws may also result in increased costs of development in order to meet performance standards imposed by the regulations.

Any increased costs of development will be more than offset by savings in internal coordination and improvement in overall permit administration. Prompt notification of all permits required will ultimately be viewed as a valuable and money-saving proposal. These savings will involve less time and confusion for applicants and reduced government manpower costs. In addition, there will be an availability of preapplication education for complex projects. Program policies VII-1 through 3,VII-3 and 4 and IX-C and D are included specifically to develop an improved economic climate for coastal development in appropriate areas of the Pennsylvania coastal zones. In addition, policies III-2 and 3, and V-1 and 2 will stimulate economic activity indirectly as the Pennsylvania Coastal Zone Management Program moves to restore water quality to improve fish habitat and provide recreational access to the waterfronts. This will help stimulate demand for recreational goods and services.

Significantly, if the Coastal Zone Management Program in Pennsylvania is not approved, waterfront development and restoration efforts will be uncoordinated and less effective. A major force for regional cooperation will be lost and local triumphs in one area will be reversed by mistakes made in neighboring communities due to lack of information transfer. Some will fix up and restore while others will ignore and despoil. A good measure of

predictability and investor confidence will be sacrificed.

Approval of Pennsylvania's Coastal Zone Management Program will mean the beginning of the provision of additional, close-to-home recreational facilities. Travel times and trip costs will be reduced and waterfront recreation activities will become much more available to a larger segment of the State's population. Certain water related sporting equipment and recreational suppliers will benefit first, as increased coastal accessibility begins to materialize. In addition, as a result of program approval, the Office of Coastal Zone Management will consult with the U.S. Fish & Wildlife Service in accordance with Section 7 of the Endangered Species Act of 1973 when it is determined that activities of the Pennsylvania Coastal Zone Management Program will affect Federally listed threatened or endangered species.

2. Natural Environment Impacts - Impacts on the natural environment will result from:

   a. Enhanced enforcement and administration of State authorities.

   b. Technical assistance to local governments in the planning and management of Geographic Areas of Particular Concern.

The major State authorities which will be incorporated into the program and which will have an impact on the natural environment are:

a. The Dam Safety and Encroachments Act - This provides for protection of wetlands and State owned submerged lands by regulating obstructions and encroachments in these areas. Enforcement of the wetlands provision will occur for the first time as a result of participation by the Commonwealth in the Coastal Zone Management Program. This is as a result of revisions to Chapter 105 of the Pennsylvania Code of Regulations.

   Through the incorporation of the Dam Safety and Encroachments Act into the Program, no permit will be granted by the Commonwealth for work in or within 300 feet of any wetlands unless the public benefits of the project outweigh the damage to the wetlands resource and the project is necessary to realize the public benefits. In evaluating the public benefits of wetlands, the Commonwealth considers whether the wetlands

perform any of six natural functions (See Appendix B of the FEIS). The Commonwealth also considers availablity of feasible alternative sites, the need to locate the proposed activity in a wetland, and the cumulative effect of numerous such changes to wetlands resources.

Regulations implementing the Dam Safety and Encroachments Act also cover a wide range of water obstructions and encroachments and provide for two exemptions to a permit. These exemptions are for (1) construction of a dam not exceeding three feet in height in a stream not exceeding fifty feet in width, when such dam is constructed for a pool for fish and fishing purposes, and (2) placement of a water obstruction in a stream with a drainage area of 320 acres or less that cannot imperil life or property, have a significant affect on coastal resources, or adversely affect the environment.

As a result of program approval, the following environmental impacts in the coastal zones would result from any dam exempted from the permit requirements of the Dam Safety and Encroachments Act: (a) loss of free flowing stream habitat necessary for spawning of anadromous fish, (b) loss of access opportunities for stream fishing, (c) siltation of submerged habitat behind dam, (d) loss of land area and wildlife habitat inundated as a result of the dam, (e) increase in fish habitat, and (f) increased opportunity for small lake or pool fishing.

The second exemption should not have a negative environmental impact since the regulations require that placement of a water obstruction or encroachment in a stream with a drainage area of 320 acres or less cannot have a significant effect on coastal resources.

The Dam Safety and Encroachments Act will also regulate commercial and channel maintenance dredging. Implementing the State policy which expresses a preference for hydraulic dredging will result in less siltation and turbidity which can be detrimental to fish, shellfish, and aquatic plant life. This policy, however, may not be applied in all cases where dredging is required. Site location, availability of dredging options, biological resources which may be adversely affected by hydraulic dredging and related economic factors will be used to determine the most suitable method of dredging.

b. The Floodplain Management Act - This provides for direct State control of highways, public utility facilities, and certain other obstructions in floodplains. It also requires local adoption of floodplain ordinances sufficient to meet the standards of the National Flood Insurance Program. This will result in the maintenance of the structure and function of floodplains by limiting development in these areas.

c. The Bluff Recession and Setback Act - This requires structures to be setback from bluff areas determined to be hazardous as a result of shoreline erosion. The impact of Policy I-A.1 requiring the establishment of erosion hazard setbacks will result in greater protection for property owners who may otherwise build structures at an unsafe distance from the bluff face. This will also protect any investment made to build these structures. A setback will not stop bluff recession and shoreline erosion. It will, however, help to prevent accelerated rates of erosion which often result from development occurring too near the bluff edge. This will result in fewer structures being lost to the effects of shoreline erosion and will reduce the amount of hazardous debris that enter Lake Erie and will reduce the level of pollutants added to the lake as fewer septic tanks and sewer lines are washed into the lake.

   Passage of this Act is a direct result of the Commonwealth's participation in the Coastal Zone Management Program. Regulations to implement the law are also directly attributable to participation in the program.

Other State laws listed in Appendix A will be incorporated into the program. While their impacts on the natural environment will not be as significant as those above, improvements in their utility as tools to manage the natural environment is expected by participation in the program. The strategies applied to make these improvements will also be applied to the laws listed above. These are:

a. Enhanced monitoring of statutes.

b. Improved regulations to provide clearer standards and criteria for resources protection.

c. Enhanced enforcement of regulatory statutes designed to protect coastal resources.

In summary, the Pennsylvania Coastal Zone Management Program will provide that State authorities designed to manage the natural environment will be improved, or in some cases, implemented for the first time. This will result in enhanced manpower to provide protection of fish and wildlife habitat, improvements to air and water quality, control of development in erosion and flood hazard areas, prevention of stream scour, and enhanced fisheries management.

Participation in the Coastal Zone Management Program will also provide protection of the natural environment through the GAPC process as explained in Part II, Chapter 3. The State already has control to protect the natural environment in many of its GAPC, such as wetlands and floodplains.

In other GAPC, the State will be working with local governments to provide protection of areas nominated as GAPC for their value as natural areas. This will require a commitment from the local government with management control over these areas. This commitment, designating a GAPC, will be made through contractual agreement with the State. In this instance, the local government agrees to maintain the natural value of the area in exchange for State Coastal Zone Management funds to develop an appropriate management scheme and local management tools to provide protection for the designated GAPC.

The GAPC process will also be used to support development activities in other areas of the coastal zone. The effect of this will be to guide development away from areas of natural value into areas where development is more appropriate.

In summary, the effects of program approval on the natural environment, especially in floodplains, wetlands, and erosion hazard areas, will be positive. Improved administration of State authorities and technical assistance to local governments will provide the stimulus.

3. Institutional Impacts - The major institutional impact of the program will be to enhance the capacity of the State as a resource manager. This means that it will develop a stronger sense of priorities for the coastal zone both in its regulatory and funding decisions and will develop consistent criteria by which its decisions are made. This improvemed sense of priority and decision-making criteria will be developed by all agencies which participate in the program.

Participation of these State agencies will provide them with the perspective of other State agencies and interest groups concerned with coastal resources. This should facilitate the process of balancing decisions between use and preservation of coastal resources. Unfortunately, from the perspective of local governments, the State is often viewed as an uncompromising "enforcer" rather than a useful partner. Coastal zone management represents a real opportunity to demonstrate the meaningful assistance that the State can provide to local governments.

The program is partially based on a "State/Local" partnership in which the State performs many regulatory functions, but relies on local ordinances for managing activities in floodplains and erosion hazard areas. The Commonwealth may also delegate administration of parts of the Dam Safety and Encroachments Act to local governments.

One result of improving State/Local relations in the coastal zone is that the concept might spread to inland areas as well. If it is demonstrated that coastal municipalities materially benefited from the coordination of State programs and the availability of funding, services and technical advice, inland municipalities might be tempted to explore such partnerships.

Without Federal approval of the Coastal Zone Management Program, these efforts will be dealt a significant setback.

An important institutional impact of program approval will be on citizen participation. A Coastal Zone Management Program in Pennsylvania will open new doors to citizens who wish to get involved in permit decisions, energy facility siting, recreation planning, wetland protection, water quality improvement, and resource management. Also, there will be a heightened public awareness of governmental processes (i.e., Environmental Hearing Board, Environmental Quality Board, public hearings) which will be used in the conflict resolution aspects of the Coastal Zone Management Program. Program approval will ensure that the decision-making process of the Commonwealth will consider the national interests in the Pennsylvania coastal zones. In addition, these same decision-making processes, especially the permitting process, will be streamlined to provide greater certainty and consistency in permit decisions as well as a decreased time for permit issuance. Without Federal approval, there will be no Coastal Zone Steering Committees, and less access to county

and State managers. Without the continuity of a solid funding base, built upon Federal approval, the main supporters of coastal zone management will gradually drift away, and be drawn to other pressing crisis areas. Finally, the coastal zone, as a concept people are just coming to understand, will disappear as a separate entity.

Possible Conflicts Between the Proposed Action and the Objectives of Federal, Regional, State, and Local Land Use Plans, Policies, and Controls for the Area Concerned

Prior to granting approval to a management program submitted by a coastal state, the U.S. Secretary of Commerce shall find that the state has coordinated the contents of its management program with local, areawide or interstate plans applicable to areas within the coastal zone existing on January 1 of the year in which the state's management program is submitted to the Assistant Administer for approval (Coastal Zone Management Act, subsection 306(c)(2)(A)).

The Pennsylvania Coastal Zone Management Program has accomplished these requirements, as documented in Chapter 5 of Part II, and will continue to consider the interests and needs of local, county, regional, and Federal agencies, authorities and affected bodies. Comments have been quite favorable on the amount of coordination that occurred with plans of other agencies. Because such extensive coordination has occurred, many of the coastal zone goals are becoming reality, through implementation by a wide variety of agencies.

Careful coordination with local, county, and regional land use plans (where available) has usually been repaid with continuing support. On-going Federal studies and plans have been consulted frequently. Many ideas proposed in Pennsylvania's Coastal Zone Management Program are, in fact, not original but are adapted from other sources. This concept has served to make acceptance of coastal management easier and has added impetus to local proposals.

If any major conflict can be identified, it is between local plans and the Coastal Zone Management Program in the area of public access, recreation and historic/cultural resources. Local plans rarely show as many areas reserved for such purposes as the Coastal Zone Management Program which stressed these areas extensively. Following program approval, local units of government will be eligible for planning grants to enable them to "rethink" or "replan" for these activities.

Environmental Effects of Alternatives

Since the alternatives deal with approval or denial of the Coastal Zone Management Program, environmental impacts are also based on approval or denial. As discussed briefly under the Indirect Impacts of Federal Approval section above, the decision to disapprove Pennsylvania's program will not have a major immediate impact on the natural environment of the coastal zones. Resource management programs would continue to function and resource protection permits would still be required, reviewed, and acted upon regardless of the status of the Coastal Zone Management Program. However, a major blow would be struck against coordination of permits and cooperation among State agencies. The Coastal Zone Advisory Committee, the major coordinating body of the State level would cease to function without a Coastal Zone Management Program and coastal management staff. Immediately, several important ties between Harrisburg, Erie, and Philadelphia would be terminated. The Department of Environmental Resources would effectively lose its local focal points of communication in each coastal area. Any semblance of program involving a balance between growth and resource protection would evaporate and the situation would likely revert to the situation that existed before 1974 and Pennsylvania's entrance into the Federal Coastal Zone Management Program. Issues would be seen as black and white; develop or preserve. Mechanisms to trade-off and balance resource management decisions would disappear.

Important coastal policies on floodplains, erosion control structures and dredging would lose a local sponsor. The policies would technically still exist, but without the mechanism of "State Consistency" little heed would be paid to them - except perhaps by a particular State agency that happened to have statutory authority.

Alternatively, the environmental impacts of the alternatives involving program approval appear very positive. The tangible benefits to residents and businesses in Pennsylvania resulting from an ongoing Coastal Zone Management Program have been pointed out previously. A balanced program, featuring a mechanism to resolve conflicts and coordinate State regulatory agencies would be extremely desirable.

Finally, Pennsylvania's Coastal Zone Management Program had to initially overcome its own image as a noncoastal state and to resolve differences between widely separated coastal areas. There is little doubt, however, that the Pennsylvania Coastal Zone Management Program has improved attitudes and expectations.

Means to Mitigate Adverse Environmental Impacts

The program's management philosophy is to encourage economic growth while protecting and enhancing environmental quality. The

Pennsylvania Coastal Zone Management Program will manage short-term uses in a balanced manner by taking into account both economic and environmental concerns. It recognizes that some energy facilities and coastal dependent developments and activities have adverse environmental consequences, but they may still be located in the coastal zone to help provide orderly economic development, and to consider the national interest.

In those instances where an action of the program will result in adverse environmental impacts, such as loss of wetlands, the program will require that steps be taken to offset the losses. This will be accomplished through changes to regulations under Chapter 105 of the Pennsylvania Code of Regulations.

In addition, the Commonwealth will provide funds in Areas of Preservation and Restoration to restore them to their natural condition or to upgrade the environmental quality of these areas.

Part VI

List of Preparers

PART VI

PART VI - LIST OF PREPARERS

Mr. Peter McAvoy, Great Lakes Regional Manager, Office of Coastal Zone Management

Degrees: B.S. Resource Development, Michigan State University (1968)
Joint M.S. Urban and Regional Planning and Environmental Studies, University of Wisconsin-Madison (1972)
J.D. Marquette University (1975)

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Mr. John Paul Tolson, Assistant Great Lakes Regional Manager, Office of Coastal Zone Management

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Mr. Daniel Hoydysh, Attorney/Advisor, Office of Coastal Zone Management

Degrees: B.S. City College of New York (1966)
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M.A. Marine Affairs, University of Delaware (1974)
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Mr. E. James Tabor, Manager, Coastal Zone Management Branch, Pennsylvania Department of Environmental Resources

Degrees: B.S. Landscape Architecture, Pennsylvania State University (1964)

Experience: 15 months coastal zone management, 16 years planning and program management

Mr. Gerald M. Sudick, Planning Chief, Coastal Zone Management Branch, Pennsylvania Department of Environmental Resources

Degrees: B.S. Landscape Architecture, Pennsylvania State University (1968)
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M.A. Geography, University of Pittsburgh (1974)

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Mr. Eric R. Conrad, Planning Analyst, Coastal Zone Management Branch, Pennsylvania Department of Environmental Resources

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MRPL, Pennsylvania State University (1979)
Master's Thesis - Coastal Zone Management

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Mr. M. Duke Pepper, Attorney/Advisor, Office of Chief Counsel, Pennsylvania Department of Environmental Resources

Degrees: B.S.B.U. Accounting, University of Delaware (1974)

J.D. Law, Lewis and Clark Law School, Northeastern School of Law (1978)

Experience: 9 months coastal zone management staff attorney

Ms. Peggy Ashenfelder, Secretary, Coastal Zone Management Branch, Pennsylvania Department of Environmental Resources

Experience: 10 years secretarial, 1 year coastal zone management

Mr. Michael A. Wolf, Chief of Land Resources Planning, Delaware Valley Regional Planning Commission

Degrees: B.A. Temple University (1969)
M. City and Regional Planning, University of Pennsylvania (1974)

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Mr. Christopher Capotis, Executive Director, Erie County Department of Planning

Degrees: B.S. Urban Planning, Columbia University

Experience: 21 years Executive Director of Erie County Department of Planning

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Degrees: B.S. Urban and Regional Planning, Indiana University of Pennsylvania (1974)

Experience: 5-1/2 years land use planning

Part VII

List of Agencies, Organizations and Persons Receiving Copies of the FEIS

PART VII

PART VII - LIST OF AGENCIES, ORGANIZATIONS AND PERSONS RECEIVING COPIES OF FINAL ENVIRONMENTAL IMPACT STATEMENT

Federal Agencies

Advisory Council on Historic Preservation
Department of Agriculture
Department of Commerce
Department of Defense
Department of Energy
Department of Health, Education & Welfare
Department of Housing & Urban Development
Department of the Interior
Department of Justice
Department of Labor
Department of Transportation
  U.S. Coast Guard
Environmental Protection Agency
Federal Energy Regulatory Commission
General Services Administration
Marine Mammal Commission
Nuclear Regulatory Commission

State and Local Agencies

Bensalem Township
Bensalem Township Planning Commission
Bristol Borough
Bristol Borough Planning Commission
Bristol Township
Bristol Township Planning Commission
Bucks County Conservation District
Bucks County Planning Commission
Chester City Planning Commission
City of Chester
City of Erie
City of Philadelphia
County of Bucks
County of Delaware
County of Erie
Darby Township
Darby Township Planning Commission
Delaware County Conservation District
Delaware County Planning Department
Delaware River Basin Commission
Delaware Valley Regional Planning Commission
Eddystone Borough
Eddystone Borough Planning Commission
Erie City Bureau of Water
Erie County Department of Planning
Erie Housing Authority
Erie Redevelopment Authority
Fairview Township

Falls Township
Falls Township Planning Commission
Folcroft Borough
Folcroft Borough Planning Commission
Girard Township
Governor's Office of Policy and Planning
Governor's Energy Council
Harborcreek Township
Lake City Borough
Lawrence Park Township
Lower Chichester Township
Marcus Hook Borough
Millcreek Township
Millcreek Township Planning Commission
Morrisville Borough
Morrisville Borough Planning Commission
North East Borough
North East Township
Northwest Pennsylvania Regional Planning
and Development Commission
Norwood Borough
Pennsylvania Department of Environmental Resources
Pennsylvania Department of Commerce
Pennsylvania Department of Community affairs
Pennsylvania Department of Education
Pennsylvania Department of Transportation
Pennsylvania Fish Commission
Pennsylvania Game Commission
Pennsylvania Historical and Museum Commission
Pennsylvania Public Utility Commission
Philadelphia City Department of Commerce
Philadelphia City Federal Programs Unit
Philadelphia City Planning Commission
Philadelphia City Water Department
Philadelphia Redevelopment Authority
Prospect Park Borough
Prospect Park Borough Planning Commission
Ridley Park Borough
Ridley Township
Ridley Township Planning Commission
Springfield Township
Tinicum Township
Tinicum Township Planning Commission
Trainer Borough
Tullytown Borough
Upper Chichester Township

State and Local Interest Groups

Allied Chemical Corporation
API-Pennsylvania
Association of Preservation of Darby Creek Valley
Atlantic Richfield Company
B.P. Oil Corporation

Bayfront NATO, Incorporated
Behrend College
Bicycle Trail Commission of Erie County
Boeing Vertol Company
Bucks County Audubon Society
Bucks County Conservancy
Bucks County Courier Times
Bucks County Historical Society
Center City Residents Association
Columbia Gas Transmission, Inc.
Concerned Area Residents for Preservation
of Tinicum Marsh
Corinthian Yacht Club
Darby Creek Watershed Association
Delaware County Chamber of Commerce
Delaware-Chester County Regional Council
Delaware County Conservation Alliance
Delaware River Port Authority
Delaware Valley Citizens for Clean Air
DELCO Federation of Sportsmen's Clubs
DELCORA
Delmarva Power and Light Company
Eastwick Project Area Committee
Edinboro State College
Erie County Audubon Society
Erie County Council of Garden Clubs
Erie County Sportsmen League
Erie-N.W. Pennsylvania Port Authority
Erie Times-News
Erie Tourist and Convention Bureau, Inc.
Erie Yacht Club, Kohkwa Park
Gannon College
General Electric Corporation
Greater Erie Industrial Development Corporation
Grundy Memorial Library
Historical Society of Erie County
Holmesburg Club
Homebuilders Association of N.W. Pennsylvania
Homebuilders Association of Philadelphia
Horticultural Society of Erie County
Hunting and Fishing Club of North East
Kerr-McGee Chemical Corporation
League of Women Voters of Pennsylvania
Lower Bucks County Canal Conservation Committee
Millcreek Chamber of Commerce
National Fuel Gas
National Sugar Refining Corporation
Neshaminy Valley Watershed Association
Old Philadelphia Development Corporation
Olde City Civic Association
PENNJERDEL Open Space Committee
Penn's Landing Corporation
Pennsylvania Boating Association, Inc.
Pennsylvania State Association of Township Supervisors

Pennsylvania State University
Pennwalt Corporation
Penn Warner Club
Pennypack Park Civic Association
Philadelphia Academy of Natural Sciences
Philadelphia Coke
Philadelphia Electric Company
Philadelphia Evening Bulletin
Philadelphia Federation of Sportsmen's Clubs
Philadelphia Industrial Development Corporation
Philadelphia International Airport
Philadelphia Partnership
Philadelphia Port Corporation
Poquessing Watershed Association
Presque Isle Yacht Club
Protect Your Environment Club
Publicker Industries
Reynolds Metals Company
Rohm and Haas Company
Scott Paper Comapny
Slippery Rock State College
Silver Lake Outdoor Education Center
Society Hill Civic Association
Stauffer Chemical Company
Sun Oil Company
Sun Shipbuilding and Drydock Company
Temple University
Trout Unlimited-Bucks County Chapter
U. S. Flotilla 5-2
U. S. Flotilla 5-3
U. S. Steel Corporation
University City Science Center
Warner Company
Westinghouse Electric Corporation
West Tonesdale Civic Association

Others Receiving Copies

All other agencies, groups and persons expressing an interest in receiving a copy of the Final Environmental Impact Statement Moreover, all major municipal libraries in the two coastal zones will receive copies for reference.

Part VIII

Comments and Responses to the DEIS

PART VII

PART VIII

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT AND RESPONSES

Part VIII contains comments received by the Office of Coastal Zone Management during the Federal review period for the Pennsylvania Coastal Zone Management Program and Draft Environmental Impact Statement ending July 21, 1980. Comments were received in written form and in oral testimony at three public hearings held in Philadelphia, Pennsylvania on July 1, 1980, and Erie, Pennsylvania on July 2, 1980. All comments, written and oral, have been summarized. Comments of individuals, groups, or agencies submitting written comments in addition to providing oral testimony at a public hearing are listed under hearing comments. In some instances, comments have resulted in changes to the document. This has been noted in the response to the comment.

The summary of the number of comments received is as follows:

Written Comments

Federal Agencies - 7
State Agencies - 1
Local Governments - 2
Interest Groups - 7
Individuals - 0

Hearing Comments (includes individuals, groups, and agencies which have submitted written comments in addition to oral testimony)

Federal Agencies - 0
State Agencies - 2
Local Agencies - 2
Interest Groups - 5
Individuals - 6

In addition, comments from two Federal agencies were received after the close of the comment period. Although the comments and response are not listed here, a number of the recommendations of these agencies are reflected in the FEIS.

Response of General Interest to Commentors on the DEIS

In its comments on the DEIS, the U.S. Department of Interior (DOI) raised a number of concerns over the Chapter 105 regulations issued pursuant to the Dam Safety and Encroachments Act. These regulations appeared in Appendix B, pages 19-98. The regulations as proposed in the DEIS are sufficient for purposes of program approval because they provided a means to carry out Policies 1-A.2 with respect to erosion control structures; I-B.1 with respect to floodplains; II-1 with respect to commercial and maintenance dredging and spoil disposal; IV-1 with respect to wetlands, VIII-1 and VIII-2 with respect to energy facilities.

Of particular concern to DOI were the provisions for wetlands protection in the regulations. OCZM has determined that the regulations are sufficient for purpose of program approval because they provide a public benefits test for activities proposed to be located in coastal wetlands. This test recognizes public benefits of naturally functioning wetlands. As part of that test, the regulations require consideration of alternative sites, information from the applicant on the need to locate the proposed activity in a wetland (the water-dependency test), and regulation of activities within 300 feet of a wetland.

OCZM finds the suggestions made for changes and additions to these regulations useful, but not necessary for approval of the program, based on the requirements of Section 923.3(b) and 923.41 of Program Approval Regulations (see also the response to the comments regarding the relationship between these regulations and the guidelines for issuance of Federal permits under Section 404 of the Clean Water Act on page VIII-13 and VIII-39). Nevertheless, the Commonwealth will consider the suggested changes and additions prior to final adoption of the regulations.

Proposed final Chapter 105 regulations are found in Appendix B of the FEIS. Final approval of the Chapter 105 regulations is scheduled for the September 16, 1980, meeting of the Pennsylvania Environmental Quality Board (EQB). No approval of the Pennsylvania Coastal Zone Management Program will be granted without adoption of adequate final regulations. Changes made between the Proposed Final Regulations appearing in the FEIS and the final regulations as adopted on September 16, 1980, will be reviewed by the Office of Coastal Zone Management for both degree and substance of change. Substantial changes to the Chapter 105 regulations will result in distribution of the final regulations and commencement of a new 30-day period prior to approval of the PCZMP.

FEDERAL AGENCIES

Department of Agriculture

(Norman A. Berg, 7/21/80)

Comment

No information concerning forest resources or their management is presented. The program should recognize that floodplains and wetlands are important producers of forest products and associated resource values such as recreation, wildlife habitat, open space, watershed protection, and other values.

Response

Management of forest resources is outside the scope of the PCZMP. The program acknowledges that coastal wetlands are important sources of resource values such as fish and wildlife habitat, storage areas for floodwaters, and buffers against shoreline erosion. However, coastal wetlands in Pennsylvania do not contain significant forest resources. The FEIS now acknowledges the value of floodplains as producers of forest products and associated resource values (see Policy Actions for Policies I-B and 1-B.1, and Policy IV of Part II, Chapter 2 of the FEIS).

Comment

There is no discussion on the effects of land use, especially agriculture and strip mining in the Delaware Valley Watershed, on water quality and sedimentation. These activities are responsible for channel and harbor dredging and for deterioration of the Delaware Estuary fisheries. These impacts should be addressed in the policy framework.

Response

In the problems statement of Policy IX-B.1, the PCZMP acknowledges that runoff from agricultural land and animal feed lots is a source of water quality degradation. The Soil Conservation Law, which is incorporated into the PCZMP, applies throughout the Commonwealth and provides for Conservation Districts which may develop comprehensive plans and carry out measures to prevent and control soil loss and enter into agreements with governmental agencies or landowners for the purpose of carrying on erosion control and prevention operations (see Appendix A of the FEIS).

While the PCZMP is concerned with the effect of activities outside the coastal zone, there are reasonable limits to the extent to which the program can address all such issues. The Commonwealth's Strip Mining Act is functioning to require reclamation of stripped lands of the upper Delaware watershed. In addition, any Federal activities or activities which require a Federal license or permit and which affect the Pennsylvania coastal zone must be consistent with the PCZMP.

Comment

No mention of urban sediment control plans is discussed. Because of the intense development in the Delaware Valley, urban sediment control plans should be addressed with stormwater management in the policy framework.

Response

In preparation of the stormwater management plans, pursuant to the Stormwater Management Act, it is anticipated that urban sediment control will be a component of those plans. The PCZMP now acknowledges this consideration (see Authority(s)/Policy 1-A.3).

Federal Energy Regulatory Commission

(Carl N. Shuster, 7/17/80)

Comment

Clarification and correction of the names and organizational structure of U.S. energy agencies is requested in Chapter 5 of the PCZMP.

Response

Changes have been made in the FEIS.

Comment

Licenses and certificates of the Federal Energy Regulatory Commission should be revised in Chapter 5 of the PCZMP.

Response

Changes have been made in the FEIS.

Comment

Maps of the coastal zone boundaries are not sufficiently clear to determine whether a property or activity is located within the management area. More detailed maps are recommended in the final PCZMP.

Response

Detailed maps of the coastal zone boundaries were published in the development of the PCZMP, and were distributed to all Federal agencies. These maps are omitted from the DEIS in an effort to reduce the volume and expense of the document. Detailed boundary maps are available for inspection by the public during regular business hours at the Department of Environmental Resources, 3rd

and Reilly Streets, Harrisburg, Pennsylvania; Delaware Valley Regional Planning Commission, 1819 JFK Boulevard, Philadelphia, Pennsylvania; Erie County Metropolitan Planning Commission, Erie, Pennsylvania; and at the Office of Coastal Zone Management, 3300 Whitehaven St., N.W. Washington, D.C. 20235.

These maps will not be printed in the FEIS in order to reduce its volume and expense.

Comment

No energy facilities other than petroleum refineries are identified as a high priority use of development opportunity areas within the coastal zone. FERC recommends that the Commonwealth include other energy facilities such as oil and gas pipelines and liquified natural gas plants within these areas.

Response

The PCZMP now recognizes all phases of energy production and transfer as high priority activities in the Development Opportunity Area category of GAPC's. This is now reflected in Part II, Chapter 3 of the FEIS.

Comment

It is unclear whether the Commonwealth would require that applicants obtain all necessary State permits before the PCZMP could determine (Federal) consistency. FERC recommends that the Commonwealth not use this technique because it is unduly restrictive and time consuming.

Response

By securing State permits in advance of Federal permits, the consistency certification required of the applicant will be facilitated, since the applicant will have had the benefit of working with the State and understanding what is required for the Commonwealth to concur with the consistency certification.

Comment

The statement on page II-5-9, "If the Department of Environmental Resources concurs with the certification, the Federal agency may proceed with normal processing of the application," is incorrect. Section 307(c)(3)(A) of the CZMA specifies only that no license shall be granted by the Federal agency until the State has concurred with the applicant's certification. In addition, according to part 15 CFR 930.63(c), "Federal agencies should not delay processing applications pending receipt of a State agency's concurrence."

Response

The Federal permit review process will run concurrently with the State's consistency review. Upon receiving concurrence of consistency certification from the DER, the Federal agency may then proceed to permit or license the activity. The PCZMP has been changed to reflect this (see Part II, Chapter 5 of the FEIS).

Comment

It appears that consistency certification is required for Federal licenses involving projects located outside of the Pennsylvania coastal zone that may significantly affect the coastal zone. The PCZMP should define the conditions under which a project located outside of the Pennsylvania coastal zone may be considered as significantly affecting the coastal zone.

Response

Activities requiring Federal permits need only directly affect (emphasis supplied) the coastal zone but not necessarily be within it in order to require that they be consistent with a Federally-approved State coastal program (see Section 307(c)(3)(A) of the Coastal Zone Management Act and 15 CFR 930.53 of Federal Consistency Regulations). The conditions under which a project located outside the coastal zone may be considered as affecting the coastal zone will be determined by the extent to which such activities conform to the policies of the management program, with respect to their impacts on the coastal zone.

Comment

The Dam Safety and Encroachments Act and the Floodplain Management Act are principal Commonwealth laws for regulatory aspects of the PCZMP. These two acts regulate all dams except those licensed pursuant to the Federal Power Act. The FERC issues non-Federal hydroelectric project licenses pursuant to the Federal Power Act. What are other Commonwealth laws that may be used for consistency certification on FERC licenses on non-Federal hydroelectric projects?

Response

Article 1, Section 27, of the Pennsylvania Constitution
Pennsylvania Clean Streams Law
Schuykill River Pollution/Siltation Law (on Schuykill River only)
Fish Laws of 1959

Comment

Hydroelectric power plants are not identified in the energy facility planning process as energy facilities likely to locate in, or which may significantly affect the Pennsylvania coastal zone. Since it is the intent of the PCZMP that Federal licenses for hydroelectric projects be subject to consistency certification, a planning process for hydroelectric power plants should be presented in PCZMP in accordance with the requirements of the Coastal Zone Management Act.

Response

A discussion has been added on hydroelectric generating facilities in the energy facility planning process (see Part II, Chapter 3). In addition, policy VIII-1 has been changed to recognize the potential of hydroelectric power in the coastal zone.

Comment

Two applications for potential hydroelectric development in the Delaware Estuary coastal zone have been received by the FERC. The FERC offers information and a staff contact for information concerning these plants.

Response

OCZM appreciates the information provided on these future hydroelectric sites. Only one of these potential hydroelectric sites is within the coastal zone.

Comment

A number of editorial and technical comments related to the text of the energy facility planning process are made.

Response

Appropriate changes have been made in the FEIS.

Department of the Army, Office of the Chief of Engineers

(George F. Boone, 7/16/80)

Comment

PCZMP and Draft Environmental Impact Statement are generally acceptable.

Response

No response necessary.

Comment

The Corps suggests presenting the maps of the coastal boundary in much greater detail and at a larger scale due to their importance.

Response

Boundary maps of a larger scale and greater detail were printed in the Technical Record during the development of the PCZMP and distributed to all Federal agencies. These maps are omitted from the DEIS and FEIS in an effort to reduce volume and expense. Detailed boundary maps are available for inspection by the public during regular business hours at the Department of Environmental Resources, 3rd and Reilly Streets, Harrisburg, Pennsylvania; Delaware Valley Regional Planning Commission, 1819 JFK Boulevard, Philadelphia, Pennsylvania; Erie County Metropolitan Planning Commission, Erie, Pennsylvania; and at the Office of Coastal Zone Management, 3300 Whitehaven St., N.W. Washington, D.C. 20235.

Comment

There are no maps showing the specific GAPC's. These would be a helpful addition to the DEIS.

Response

All GAPC's are shown in maps of the Technical Record. These can be referenced in the same locations as the coastal boundary maps.

Comment

More attention should be given to the GAPC's which are overlap areas. These are areas which are most controversial, but the DEIS does not set priorities for overlap areas.

Response

Overlap areas have been nominated as GAPC's pursuant to 15 CFR 923.23, Other Areas of Particular Concern. In meeting the requirements of this section of Program Approval Regulations, the Commonwealth is not required to establish priorities of use for these areas. However, once an overlap area is designated as a GAPC, the Commonwealth must indicate a reasonable timeframe and procedures for developing and implementing appropriate management techniques, and an agency (or agencies) capable of formulating and implementing the necessary management techniques (see Part II, Chapter 3 for nomination and designation procedures).

Comment

Dredging disposal activities are assigned as a high priority use in Development Opportunity Areas, contingent on obtaining a permit from the Department of Environmental Resources and reclamation for other river related uses. This is misleading in that dredged material disposal is a necessary activity.

Response

The PCZMP recognizes dredged material disposal as a necessary activity. However, any disposal of dredged material will require a permit under the Clean Streams Law or Dam Safety and Encroachments Act, regardless of where it is placed. By citing dredged material disposal as a high priority use of Development Opportunity Areas, the Commonwealth is indicating its preference for locating dredged material disposal areas.

Comment

Use of the term "likely to affect" the coastal zone is not the appropriate legal standard when referring to Federal licenses and permits which are subject to Federal consistency certification.

Response

The term has been changed to "affecting" in the FEIS. This is the appropriate legal standard pursuant to Section 307(C)(3)(a) of the CZMA.

Comment

Specific statutory citations should be listed for Corps of Engineers permits subject to Federal consistency. There is no Corps permit for hazardous substances.

Response

The specific statutory citations for all Corps permits subject to Federal consistency have been added. Reference to Corps permits for hazardous substances has been deleted.

Comment

The DEIS errs when it implies that only Department of Interior permits obtain consistency certification through the approval process for (OCS) oil and gas development plans. These plans may be detailed enough that the Corps could piggyback consistency certification of its permits on certifications of consistency for (OCS) oil and gas development plans.

Response

The PCZMP did not mean to imply that only Department of Interior permits require consistency certification for (OCS) oil and gas activities. The PCZMP will attempt to work with the Corps of Engineers to enable the applicants for Corps permits associated with (OCS) oil and gas activities to certify consistency with the PCZMP at the same time that the Commonwealth is working with the Department of Interior on certification of consistency with (OCS) oil and gas development plans. The PCZMP has been changed to reflect this (see Part II, Chapter 5, Outer Continental Shelf Activities).

Comment

Discussion of port activities should be expanded to include maintenance of existing navigation. This would be appropriately included as a national interest consideration.

Response

Need for maintenance of navigation channels to support port activities is discussed under policy II, Dredging and Spoil Disposal. Ports and Navigation are identified as activities in the national interest (see Part II, Chapter 5).

Department of the Navy

(W. B. Britt, 7/9/80)

Comment

The use of the words "direct" and "significant" impacts is not in consonance with 15 CFR 930.33 (Federal consistency regulations). The phrase "directly affecting" would adequately cover what the PCZMP defines as "direct" and "significant" impacts.

Response

Pursuant to Section 305(b)(2) of the Coastal Zone Management Act and 15 CFR 923.11 of Program Approval Regulations, states are required to identify land and water uses that will be subject to the terms of the management program. These uses shall be those with direct and significant impacts on coastal waters. The legal standard for Federal activities subject to consistency with the PCZMP is the "directly affecting" test as determined by Federal agencies. These are two distinct requirements, and OCZM has determined that the PCZMP has adequately identified those uses with direct and significant impacts on coastal waters as subject to the management program.

Comment

The map of the Delaware Estuary coastal zone does not show the Philadelphia Naval Base as excluded Federal lands.

Response

A generic statement is made in Part II, Chapter 1 of the FEIS that all Federal lands are excluded from the Pennsylvania coastal zone. Figure I-3 has been changed in the FEIS to reflect the exclusion of the entire Philadelphia Naval Base.

U.S. Department of Commerce, Maritime Administration, Great Lakes Region

(Ronald J. Bodziony, 7/16/80)

Comment

The PCZMP appears to have a balanced approach to environmental, recreational, historical and economic development requirements. A basic philosophy of encouraging economic growth while protecting and enhancing environmental quality is prevalent throughout the plan.

Response

No response necessary.

Comment

Request correction in Maritime Administration contact for Eastern Region as listed in Appendix C, and establishment of Maritime Administration contact for the Great Lakes Region.

Response

Although Appendix C is not reprinted in the FEIS, the recommended change has been made for the record. In addition, the PCZMP has added the Great Lakes Region of the Maritime Administration to its list of Federal contacts.

Comment

Membership on the State level Coastal Zone Advisory Committee (CZAC) is heavily weighted with representatives of the DER. From a voting membership standpoint, this could impede equitable resolution of conflicts in the coastal zone. In addition, there is no indication of which Federal agencies will serve on the Committee or what their roles will be. The Committee also does not include any industry or port authority representation. MarAd recommends that port authorities be involved on the CZAC or local steering committees or both, and that voting representation from DER be limited to one or two positions, that other offices have an equal number of voting members on the CZAC, and that Federal agencies to be represented on the CZAC be identified.

Response

The CZAC is purely an advisory (non-voting) mechanism for assisting the Coastal Zone Management Branch in providing State level program coordination. Since many of the program's authorities fall under the powers of DER, this agency has many directly affected representatives, who therefore "sit" on the committee. This committee is not designed to handle Federal coordination mechanisms. These mechanisms are described under Federal Coordination activities in Part II, Chapter 5 of the FEIS. Port authorities are represented on the local steering committees, as outlined in the FEIS (see Part II, Chapter 5). In addition, the Pennsylvania Department of Commerce is a member of the CZAC.

Comment

The types of individuals to be appointed as citizen representatives on the local coastal zone steering committees are not specified. MarAd recommends that these citizen representatives be a mix of business, agriculture, and environmental oriented personnel.

Response

The PCZMP agrees with the concept and intent of including a diverse mixture of various citizen interests on the local steering committees, and language to this effect has been incorporated into Part II, Chapter 5 (Local Coordination Activities) of the FEIS.

Comment

The ports and industrial development policies incorporated into the PCZMP are stated in broad, general terms and give the impression of a "one-shot" study that will accomplish them. These policies should result in a continuous ongoing effort.

Response

The PCZMP considers enhancement of port and industrial facilities to be an ongoing and continuous process. Changes have been made under the Policy Actions for Policies VII-1 and VII-2 to indicate that port and water dependent industrial development will be ongoing efforts of the PCZMP.

Environmental Protection Agency

(John R. Pomponio, 7/21/80)

Comment

Although the CZMP incorporates the requirements of the Clean Air Act and presents an air quality policy, it does not appear that the program has been coordinated with other efforts to maintain or improve air quality in the coastal zone. The CZMP does not discuss Air Quality Control Regions, the State Implementation Plan, or areas subject to prevention of significant deterioration regulations. We believe that these are important air quality issues that should be addressed in the CZMP.

Response

The PCZMP has been coordinated with the air quality program of the Commonwealth through the statewide Coastal Zone Advisory Committee discussed in Part II, Chapter 5 of the FEIS. This process will be continued throughout program implementation. In addition, the PCZMP will monitor the applications for issuance of air quality permits as they affect the coastal zone through the process described in Part II, Chapter 4, Program Monitoring and Evaluation. A discussion has been added to the FEIS dealing with Air Quality Control Regions, the State Implementation Plan and areas subject to prevention of significant deterioration regulations (see Problems Addressed, Policy IX-B.2).

Comment

The CZMP does not discuss EPA's National Pollution Discharge Elimination System (NPDES), or the Corps of Engineers (COE) Section 404 permit program. There should be some explanation of the relationship between these Federal permit activities and the goals and permit requirements of the CZMP.

Response

Explanations of the relationship between these two Federal programs, the NPDES and the Section 404 program, have been included in the Policy Action sections of Policies IX-B.1, Water Quality, IV-1, Wetlands, and II-1, Dredging and Spoil Disposal respectively. The requirements of the NPDES program are incorporated into the PCZMP under the provisions of the Clean Streams Law. This was delegated to the Commonwealth by U.S. EPA on June 30, 1978. Projects affecting coastal wetlands are subject to State regulations pursuant to the Dam Safety and Encroachments Act and Federal regulations pursuant to Section 404 of the Federal Clean Water Act. This joint review will provide for additional protection of wetlands because the stronger provisions of each set of regulations will apply. No Federal permit will be issued until all requirements of the State permit are met. Consequently, any requirement for a wetlands permit, which is stronger at the State level, must be met before a Federal permit is granted.

Comment

It appears that the construction of dams of up to three feet high in streams 50 feet wide would not be regulated under the PCZMP. We believe that the environmental impacts of this policy should be discussed.

In the discussion of culverts and bridges in regulations to the Dam Safety and Encroachments Act, it is not clear why culverts shorter than 100 feet are exempt from review, or why some can be designed for only 25-year floods.

Response

The construction of dams up to three feet high in a stream not exceeding fifty feet in width, where such dam is constructed for the sole purpose of creating a pool for fish or fishing purposes or culverts shorter than 100 feet do not require the issuance of a State permit. However, construction of these must adhere to the design standards specified in the Chapter 105 regulations (Appendix B of the FEIS). The environmental impacts of such dams include loss of stream habitat, barriers to anadromous fish such as salmonids in tributaries to Lake Erie and shad in tributaries to the Delaware Estuary, siltation in the impounded water, loss of stream access sites and loss of fishing opportunities for anadromous fish. These impacts are identified in Part V of the FEIS, Environmental Consequences.

Comment

The Dredging and Spoil Disposal Policy (page II-2-10) does not reference either the COE's Section 404 permit program or EPA's guidelines and criteria for disposal site selection.

Response

Disposal of dredged material will require review based on Section 404 of the Clean Water Act and the Dam Safety and Encroachments Act (if it is classified as a water obstruction or encroachment) and/or the Clean Streams Law. Policy Actions/Policy II-1 of the FEIS reflects this.

Comment

It is not clear that the Hydraulic Dredging Policy is appropriate for all dredging situations. We are also concerned that hydraulic dredging may cause discharge problems at disposal sites.

Response

A revision to the Policy Action section of Policy II-2 has been added which states, "Principally hydraulic dredging is recommended within the Pennsylvania coastal zone because it allows less turbidity and silt movement than does mechanical dredging." Increased sediment movement in Presque Isle Bay or the Delaware Estuary is a highly undesirable event. Hydraulic dredging, however, may not be used in all cases. Site location, availability of dredging options for dredged material disposal, biological resources which may be adversely affected, and related economic factors will be used to determine the most suitable method of dredging."

Comment

Although local plan coordination is discussed on page II-5-25, no details of this process are presented. We would like to know what topics were considered during this coordination procedure, what conflicts were identified, and which conflicts remain unresolved.

Response

The topics that were discussed during local plan coordination are reflected in the scope of Chapter 2, Coastal Zone Policy Framework. Specific conflicts or problems are identified prior to each policy statement. Many minor conflicts remain unsolved; however, all major conflicts, as determined by State and local representatives, have been addressed in detail in the document, and the state has the necessary authorities to enforce the coastal policies.

Comment

Chapter II-5, Intergovernmental/Public Coordination and Review, does not provide sufficient detail to assure consistency with existing Federal policy.

Response

Part II, Chapter 5 outlines general procedures to be used to determine consistency of Federal actions with the policies and standards of the PCZMP pursuant to Section 307 of the Coastal Zone Management Act. The PCZMP incorporates the requirements of the Clean Air Act and Clean Water Act. The relationship of Section 404 of the Clean Water Act to the PCZMP has been discussed in response to an earlier comment. The Program intends to coordinate its activities with Federal agencies through the Great Lakes Basin Commission. (See Part II, Chapter 5)

Comment

Policy I-A.1 (page II-2-3), concerning bluff recession hazards, refers to the "economic life" of structures. Does this correspond to the life spans listed on page II-B-9? Why were these life spans selected?

Response

The reference made to "economic life" of structures in Policy 1-A.1 corresponds to the life spans listed in Bluff Recession and Setback Regulations contained in the FEIS.

These life spans are based on economic analysis of a structure's life expectancy. Principally, the 50-year life expectancy of a residential structure is based on two 25-year homeowner mortgages. The life expectancies of commercial and industrial structures are greater due to the large capital expenditures for construction.

Comment

Why was 50 feet established as the minimum bluff setback distance?

Response

A minimum of a 50' setback was established by using a recession rate of one foot per year times the life span of a residential structure. Minimum setbacks are 75' for commercial structures and 100' for light and heavy industrial structures. Where the data used in recession rate calculations showed a rate of recession of less than one foot a year, other factors such as high ground water levels, storm water run-off, and static pressure were considered in calculating the setback distance. Where the annual recession rate is greater than one foot, the rate is multiplied by the minimum setback distance for the appropriate class of structure to determine the setback distance. Based on PCZMP studies, the Commonwealth believes a 50' buffer strip of undisturbed ground and vegetation will slow bluff recession where that erosion could be caused by high ground water levels, sheet run-off, and increased static pressure. A 50' buffer strip in areas where more factors are causing bluff recession than mentioned previously will not be sufficient. When more factors are present, higher rates of recession were observed and greater setback distances have been required by the Bluff Recession and Setback Act.

Comment

It is not clear that this minimum distance, or the setback formula, will adequately control bluff erosion or protect property. The EIS should include an analysis of this policy.

Response

There is no absolute prevention of bluff recession; bluff recession cannot be abated, it can only be retarded. The minimum distance as discussed in the previous response is sufficient, based on State geotechnical investigation, to protect property from the hazards of bluff recession during their economic life span. Part V of the FEIS, Environmental Consequences, is expanded to discuss the effect of this setback.

Comment

It is not clear to us that this DEIS is consistent with the Council on Environmental Quality's (CEQ) regulations for implementing the National Environmental Policy Act (NEPA). Of particular concern to us is the treatment of alternatives (CEQ Paragraph 1502.14) and the anaylsis of environmental impacts (CEQ Paragraph 1502.16). These two sections should be the most important parts of an EIS, but they have not been emphasized in the DEIS for the proposed CZMP. We believe that this procedure has limited the usefulness of the EIS as a decisionmaking document because it is difficult to compare the impacts of the project alternatives.

Response

OCZM disagrees that the DEIS on the PCZMP is inconsistent with CEQ regulations for implementing NEPA, especially with respect to the analysis of alternatives and environmental impacts. However, additional material has been added to Part III to indicate how alternatives are considered in the course of program development. The discussion on environmental impacts has been expanded to include:

(1) the permit exemption for dams up to three feet high in streams less than 50 feet wide;

(2) the Hydraulic Dredging Policy;

(3) the 50' minimum bluff setback.

U.S. Department of the Interior

(Larry E. Meieroto, 7/21/80)

Comment

The Department believes that the PCZMP is deficient in meeting key program approval requirements which require that the management program contain three broad classes of policies related to resource protection, management of coastal development, and simplification of government processes. In general, we find that the coastal policies need considerable modification before decisionmakers

or anyone proposing projects affecting the coastal zone can determine what land and water use activities will or will not be permitted. Program approval regulations also require that the policies, standards, and procedures by which program decisions will be made must provide (a) a clear understanding of the content of the program, and (b) a clear sense of direction and predictability for decisionmakers who take actions pursuant to or consistent with the program.

In particular, we consider the policies on dredge spoil disposal and wetlands to be inadequate. For example, we believe it is not sufficient for Policy II-1 to state that dredging and spoil disposal "will be regulated to protect against obstruction to navigation, reductions in flood flow capacity, and damages to the public interest, as well as minimize harmful impacts to fish and wildlife habitats." Does this mean that dredge spoil will be removed from floodplains, or that open water disposal will be prohibited? The policy needs specific criteria under which spoil disposal can take place. The Department believes that the policy on wetlands needs similar revisions. For example, a policy should be provided which prohibits non-water-dependent fills in wetlands or shallow water. The PCZMP attempts to address the deficiencies in these policies through the draft regulations on Dam Safety and Waterway Management. While these regulations contain some excellent criteria, the Department finds that when they are used in combination with the program policies, program predictability is not significantly enhanced.

Response

OCZM finds the PCZMP to contain the three broad classes of policies required in 15 CFR 923.3(b)(2) and, in combination with administrative regulations, finds the policies to be sufficiently specific. Policies I-A.2, I-B, II-1, III-1, IV-1, IX-B.1 and IX-B.2 are related to resource protection; I-A.1, I-A.3, I-B, V-1, VII-1 through 3 and VIII-1 through 3 are related to management of coastal development; IX-C is related to simplification of government processes. Decisions with regard to dredged material spoil disposal and the use of wetlands are based on a public benefits test applied by the Department of Environmental Resources (see Sections 105.18, Projects Affecting Wetlands and 105.411, Criteria for Approval of Discharges of Dredged or Fill Material, in Dam Safety and Encroachments Act regulations, Appendix B of the FEIS.) Future actions with respect to disposal of dredged material or activities in wetlands can not be predicted with complete certainty until this balancing test has been applied. The Commonwealth does intend to preserve and protect wetlands through regulation of filling, dredging, draining and other activities (see Policy IV-1). OCZM considers these regulations to be sufficiently specific to meet the requirements of 15 CFR 923.3(b)(4) and 923.11(b)(2) and not inconsistent with the Federal 404 permit requirements.

The policies cited by the Department do not mean that dredge spoil already in floodplains will be removed or that open water disposal will be prohibited. However, open water disposal will be regulated. A balancing test will be applied as provided in the Chapter 105 regulations. Proposed final Chapter 105 regulations require that an applicant for a wetlands permit provide sufficient information on the need to locate in a wetland.

Comment

An important category of enforceable policies, those related to the management of coastal development, is lacking. Of particular concern to the Department is the absence of enforceable program policies involving the coastal dependency of large scale industrial, commercial, residential and institutional development.

Response

Due to the nature of the shorelines - erodible bluffs for nearly the entire length of Lake Erie shoreline and highly urbanized areas with some undeveloped floodplains and wetlands along the Delaware Estuary - management of coastal development is of most significant concern to Pennsylvania in erosion hazard areas, floodplains, wetlands and natural value GAPC's. The Commonwealth controls development in the first three areas by applying the regulatory provisions of the Bluff Recession and Setback Act, the Floodplain Management Act, and the Dam Safety and Encroachments Act. The Commonwealth will control the impacts of development in natural value GAPC's through the administration of air and water quality permits. Control of these areas through performance standards meets the requirements for managing coastal development pursuant to 15 CFR 923.3 and 923.11.

Comment

Although the Dredging and Spoil Disposal Policy section states that dredging is important for "the recovery of commercially valuable sand and gravel," the section is primarily directed at spoil disposal rather than commercial recovery. The Department believes that a separate section on commercial recovery of offshore sand and gravel is warranted. For completeness, onshore development should also be mentioned, although the Pennsylvania Surface Mining Conservation and Reclamation Act adequately regulates the extraction of onshore aggregate minerals and subsequent reclamation of mined areas, and there would appear to be little need for the PCZMP to further regulate these activities.

Response

The PCZMP has revised its Dredging and Spoil Disposal Policy (Policy II-1) to highlight the importance of recovery of commercially valuable sand and gravel under the necessary State regulatory control provided by the Dam Safety and Encroachments Act and Chapter 105 regulations (Appendix B). Onshore mining is not a significant issue in either coastal area and, as the comment indicates, it is adequately controlled by the Pennsylvania Surface Mining Conservation and Reclamation Act and is not referenced in the FEIS.

Comment

We believe that the PCZMP does not deal with the many impacts of industrial users on Lake Erie. For example, in 1968, the Hammermill Paper Company's waste injection well in Erie, Pennsylvania, blew out as a result of a tubing break and resultant casing corrosion. We believe that the Pennsylvania Coastal Zone Management Program should include State policies and regulations on waste injection wells, and should indicate the agency responsible for their administration.

Response

The PCZMP, under Policy IX-B.1 Water Quality, can regulate the impacts of industrial users on Lake Erie and the Delaware River Estuary through the Clean Streams Act of June 22, 1937, P.L. 1987, as amended, along with specific regulations provided under DER regulations, Title 25, Chapter 97, Industrial Wastes. Waste injection wells are uncommon in either coastal zone, and there is no evidence that failure to enforce industrial waste regulations resulted in the blowout referenced in the comment.

Comment

The Department also believes that PCZMP should contain a policy on endangered species since a Federally listed endangered species, the shortnose sturgeon, has been found as far north as Lambertville, New Jersey. Coastal development could jeopardize this species' existence.

The Department provides the PCZMP with the following definition and policy as suggestions for incorporation:

Definition of Habitat for Endangered or Threatened Species

- Areas in the coastal zone known to be the habitat of any fish, wildlife or vegetation identified as "threatened" or "endangered" on official Federal or State lists of endangered or threatened species are considered special areas. This definition also includes a sufficient buffer area to insure continued survival of the species.

Policy

Development that adversely impacts the habitat of endangered or threatened species is prohibited.

Response

The PCZMP recognizes the importance of protecting endangered species. Protection of endangered species is afforded by the program's policies on wetlands protection (Policy IV). This fact is reflected in changes made to this policy which appear in Chapter 2 of the FEIS. Protection of endangered species is implicit in implementation of the Clean Streams Law, which requires the consideration of discharges on fish and wildlife habitat.

Comment

The Department is also concerned about the effectiveness of the non-enforceable program policies, particularly since a substantial amount of regulatory authority in the Delaware Estuary and Lake Erie coastal zones will be delegated to the local level. Policies related to wetlands protection (Policy IV-1.1), geographic areas of particular concern (Policy V-2), and port planning (Policies VII-1 and VII-2), and energy facility siting (Policy VII-3 and VII-4), are examples of policies which the Commonwealth, acting through the Department of Environmental Resources (DER), cannot enforce.

Certainly, those non-enforceable policies which support the efforts and programs of other State agencies, such as the policy on historic preservation, can be given additional specificity in the Memoranda of Understanding. In that regard, we recommend that the policy on historic preservation might more forcefully urge the "adaptive reuse" of historic structure. However, we recommend that mechanisms for incorporating these policies into local plans and ordinances be thoroughly explored and be discussed in greater detail in the final program document.

Response

The Commonwealth intends to work with local governments to amend plans and ordinances to implement the non-enforceable policies cited in the Comment. The PCZMP is including an appendix to its memorandum of understanding with the Pennsylvania Historical and Museum Commission which commits it to advise the Commission of all permit applications for projects received for evaluation of the impacts on archaeologically and historically significant sites and structures within the coastal zones. This is also referenced under Policy Actions of Policy VI, Historic Preservation, in the FEIS.

Comment

The Department has a number of concerns about the Dam Safety and Waterway Management regulations which apply to dredge and fill activities affecting wetlands and waters of the State. First, we find these regulations difficult to use and confusing. The distinctions among the various categories of regulated activities and uses are not readily understood. For example, both Subchapters F and J of the regulations relate to the discharge of fill material into regulated waters, yet they contain two different sets of permit review criteria. To improve clarity and to provide greater specificity in the PCZMP, we recommend that policies for each category of activity and use contained in the regulations (e.g. levee construction, stream crossings, docks, wharves) be extracted from these regulations and inserted into the policy section of the management document, with the appropriate section(s) of the regulations cited.

Response

OCZM disagrees that the Dam Safety and Waterway Management Regulations are confusing. In the example cited, Subchapter F refers to fill used in the design and construction of levees, floodwalls, etc. while Subchapter J refers to fill in the sense of disposal of dredged material. OCZM sees no need to expand the number of policies to correspond to each category listed in the Chapter 105 regulations. Policies related to wetlands and dredging are already contained in the PCZMP. These are impact related policies, and would apply to the structures covered in the Chapter 105 regulations. The existing policies and proposed final regulations (Appendix B) therefore provide sufficient information on uses subject to the management program as required in 15 CFR 923.3(b), 923.11, and 923.41. Although it is not necessary for program approval, the Commonwealth will consider adopting a table of contents at the beginning of the Chapter 105 regulations to aid anyone using these regulations (see General Response pertaining to Chapter 105 Regulations).

Comment

While the regulations contain some excellent criteria, no priorities are provided, and the decisionmaker is subsequently left with a tremendous amount of discretionary authority. For example, Section 105.15 includes various types of information which must be "considered" by the DER when reviewing permit applications, but the regulations do not indicate how this information is to be used or how much weight it will be given. We suggest that the nature of DER "consideration" be more precisely defined and/or that the relative importance of the various review factors be indicated.

Response

These are criteria used in applying the public benefits test to specific permit applications. It would be impossible to predict the outcome of every permit application with complete certainty prior to an evaluation of the project, according to the criteria listed in 105.15 and 105.16. All factors for consideration will be given equal weight in the decisionmaking process. Legal and administrative appeal mechanisms, as described in Part II, Chapter 4 of the FEIS, are available for any persons aggrieved by a decision of the Department concerning a permit application. The Department will use an environmental assessment process and expertise of such agencies as the Pennsylvania Game Commission and the Pennsylvania Fish Commission in the consideration of permit applications and in weighing public benefits (see General Response pertaining to Chapter 105 Regulations).

Comment

We believe that the regulations should clearly indicate that an applicant is to select a least environmentally damaging, yet feasible, alternative to discharging into wetlands or other areas listed under Section 105.411, and that the activity associated with the discharge should be water-dependent. The regulations in Subchapter J contain excellent criteria for protecting natural resources from discharges of dredged or fill material unless the applicant demonstrates and the DER finds a "public benefit" which outweighs the damage to the affected resource(s). For the purposes of the regulations, a determination of "public benefit" (a discussion of which is included in Section 105.16 of the regulations) includes the consideration of alternative sites and designs, and provision for mitigation for all unavoidable adverse impacts. However, "consideration of alternatives" does not necessarily mean that an applicant must select a non-wetland site if available and feasible. Where an activity associated with the discharge of dredged or fill material does not require direct access or proximity to or siting with the water resource in question in order to fulfill its basic purpose, we believe that the discharge should be allowed only when, in addition to satisfying the other requirements of the regulations, there is a demonstrated need for the activity from the standpoint of human health and safety. We believe that Section 105.18(b) of the regulations for activities affecting wetlands should be similarly revised to indicate that non-water-dependent fills without demonstration of public need will be denied, notwithstanding the availability of a least damaging alternative.

Response

The Comment is correct that an applicant must not necessarily select a non-wetland site if available and feasible. However, in administering permits under the Dam Safety and Encroachments Act, it is the policy of the Department of Environmental Resources to encourage development that protects the natural condition of the watercourse or other body of water (see 105.16(c) of proposed final Dam Safety and Encroachments regulations in Appendix B). By definition, a body of water includes wetlands. In addition, the DER shall consider whether feasible alternative sites are available prior to the issuance of any wetlands permits (see 105.18(b) of proposed final Dam Safety and Encroachments Act regulations). These regulations also require permit applicants to provide sufficient information on the need to locate a proposed activity in a wetland. This is considered to be a water dependency test by the Commonwealth. The Commonwealth cannot prohibit a non-water dependent use from occurring in a wetland, but does provide a balancing test in which public benefits are weighed. The factors used in this balancing test are sufficiently specific to meet program aproval requirements as outlined in 15 CFR 923.3(b), 923.11, and 923.41 (see General Response pertaining to Chapter 105 regulations).

Comment

While the Department commends the State for its incorporation of a mitigation requirement into the program, we believe this concept needs further development. We recommend that a conceptual definition of mitigation be provided in the PCZMP, and that a discussion be included which more clearly indicates how the Commonwealth will implement this important program requirement. In this regard, we recommend the following definition:

> "Mitigation means (a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the impacted environment; (d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action, or if (a)-(d) cannot be achieved; (e) compensating for the impact by replacing or providing substitute resources or environments."

The Department believes that the evaluation, consideration, and selection of a least environmentally damaging, yet feasible, alternative to avoid projected-related resources losses is considered within the definition of mitigation.

Response

Adoption of a definition for mitigation is not a requirement for program approval. However, the Commonwealth will consider the adoption of this definition prior to promulgation of final regulations to the Dam Safety and Encroachments Act (see General Response pertaining to Chapter 105 regulations).

Comment

The Department is concerned about the limited references to wetlands in the Dam Safety and Encroachments Act regulations. In this regard, we recommend that a more detailed discussion of the legal basis for regulating wetlands under the PCZMP in general and the Dam Safety and Waterway Management Act in particular be included in the final program document. We also suggest that the definitions of "encroachment" and "water obstruction" (Section 105.1 of the regulations) include specific reference to activities in or affecting wetlands. In this same section, we suggest that the definition of "wetlands" make reference to wetlands defined under the regulatory permit program of the Corps of Engineers. We further suggest that the phrase "activities in or within 300 feet of any wetland" be added to the discussion of the scope of the regulations (Section 105.3). Since the regulations provide for delegations of regulatory functions (Section 105.4), we also request that the PCZMP clarify to what extent and to what level of government regulatory authority in wetland areas may be delegated.

Response

The legal basis for regulating wetlands under the PCZMP in general and the Dam Safety and Encroachments Act is as follows: (1) The Dam Safety and Encroachments Act is incorporated into the PCZMP pursuant to the Governor's Executive Order; (2) The Dam Safety and Encroachments Act and the implementing regulations define a "body of water" as "any natural or artificial lake, pond, reservoir, marsh or wetland." (See explanation of the Dam Safety and Encroachments Act in Appendix A and Dam Safety and Encroachments Act regulations in Appendix B of the FEIS.) There is no need to make reference to wetlands in the definitions of "encroachment" and "water obstruction." Both definitions refer to "body of water," which is defined to include wetlands. There is also no need for purposes of program approval to add the phrase "activities in or within 300 feet of any wetland" to the discussions of the scope of the regulations. This dimension of the scope of the Dam Safety and Encroachments Act is subsumed under 105.3(4), which states, "All water obstructions and encroachments other than dams located in, along, across, or projecting into any watercourse, floodway or body of water, whether temporary or permanent" (see General Response pertaining to Chapter 105 Regulations). With respect to the extent and level of government to which regulatory authority in wetland areas may be delegated, Section 105.4 of the regulations to the Dam Safety and Encroachments Act provides that the DER may delegate provisions of the 105 regulations to a county conservation district or other county agency. The regulations provide that when the Department delegates one or more of its regulatory functions to a local agency, the Department shall in all cases retain the concurrent power to inspect and monitor all categories of water obstructions and encroachments, and to enforce the Dam Safety and Encroachments Act and regulations. In addition, the Department retains the authority to disapprove the issuance of any permit approval by the local delegated agency.

Comment

It appears that two of the "key program regulations" described in Appendix B are to be promulgated under existing statewide laws administered by agencies other than the designated lead agency for the proposed program, the Coastal Zone Management Branch of the Department of Environmental Resources. If the lead agency is to be effective in meeting the objectives of the coastal policy framework, then specific reference to appropriate coastal policies as well as procedures for permit review by the Coastal Zone Management Branch should be included in the final version of the key program regulations. The inclusion of specifics on the lead agency in such regulations is essential from the point of view of Federal consistency because Federal agencies are obligated only to be consistent with the State's CZM program, but not with all the provisions in existing State laws which are applicable statewide. We believe that the proposed program will be greatly clarified if the role of the designated lead agency for CZM is specifically described in the various regulations to be utilized for future program implementation.

Response

Of the three sets of "key program regulations" found in Appendix B to the DEIS, two will be promulgated by the Department of Environmental Resources. The Department of Community Affairs (DCA) promulgated the Floodplain Management Regulations as they appeared in the DEIS on July 14, 1980. (For this reason, they are not reprinted in the FEIS.) However, DER does have the authority to bring suit against any municipality not conforming to the provisions of the Act. The DER, along with the DCA, will monitor local administration of floodplain regulations pursuant to Section 38.8 of Floodplain Management Regulations (Appendix B of DEIS). Bluff Recession and Setback regulations will be administered by the Office of Resources Management, Coastal Zone Management Branch (DER). The procedures for State monitoring of local government administration of the Bluff Recession and Setback Act are already included in the proposed regulations to that Act (see Part II, Appendix B of the FEIS). The Dam Safety and Encroachment Act regulations will be administered by the Bureau of Dams and Waterway Management (DER). Procedures for permit review by the Coastal Zone Management Branch are described in Part II, Chapter 4. While it would be useful to have coastal policies and procedures for permit review by the Coastal Zone Management Branch in the final version of key program regulations, it is not a requirement pursuant to 15 CFR 923.41, 923.42(b), 923.44(b), and 923.46. Nevertheless, the Commonwealth will consider including these in the promulgation of the final Dam Safety and Encroachments Act regulations (see General Response pertaining to Chapter 105 regulations).

Comment

Of major concern to the Department is the fact that the State does not have the authority to manage all those uses which can be expected to have a direct and significant impact on coastal waters. The discussion in the PCZMP moves directly from definitions of "direct" and "significant impact" to a list of those uses which are to be subject to the management program,

with no real explanation of the process which took place in between. As a result, there does not appear to be any justification for the fact that the PCZMP does not consider the impacts of residential, commercial and industrial development. The only apparent reason for excluding these uses is that the State does not have the authority to control them. For example, according to the Technical Record, the Lake Erie Coastal Zone (LECZ) will undergo a large population increase if the U.S. Steel plant and the Pennsylvania Electric Company's 690 megawatt electric generating plant are constructed as proposed. The population in the western portion of the LECZ is expected to increase by nearly 60% as a result of these proposed developments. Other portions of the LECZ are also expected to experience large population increases, although not at the same level. Our point is that the LECZ will experience significant developmental pressures from housing and commercial and industrial development in the coastal zone, yet the State will not be able to control or perhaps even influence the development. We would expect areas designated as Geographic Areas of Particular Concern (GAPC) now in high quality farmland or wildlife habitat to be developed for housing, shopping centers, and other uses that would be more appropriately located outside the coastal zone. As the Technical Record points out, "...local governments have largely unrestricted authority to make land use decisions, and the State government is unable to exercise the regulatory powers required by Sections 306 of the Coastal Zone Management Act." From our review of the PCZMP, we are convinced that the program does not yet contain this authority. If so, then a key requirement of the Act cannot be met.

Response

As explained in response to a similar comment, the PCZMP contains the three types of policies necessary for program approval - resource protection, management of coastal development, and improved governmental decisionmaking. The character of Pennsylvania's shorelines limits direct and significant impacts to activities occurring in erosion hazard areas, floodplains, wetlands, and those which impact air and water quality in the coastal zone. The Lake Erie coastal area is characterized by highly erodible bluffs along nearly the entire length of shoreline, while the Delaware Estuary is largely urbanized with some undeveloped floodplains and wetlands outside the Philadelphia area. The Technical Record, cited in the Comment, is outdated and will, except for its maps, not be used during program implementation. Consequently, the statement attributed to it regarding the necessary regulatory authorities is incorrect. OCZM considers the scope of the program as required by 15 CFR 923.3 and 923.11 of Program Approval regulations to be adequate.

Comment

We request that the PCZMP discuss in greater detail the relationship between the PCZMP and local land use planning, particularly how the program relates to development activities not regulated by State permit. The discussion should also list the specific land and water uses and activities which are subject to the exclusive control of local governments.

Response

As indicated in response to the previous Comment, OCZM has determined the scope of the PCZMP to meet the requirements set forth in 15 CFR 923.3 and 923.11. The Commonwealth has regulatory control over activities in erosion hazard areas, floodplains, wetlands, and for all activities subject to air and water quality regulations throughout the coastal zone. It is not essential for local governments to play a legally enforceable role within the scope of the PCZMP. This was adequately explained in the DEIS.

Comment

In comments on Pennsylvania's draft Technical Record and the preliminary program, the Department noted that improvement was needed in the energy facility permitting process and the procedure through which facilities would be sited. This process was described by the Commonwealth on pages 3-22 of the preliminary draft program document as being "so complex and disjointed that it can result in unnecessary project delays." While Policy VIII-1 states that "coastal zone management funds and expertise will be utilized in developing studies and siting procedures designed to improve the current site selection process," we do not believe that the PCZMP as presently written either describes adequately the existing process or provides sufficient assurance that the process will be improved during program implementation.

Response

The requirements of Section 305(b)(8) of the Coastal Zone Management Act and 15 CFR 923.13 of Program Aproval regulations have been met. The issue raised in the Comment relates to administration of the energy facility siting process. This is adequately summarized in Part II, Chapter 3 of the FEIS. To provide greater detail of a process which the Commonwealth has indicated it wants to improve serves little purpose. Improvement of this process will be judged during the annual program reviews if the PCZMP receives approval.

Comment

The PCZMP contains a list of "nominated" GAPC's which is supposed to provide some indication of where energy facilities should (development opportunity areas) and should not (areas of significant natural, recreational, historic, or cultural value) be sited. However, from the discussion on page II-3-33 of the DEIS, it is not clear that these "nominations" are acceptable to local municipalities or that even if they are, that local municipalities will act to incorporate these "nominations" into local law or zoning. In fact, since it is stated that the Coastal Zone Management Branch of DER "will work closely with local governments to identify suitable sites for energy development," it is not clear that the present list of "nominated" GAPC's has any meaning whatsoever.

Response

The list of "nominated" GAPC's in Part II - Chapter 3 of the FEIS has been developed jointly by the PCZMP and the local steering committees, and county and regional planning agencies. It has also been reviewed and approved by the local

steering committees and the affected public. By nominating areas as GAPC's, the State has indicated its priorities for managing those areas. For GAPC's designated by virtue of State regulation or State ownership, the Commonwealth provides a basis for appropriate management policies andd use guiddelines as stated in the PCZMP.

Comment

Regardless of the status of the GAPC procedure, the Commonwealth's present process for energy facility siting rests primarily on the actions of the Public Utility Commission (PUC). We do not believe that the PCZMP describes these procedures in sufficient detail to satisfy the CZM Program Approval Regulations, nor is it clear that the PUC has been properly "networked" into the program. While the PCZMP indicates that the PUC conducts evaluations and holds hearings (page II-3-15), there is no evidence that the PUC has, for example, an assessment procedure "to evaluate, to the extent practicable, the costs and benefits of proposed and alternative sites in terms of State and national interests as well as local concerns." We believe that PUC procedures are particularly important since it does not appear that DER's formal involvement in the process (through the issuance of environmental permits) occurs early enough to provide for a proper assessment of alternatives.

As noted above, the Department has general concerns about the form of the Memoranda of Understanding being used to "network" State agencies into the PCZMP, i.e. that the proposed form is too general to ensure full implementation of the management program. With regard to the PUC, there is the additional concern that there is no proper citation or description of the enabling legislation under which the PUC operates nor any indication that this is one of the authorities to be "networked."

Response

The PUC considers alternatives to the siting of energy facilities under its authority to certify the need for public utilities. This is done during the public hearing process. This has been added to the Energy Facility Planning Process (Part II, Chapter 3 of the FEIS). This is sufficient for the purpose of program approval pursuant to 15 CFR 923.43 because regulatory siting authority for construction and operation of energy facilities rests with the DER through enforceable policy VIII-1. Alternatives are also considered in the permitting process of the DER through the public hearing process (see Part II, Chapter 3 of the FEIS). Citation of the PUC authority used to consider alternatives has been included in Part II, Chapter 3 of the FEIS.

Comment

We believe that two additional points require correction. On page II-3-24, the document states that "It is likely that prospective Outer Continental Shelf oil and gas development support base needs, initially and perhaps in the long run, will be provided by Gulf state bases." Currently, all Mid-Atlantic OCS activity is being supported out of both Davisville, Rhode Island

and Atlantic City, New Jersey. Additional support bases for the Mid-Atlantic may be required, and sites in other East Coast cities may be utilized in the future. It is, however, highly improbable that any support activity for Mid-Atlantic operations will originate from the Gulf states.

Response

OCZM agrees with this Comment, and appropriate changes have been made in the FEIS to reflect accurate future OCS support base needs.

Comment

Two categories of geographic areas of particular concern (GAPC's) have been included in the PCZMP: designated GAPC's and nominated GAPC's. GAPC's are designated on the basis of three criteria: State ownership, State regulations, or contractual agreement with the agency or entity responsible for management. Presumably, State agencies (other than DER) which own or regulate designated GAPC's are networked into the PCZMP through either the Executive Order or by Memorandum of Understanding (MOU), although neither one specifically mentions this subject. Further, it would appear that contractual agreements would be negotiated only with non-State agencies, although this also is not clear. Moreover, unless these contractual agreements were executed for substantial periods of time, there would seem to be no real assurance that a designated GAPC would be managed in a manner consistent with the PCZMP for more than perhaps a year at a time.

What is most confusing, however, is the actual definition of designated GAPC's as "those areas which receive coastal zone management funds to further the objectives of the program." While we have no objection to the use of coastal zone management funds for the management GAPC's, we do believe that the definition as presently written is misleading, since it would appear to require continuing expenditures of CZM funds to maintain a designated status. We request that these points be clarified in the final program document.

Response

The intent of designated GAPC's is to provide a basis for appropriate management policies and use guidelines as stated in the PCZMP. Use priorities have been established by the legislative authorization under which State ownership or State regulation is established, and by the PCZMP for areas designated through contractual agreement with the local agency responsible for management. For all GAPC's which are not subject to State regulation or under State ownership to maintain a designated status, continuing expenditures of coastal management funds will be necessary. This is clarified in Part II, Chapter 3 of the FEIS.

Comment

In addition to the designated GAPC's, a number of areas have been nominated as candidates for future designation. These areas fall into four classes: areas of significant natural value, development opportunity areas, areas of significant

recreational, historic, or cultural value, and overlap areas (i.e. those areas which have characteristics of more than one of the first three). Suggested (but not binding) use priorities have been identified for the first three classes of nominated GAPC's. Since the nomination of these GAPC's would seem to indicate that they merit special concern and attention, and since the PCZMP is apparently relying on coastal municipalities to provide the necessary management tools, we suggest that the final program include a discussion of the incentives that will be offered to (and the benefits that would be realized from) local government participation and cooperation. We also request that the final document include a discussion of what means, if any, the Commonwealth will use to protect or manage these areas in the absence of local action.

Response

The incentives offered for local participation and cooperation for nominated GAPC's are financial. For example, by agreeing to conduct an economic feasibility project in a GAPC nominated for its development opportunity, other Federal and State agencies capable of providing increased funds for economic development will be more likely to invest public funds if the study conducted with coastal funds is shown to be feasible. A similar case can be made for GAPC's nominated for their natural value or for their recreational, cultural, or historic value. This is explained under Policy Actions, Policy V-2, Geographic Areas of Particular Concern, in the FEIS. The Commonwealth will protect these areas through the regulation of activities which affect air and water quality.

Comment

It is not clear to us whether the list of 65 areas on pages II-3-9 through II-3-II includes both designated and nominated GAPC's or only the latter, since a State park (Presque Isle State Park), several "access areas," and several bluffs are included. We believe that it would be useful to include the names and approximate acreages of designated areas, if this has not been done, or to distinguish between the two categories if both are included in the list. If the State park land, access areas, etc. included in the list represent proposed additions to present holding, we suggest that this fact be stated.

Response

The list of GAPC's includes both designated and nominated GAPC's. Those that are designated by virtue of State regulation or ownership are identified in the FEIS.

Comment

According to the PCZMP, the Lake Erie Coastal Zone (LECZ) is divided into four types of GAPC's: Development Opportunity Areas (2,650 acres), Areas of Significant Natural Value (22,765 acres), Areas of Significant Recreational, Historic or Cultural Value (4,329 acres) and Overlap Areas (1,225 acres). We

believe that the 22,765 acre figure for Areas of Significant Natural Value is misleading. Of the 22,765 acres, only 365 acres is in natural habitat, while the remainder (22,400 acres) is farmland. We suggest that farmland be separated from natural areas and placed in another, or new category. Of the 30,969 acres listed in the LECZ, 72% is farmland, 8% is listed as a Development Opportunity Area, and only 1% exists as natural habitat.

For the Delaware Estuary Coastal Zone (DECZ), the acreages for the four GAPC types are as follows: Development Opportunity Areas (5,196 acres), Areas of Significant Natural Value (323 acres), Areas of Significant Recreational, Historic or Cultural Value (4,329 acres), and Overlap Areas (1,374 acres). For the DECZ, 46% of the land is listed as Development Opportunity Areas, while only 2% is listed as Areas of Significant Natural Value.

If the State insists that a greater percentage of the DECZ should be developed because it is already highly developed, then we would think that development in the LECZ, which is relatively undeveloped, would proceed far more cautiously. Unfortunately, this does not appear to be the case. The percentage of land designated as Areas of Significant Natural Value in the LECZ is even less than in the DECZ. Furthermore, as we have already pointed out, State planners anticipate future large scale development in the LECZ, yet are unable to regulate the growth.

Response

The Commonwealth has clearly indicated that most of the GAPC's nominated for their natural value are composed of farmland. Therefore, OCZM sees no reason for adding an additional category of GAPC's. In reality, 21,000 acres (not 22,400) is farmland.

The percentage of land nominated as Areas of Significant Natural value is less in the Lake Erie Coastal Zone than in the Delaware only if farmland acreage is not considered. As pointed out in earlier comments, the Commonwealth is concerned with industrial, residential, and commercial development in erosion hazard areas, floodplains, wetlands, Natural Value GAPC's and Recreational, Cultural and Historic GAPC's. The Commonwealth can regulate development in the areas identified which are subject to State regulation and control impacts of development through the issuance of air and water permits in these types of nominated GAPC's.

Comment

Conversations between the Department's Fish and Wildlife Service and the State indicate that the reason for designating such a large portion of the DECZ as Development Opportunity Areas was that the Delaware portion is already heavily developed. However, in the next few years, four sewage treatment plants in the Philadelphia area and one in Camden, New Jersey, will be up-upgraded at a cost of over $1.4 billion to improve treatment facilities. This development is expected to substantially enhance water quality in the Delaware River, and we expect the aquatic ecosystem to respond accordingly;

but unless the program provides for a more balanced use of the coastal zone, these gains will benefit only aquatic organisms. Without improved access to the river and a prohibition against nonwater-dependent fills in shallow water, public use of the resource will remain at the same low level.

Response

OCZM considers the Pennsylvania program to provide a reasonable balance between resource use and protection. A major thrust of the PCZMP will be toward improving the access to the Delaware River. In fact, the program has already responded to the need for improved access by conducting four studies designed to determine the feasibility of improving access along Lake Erie and the Delaware River. The PCZMP expects to be able to implement its finding for such studies by use of funds from the Department of Interior's Land and Water Conservation Program and Urban Park and Recreation Recovery Program.

In addition, State action on proposed non-water-dependent fills will depend on the outcome of balancing tests which the Commonwealth would apply to any such proposed activity (see the FEIS, Appendix B, Dam Safety and Encroachments Act regulations, Section 105.16 and 105.18).

Comment

The PCZMP lists several specific areas in both coastal zones which meet the criteria provided in the program document (page II-3-13) for Areas for Preservation or Restoration (APR's). However, it is not clear whether these areas have been either nominated or designated. We suggest that the PCZMP clarify the status of these areas, and indicate what specific actions will be taken to designate APR's during the first year of program implementation. We also request that the PCZMP rectify the apparent inconsistency between a reference in the text to three criteria for APR designation and the fact that only two "conditions" are listed (page II-3-13).

Response

All areas presently designated as GAPC's are also designated as APR's. This has been clarified in the FEIS. The reference to criteria for APR designation has been deleted.

Comment

Policies, programs and techniques for improving access and for shorefront protection are considered on pages II-3-36 through II-3-49. The question of shorefront access is addressed appropriately with the realization that public access for recreation is one of a number of competing and compatible uses for the water resource. It is recognized that the present economic and energy situations will induce a revaluation and rethinking of traditional and accepted vacation and recreation modes, and that intensive close-to-home opportunities will become not merely desirable, but virtually imperative.

In this section, the Statewide Comprehensive Outdoor Recreation Plan is referenced suitably in terms of Commonwealth policy, but it would be useful to have similar appropriate references to the Statewide Historic Preservation Plan. In addition, the specifics of urban waterfront revitalization might be addressed insofar as there is evidence of increasing public and governmental concern and involvement in this particular area. It would also be useful to highlight the Commonwealth's commitment to the three areas of islands, rivers, and trails as resources which could impact the coastal zone programmatically; their particular place in a comprehensive statewide resource vision for the long range should be made clear, and acceptable initiatives for fostering and nurturing desirable future objectives might be discussed. Similarly, the relationship of the utilization of these resources to the general coastal zone management program could be delineated. The implications of the Environmental Protection Agency's Clean Waters Program could also be explored.

Response

The section of the PCZMP referenced in this comment deals with Shorefront Access. Reference to the Statewide Historic Preservation Plan would not apply to provisions of this section. However, reference to it is now made in Part II, Chapter 2, Policy Actions/Policy VI of the FEIS.

The PCZMP acknowledges the importance of the urban waterfront through its policies on recreational and fishing access, historic preservation and port development, and air and water quality (see Part II, Chapter 2).

The Commonwealth's commitment to islands is already highlighted through its GAPC process. Four islands on the Delaware have been nominated as GAPC's. The Commonwealth's Scenic Rivers and Trails Program will not significantly affect the Commonwealth's coastal zones. However, the PCZMP is closely coordinated with the Pennsylvania Trails Program, funded through a grant under the Heritage Conservation and Recreation Service. Any opportunities for coastal access that can be provided through the trails or rivers program will be coordinated through the PCZMP. This is noted in Policy Action for Policy V-1 of the FEIS.

Implications of EPA's Clean Waters Program (the PCZMP has adopted the requirements of the Federal Clean Water Act) are that more persons will demand access to the Delaware River for recreation. This would be especially true for fishing access as native fisheries become re-established. This reinforces the need for the management program which has policies designed to insure access to coastal waters.

Comment

The Executive Order and the standard terms of the MOU's are presented in draft form in Appendix A, and are to be executed prior to program approval. According to the PCZMP, the Executive Order has both legally enforceable and administratively enforceable aspects. It is not clear to us whether this means

simply that the Executive Order is legally enforceable only where it applies to the program's enforceable policies, or that the Executive Order is not binding on independent boards and commissions as the program summary seems to imply, or that some other meaning is intended. In addition, the specific requirements of both the Executive Order and the MOU's are conditioned by the phrase "to the maximum extent permitted by law." We request that the final document discuss under what conditions State agencies could not be consistent with management program under existing or future law.

Response

The Executive Order is legally enforceable for all enforceable coastal policies. However, since the DER is responsible for enforcing all of these policies, the significance of the Executive Order is not as great as if DER lacked this enforcement capability. The Executive Order is administratively enforceable for all non-enforceable coastal policies on executive agencies. The Memoranda of Understanding are not required for program approval since all enforceable policies are carried out by the DER.

The phrase "to the maximum extent permitted by law" is included in the Executive Order and the memoranda of understanding to provide for any eventuality in which any future law would exempt an agency from being consistent with the PCZMP. Such a change would be reviewed under Subpart I of the CZMA Program Approval Regulations, 15 CFR 923, to determine the need to amend the PCZMP. At this time, however, OCZM knows of no agency which has been determined to be exempt from compliance with the policies of the PCZMP. Any such change would precipitate a review of the PCZMP for continued approvability.

Comment

Since only the standard terms of the Memoranda of Understanding are presented in the program document, it is difficult to gain a complete sense of how the PCZMP will be implemented. We trust that the full texts of these memoranda will answer some of the questions which are raised elsewhere in our comments.

Response

The full text of the MOU's between by the DER, Fish Commission, Historic and Museum Commission, and Public Utility Commission, appear in the FEIS. However, they are not required for purpose of program approval since all enforceable policies can be enforced by the DER. They will be used to enhance the program's non-enforceable policies and bring focus to the Program.

Comment

With regard to the laws and agencies included in the PCZMP, two questions have arisen. We assume that the Stormwater Management Act was inadvertently omitted from the list on page II-4-5, since it is cited in the section on program policies and described in Appendix A. However, we are uncertain about the

status of the Pennsylvania Game Commission, which is listed in Appendix C as an agency which will "participate" in the program, but whose role is not elsewhere explained. We request that these questions be addressed in the final program document.

Response

For the Stormwater Management Act to be enforceable, regulations must be developed and adopted by the legislature, county stormwater plans must be developed, and municipal ordinances passed to incorporate provisions of the county plans. This process is expected to take three to four years. It is now listed under non-regulatory authorities in Part II, Chapter 4 of the FEIS.

The Game Commission sits on the Coastal Zone Advisory Committee to coordinate its activities with the PCZMP (see Part II, Chapter 5 of the FEIS). The Commission is subject to all enforceable policies of the PCZMP. However, there are no State Game Lands in either coastal zone.

Comment

Although all of the authorities networked into the PCZMP are State statutes, the administration of at least two of these, the Floodplain Management Act and the Bluff Recession and Setback Act, will take place at the local level. We request that the final program document discuss which municipalities are or may be affected by these laws, as well as provide details of (including timetables for) local compliance. In at least one other instance, under the Dam Safety and Encroachments Act, DER may delegate permitting authority to the local level. We believe that the PCZMP should include some discussion of DER's plans for making such delegations, as well as the impact they may have. For example, where DER delegates permitting authority in wetlands, will local ordinances and plans be updated and revised to be consistent with PCZMP enforceable and non-enforceable policies? How will existing local wetland ordinances and/or comprehensive plans be integrated into the permit process? What mechanisms will be used by DER to monitor and evaluate local administration? We also request that the final program document identify and discuss any other relevant authorities which have been or may be delegated to the local level for purposes of administration.

Response

The Floodplain Management Act applies to each municipality which has been notified by the Federal Emergency Management Agency that it has been identified as having an area or areas which are subject to flooding. According to State law, each of these municipalities shall participate in the National Flood Insurance Program. Municipalities are defined as "a city, borough, town or township or any similar general purpose unit of government or county or other governmental unit when acting as an agent thereof, or any combination thereof acting jointly."

All municipalities in Pennsylvania's coastal zones have been notified that they are subject to flooding. Pursuant to Section 201 of the Pennsylvania Floodplain Management Act, all municipalities subject to flooding and not

participating in the National Flood Insurance Program at the time the Act became effective shall fully comply with the requirements for participation within six months of October 4, 1978 (effective date of the Act), or six months from the date of notification by the Federal Emergency Management Agency that it has been identified as having an area or areas subject to flooding, whichever is first. At this time, all municipalities within the coastal zone are participating in the National Flood Insurance Program.

Within six months following designation of an area and municipality subject to bluff recession hazards, each designated municipality must comply with provisions of the Bluff Recession and Setback Act. The only municipalities subject to the provisions of this Act are the eight townships bordering the shores of Lake Erie, exclusive of the City of Erie (Erie has no erosion hazard areas). Designation of the bluff recession hazard areas for all municipalities is scheduled for September 16, 1980. The Commonwealth will enforce the erosion hazard setback until compliance by local governments is achieved. This information has been added to Part II, Chapter 4, Program Monitoring and Evaluation in the FEIS.

Under the Dam Safety and Encroachments Act, the DER may delegate to a county conservation district or other county agency one or more of its regulatory functions (see Appendix B, Dam Safety and Encroachments Act Regulations, Section 105.4). Whenever the Department delegates one or more of its regulatory functions to a local agency, the Department retains the power to inspect and monitor all categories of water obstructions and encroachments and to enforce the Dam Safety and Encroachments Act and regulations. In addition, the Department retains the authority to disapprove the issuance of any permit approved by its local delegated agency.

Comment

The Department is also concerned about the processes that are available to resolve conflicts resulting from local administration of the above-cited statutes. The PCZMP describes a judicial process which can be used where the State finds that locally administered programs are not being implemented consistent with PCZMP policies and regulations. Since this process tends to be both time-consuming and costly, we recommend that other enforceable administrative mechanisms for relief be produced.

Response

While enforceable administrative mechanisms for relief are desirable, they are not required. The judicial process is acceptable as a means of conflict resolution as stated in 15 CFR 923.42(c). This process will be used in the administration of the Bluff Recession and Setback Act (see Subchapter D of Bluff Recession and Setback Act Regulations, Appendix B of the FEIS) and the Floodplain Management Act (see Section 38.8 of Floodplain Management Act Regulations, Appendix B of the DEIS).

For local administration of the Dam Safety and Encroachments Act, any permit shall be subject to review by the DER and may be disapproved by the DER.

Comment

The PCZMP mentions that OCS exploration, development and production activities will be subject to consistency procedures. However, the list following paragraph 3 contains only Federal activities subject to Section 307(c)(1). Since OCS activities are addressed separately on page 11-5-11, we suggest that the reference to such activities be deleted from here in order to eliminate confusion.

Response

The listing attempts to identify all Federal activities, licenses and permits, and Federal assistance that will be subject to Federal consistency. OCS activities subject to 307(c)(3)(B), Federally licensed and permitted activities described in detail in OCS plans, have been added to the listing.

Comment

In paragraph 4 on page II-5-9, we believe the fifth sentence should be changed to read, "The Secretary of Commerce shall then determine whether the activity is consistent with the objectives of the Coastal Zone Management Act, or is necessary in the interest of national security" (emphasis added). We also suggest that the following sentence be changed to read, "If the Secretary finds that the proposal meets either of these requirements, the Federal Agency may approve the activity" (emphasis added), so that it is consistent with 15 CFR 930.131.

Response

These changes have been made in the FEIS.

Comment

We request that the second sentence in paragraph 2 on page II-5-11 be changed to, "The applicant submitting an OCS exploration or development/production plan to the U.S. DOI..." and that in the following sentence "privileged information" be changed to "proprietary information."

The Department also believes that paragraph 3 on page II-5-II, should be expanded to include the specific provisions of 15 CFR 930.79. For example, if consistency concurrence is not provided within three months, the State must notify the DOI, the permit applicant, and the Assistant Administrator of the status of consistency review. State concurrence may be conclusively presumed in the absence of this status report.

Response

The suggested changes have been made.

Comment

The PCZMP indicates that the Lake Erie and Delaware Estuary Steering Committees will be reviewing "State level CZM activities with respect to consistency with local goals and actions." We request that this function be clarified, since it is not clear who has to be consistent with whom. What would happen, for example, where State coastal policies conflict with local goals and action? We also request that the role of these committees with regard to the coordination of consistency reviews with the State and involvement in the conflict resolution process be discussed in greater detail.

Response

The PCZMP will coordinate its activities with its local steering committees to coordinate its actions with local goals. The role of the local steering committee has been changed from "consistency" to "coordination" in Part II, Chapter 5 of the FEIS. This applies to funding of special projects, but does not apply to State regulatory authority or activities. In the instance where State coastal policies conflict with local goals, State policies would prevail if the policy in question is enforceable; if the policy is non-enforceable, the State would negotiate a resolution with the local governments through the conflict resolution process described in Part II, Chapter 4 of the FEIS. For the purpose of implementing Federal consistency, the Coastal Zone Management Branch of the DER is the single State agency that will make consistency determinations.

Comment

Section 307(f) of the CZMA requires states to incorporate into their management program requirements of the Clean Water Act and the Clean Air Act, as amended. The PCZMP indicates that through State law the program "will incorporate these requirements," and that "any action or proposal which would violate State air and/or water quality laws and regulations is considered inconsistent with the PCZMP" (page II-5-13). The Section 404(b)(1) environmental guidelines for the discharge of dredged and fill material into waters of the U.S. are also standards applicable to the PCZMP. We suggest that the PCZMP indicate how these standards have been incorporated into the management program, and whether actions which violate these guidelines would also be considered inconsistent with the PCZMP.

Response

Projects affecting coastal wetlands will be subject to the review of both State regulations pursuant to the Dam Safety and Encroachments Act and Federal regulations pursuant to Section 404 of the Federal Clean Water Act. This joint review will provide additional protection to wetlands because the stronger provisions of each set of regulations will apply. For example, under the Commonwealth regulations, no permit will be granted for water obstructions and encroachments that are in or otherwise affect important coastal wetlands unless the applicant demonstrates and the Department concludes that the public benefits of the project outweigh the damage to the wetland resource, and that the project is necessary to realize public benefits. This provision is not included in the 404 regulations.

Comment

The subject document exhibits a reasonably thorough consideration of Pennsylvania's two coastal zone areas: the Delaware River estuary at the eastern end of the Commonwealth and the Lake Erie shoreline at the western end. While the Lake Erie shoreline is characterized as largely rural, the Delaware River estuary is generally urbanized on the Pennsylvania side of the river; this is in marked contrast to the more undeveloped New Jersey coastal area on the opposite shore. It may be useful also to point out that the City of Erie is the principal settlement in the Lake Erie coastal zone of Pennslyvania, with Buffalo-Niagara Falls in New York and Cleveland in Ohio as the major neighboring shoreline cities. These two situations - the relatively undeveloped New Jersey shore of the Delaware River estuary, and two of the larger cities in the Great Lakes conurbation - need to be considered in any comprehensive overview and can illuminate the features sketched in the descriptive part of the document. It is clear that the Delaware River is a working river, and that any management plan must be acutely sensitive in balancing the numerous and occasionally conflicting legitimate claims to the use of the resource. This is why the context stressed above is of key significance, for the New Jersey and the State of Delaware portions of the estuary must figure in any total management plan for the whole resource. A similar contextual view of the Lake Erie shoreline would appear to be useful. In this regard, the roles of the Delaware River Basin Commission and the Great Lakes Commission should be further discussed. In particular, agreements arrived at by the Commission may have substantial impact on the success of environmental impact mitigation measures, and consequently need mentioning.

Response

The PCZMP is fully aware of the character and interstate dimensions of both its coastal areas, as indicated in Part II, Chapter 1 of the FEIS and Part IV, Affected Environment.

The roles of the Delaware River Basin Commission and the Great Lakes Commission have been discussed in Part II, Chapter 5 of the FEIS.

Comment

We also believe that the DEIS should give some consideration to the interstate impacts of approving the Pennsylvania program. This is particularly important in DECZ because all of the neighboring states have fully developed management programs. We would like to know, for example, if there are expected to be any major changes in the development of the individual states' coastal zones as a result of policies which may be more restrictive in one state than in another.

Response

The most relevant policies for comparison of the New Jersey, Delaware, and Pennsylvania coastal zone programs are those related to the location of heavy industry in the coastal zone. The Pennsylvania program and the New

Jersey Program above the Delaware Memorial Bridge encourage the location of such use of the coastal zone, provided certain performance standards of State regulatory authorities are met. The Delaware program, and the New Jersey Probram below the Delaware Memorial Bridge, however, restrict heavy industry in the coastal zone. This may have the effect of increasing heavy industry development pressure in part of New Jersey and in Pennsylvania. OCZM believes these policies of the three states are therefore, consistent, and reflect the relative importance of the resources.

Comment

Additionally, the DEIS does not evaluate potential environmental impacts on anadromous fish and waterfowl along the Pennsylvania portion of the Delaware Estuary resulting from future port and industrial development activities. An analysis of these impacts should be included in the FEIS. Whereas, the PCZMP states water quality has deteriorated, water quality improvement goals, e.g. in relation to fisheries, should also be further clarified and a timetable for the attainment of these goals should be calculated for inclusion in the FEIS.

Response

Any development activities will be required to meet the performance standards of the various laws incorporated into the PCZMP, including the water quality standards of the Clean Streams Law. This should have a beneficial impact on Delaware Estuary fisheries and waterfowl. A timetable for attainment of fisheries goals will be developed during program implementation in conjunction with the Pennsylvania Fish Commission's work to develop a fisheries management plan for the Delaware Estuary.

Comment

At a July 8, 1980, meeting with OCZM and the State concerning the PCZMP, a representative from the State of Pennsylvania indicated that the State intends to use the Pennsylvania Technical Record as a supplement to the PCZMP and as further guidance to local governments. As you know, the Department commented extensively on this document in a letter to the Commonwealth dated September 17, 1979. If information contained in this document which does not appear in the draft PCZMP is to be used during program implementation, then we suggest that information be referenced and, where applicable, reinserted into the PCZMP.

Response

Except for the maps of the coastal boundary and location of designated and nominated GAPC's, the Technical Record, cited in the Comment, is outdated and will not be used as a basis for program implementation.

Comment

Page II-1-8, Wetlands. It is stated here that wetlands provide ground water (aquifer) recharge. This statement is basically incorrect since wetlands are generally ground water discharge areas or standing water reflecting the level of adjacent ground water.

Page II-C-5, List of Federal Contacts. The name of Norman Beamer is shown for the USGS. Please change the name to David E. Click.

Response

The correction has been made by deleting the term "aquifer recharge" and changing the name of the Department of Interior contact.

STATE AND LOCAL AGENCY AND INTEREST GROUP COMMENTS

Pennsylvania Department of Commerce

(Geoffrey Stengel, Jr., 7/16/80)

Comment

The Pennsylvania Department of Commerce has actively participated over a period of time in the development of the Coastal Zone Management Program advocated for the State. During the Coastal Zone Management Subcommittee meetings in the Department of Environmental Resources, the Department has always requested that an active coastal zone program include adequate provisions for economic development activities, especially in light of the current recession and the Governor's economic development policy. Since most of the committee members were representatives of environmental organizations, there was little, if any, implementation of these comments in the final documents produced. The omissions of the verbal discussions from the formal minutes has on several occasions been discussed directly with the Coastal Zone Management staff. It is obvious that a viable coastal zone program can only be reasonably implemented if there is a good balance of economic and environmental actions with a special attention being paid to maintain the employment and tax base in the areas in question. To date, there is no evidence that this important relationship is adequately treated in the voluminous material presented in the impact statement. The summary on page "i" lists ten (10) major issues for the CZMP. Of these, only two - Port Activity and Energy Facility Siting - reflect the above needs of the Commonwealth in trying to stem the outmigration of population and provide necessary employment and tax base.

Response

The Coastal Zone Advisory Committee has representatives from all affected State agencies and offices. This includes the Departments of Commerce, Community Affairs, and Transportation, as well as the Governor's Energy Council and Office of Policy and Planning. The PCZMP has nine policies that directly or indirectly serve to enhance the development of economic activities in the coastal areas of Pennsylvania (see Part II, Chapter 2). These policies, VII-1, VII-2, VIII-1, VIII-2, VIII-3, IX-A, IX-C, and two new policies, VII-3 and IX-D in the FEIS, have been identified in response to the input of economic development interests throughout program development. In the opinion of OCZM, itself part of the U.S. Department of Commerce, economic development interests have been and will continue to be considered in the PCZMP. One advantage of Federal approval of the PCZMP is improved opportunities to work closely with OCZM's sister agencies, including the Economic Development Administration and the Maritime Administration, on issues of common concern.

Comment

There should be a clear statement of reasonable policy providing for industrial development activity, including heavy industry, with a readily identifiable means of implementing said policy.

Response

The PCZMP takes an integrated view of economic activities. Industrial concerns are addressed in the program's economic support policies, which are: Policies VII-1, VII-2, VII-3 (a new policy which appears in the FEIS), VIII-1, VIII-2, VIII-3. Industrial activities are also supported through the program's policies on Permit Improvement IX-C, Intergovernmental Coordination IX-A, and "Choices for Pennsylvania" IX-D (a new policy which appears in the FEIS). There is no need to address each individual industrial activity in a coastal policy.

Comment

Conflicts between environmental and sensitive areas of the coastal zone and economic and other activity should be minimized through wise and clearly identified planning documents, rather than brought into conflict by such confusing labeling as "overlap areas."

Response

Overlap areas have been nominated as GAPC's pursuant to 15 CFR 923.23, Other Areas of Particular Concern. In meeting the requirements of this section of program approval regulations, the Commonwealth is not required to establish priorities of use for these areas. However, once an overlap area is designated as a GAPC, the Commonwealth must indicate procedures for developing and implementing appropriate management techniques, an agency (or agencies) capable of formulating the necessary management policies, and a reasonable timeframe for implementing the management techniques (see Part II, Chapter 3 of the FEIS for nomination and designation procedures for GAPC's, and 15 CFR 923.23).

Comment

It is essential that water-related manufacturing and commercial enterprises be allowed to function in their necessary modes in order to compete in national and international markets. This is expecially true for energy-related projects such as coal, etc.

Response

The PCZMP agrees, and this concern is reflected in Policy VII-1, Port Activities/Development, which is designed to attract and encourage the siting of port-dependent economic activities in the Commonwealth's coastal ports.

Comment

The lack of continuity in zones crossing state lines is of special concern in that it tends to confuse and cause undue problems when attempting to establish just what a coastal zone program is all about.

Response

State coastal management programs respond to the perceived problems, issues and needs of individual states. There has been close coordination with New York and Ohio in the development of the PCZMP through the Standing Committee on Coastal Zone Management of the Great Lakes Basin Commission. The PCZMP has coordinated with the states of New Jersey and Delaware through informal discussions and meetings with the Mid-Atlantic Coastal States. The PCZMP has been developed to reflect each region's particular needs as interpreted by the Commonwealth. The coastal zones in the Delaware Estuary and Lake Erie have been designated as the result of numerous public meetings, and represent the concensus of the Steering Committees of both regions. Economic activities in Pennsylvania's coastal zone will now have the advantage of greater predictability of State and Federal actions in the coastal zones as a result of the management program. Efforts will continue to be made to ensure that coastal activities in Ohio and New York are coordinated with those which may affect Pennsylvania.

Comment

The Environmental Impact Statement is seriously lacking in socio-economic profile, especially as concerns labor force and unemployment data and their related problems. This has been pointed out repeatedly to program managers with no response to this point. Therefore, we are attaching a copy of "Pennsylvania Employment and Earnings," highlighting the problems of unemployment in the Commonwealth.

Response

The PCZMP clearly recognizes the economic problems plaguing the coastal zones which were reflected in these figures. The DEIS and the FEIS, however, are intended to portray the management mechanisms that will be used to address these and other coastal problems. The PCZMP serves to help stimulate appropriate economic development in the coastal zone. The impacts of the PCZMP on economic development are outlined in Part V of the FEIS. However, the use of large amounts of economic data in the FEIS is not appropriate.

Comment

Provision for input by economic developers, until recently, has been minimal, and therefore the program is generally lacking in both understanding of development needs and reconciliation of coastal zone problems between policy and decisionmakers representing all major interests in the coastal zone.

Response

The opportunity for input by economic developers has always been available in the development of the PCZMP. This is evidenced by the membership of its local steering committees and the statewide advisory committee (see Appendix C of the DEIS). The Philadelphia Port Authority has held a seat on the Delaware Estuary Steering Committee; the Port Authority in Erie represents its economic interest on the Erie Steering Committee; the Department of Commerce has been represented on the State Advisory Committee from the outset. The recent interest among economic developers is witnessed by the recent changes in the program's two port policies and the development of a new economic policy, VII-3, which appear in the FEIS. This participation has helped to further provide a program which is balanced between economic and environmental concerns.

Comment

Specific serious problems arise from proposed steel mill, energy and industrial developments currently in process or anticipated as high priority in the Commonwealth's effort to stabilize her economic situation.

Response

Energy and industrial development may locate throughout the coastal zone, provided that the performance standards of State regulatory authorities are met. The PCZMP will be working to streamline and expedite the permit process (see Policy IX-C) for citizens and industry. In addition, the Commonwealth is encouraging energy and industrial activities in GAPC's classified as Development Opportunity Areas.

Comment

It is imperative for a successful plan to reasonably provide for implementation of economic development activities as well as environmental and recreational activities in wisely managing our coastal resources. We professionally feel that a multiple-use approach is the best means of accomplishing this objective and minimizing conflicts in the zone, while providing for high priorities representing all program interests. Hopefully, the recognition of this fact will be fully provided for in any coastal zone program that is actively implemented in the Commonwealth of Pennsylvania.

Response

The PCZMP agrees, and this will be a goal to which the program adheres under the implementation phase.

United States Steel

(C.D. Horne, 7/15/80)

Comment

We have a general concern that the CZM program addresses itself primarily to environmental issues with limited emphasis on potential development opportunities. It is interesting to note that in the DEIS Summary (page I) the ten itemized policies only recognize "Port Activities" and "Energy Facility Siting" as potential development activity, without reference to other types of development activity such as industrial.

Response

The CZMP FEIS has nine policies that will benefit development activities, including industrial activities, either directly or indirectly. These are policies VII-1, VII-2, VII-3, VIII-1, VIII-2, VIII-3, IX-A, IX-C, and IX-D. IX-D. Additionally, development activities will benefit from having greater predictability with respect to State and Federal regulatory actions in the coastal zone as a result of program implementation. OCZM considers the PCZMP to provide a balance between development opportunities and environmental protection.

Comment

We are concerned with the inconsistent CZM landward line. It would appear that the line should be consistent in character, probably measured a prescribed distance from the waterfront.

Response

The CZM landward boundary was determined as a result of extensive public participation. A fixed distance line lacked the flexibility to include within the boundary all the salient activities and features, such as GAPC's, of importance to the program. For example, the U.S. Steel property in the western segment of the Lake Erie Coastal Zone was included within the coastal boundary as a Development Opportunity Area GAPC to highlight the Commonwealth support for the proposed steel mill. The boundary with the City of Erie was expanded to include the entire Bayfront Neighborhood to highlight that community's cultural ties to Lake Erie. In some cases, physical or cultural features were used to determine the boundary for administrative ease. This is permitted under the regulations of the Coastal Zone Management Act (see 15 CFR 923.31).

Comment

We also question the inconsistency between what we understand to be the landward CZM line in Ohio and New York States, versus that proposed for Pennsylvania.

Response

Each state's coastal program responds to the needs of its citizens and issues along its shoreline. Ohio's CZM boundary generally extends approximately 1,000 meters inland. In certain areas, it bulges further inland to include important natural resource areas. The New York boundary extends inland 500-2,000 feet from Lake Erie. Pennsylvania's boundary varies from 400 feet inland to over three miles inland. At the same time, program approval regulations (see 15 CFR 923.34) require that states document that there has been consultation and coordination with adjoining coastal states regarding delineation of adjacent inland and lateral seaward boundaries. On its eastern boundary, Pennsylvania's Lake Erie coastal zone extends approximately three miles inland, while the proposed boundary for New York is approximately 1,000 feet; on its western boundary, the Pennsylvania Lake Erie coastal zone extends approximately 1.5 miles; the proposed Ohio boundary is approximately 1,000 meters. While the boundaries do not coincide, the Commonwealth has coordinated its boundaries with Ohio and New York (see Part II, Chapter I of the FEIS). The rationale for the difference in the boundaries is given in response to the previous comment. Areas subject to regulatory controls or proposed regulatory controls within the coastal zones of each of the states are more uniform than the proposed coastal boundaries. This is sufficient for program approval (see 15 CFR 923.31 through 923.34).

Comment

We are extemely concerned about "Biles Island" in the Delaware Estuary being classified as an "Overlap Area" rather than as a "Development Opportunity Area." We have various industrial activities in this area and require this tract for future expansion of these activities.

Response

The overlap designation was initially given to Biles Island because the PCZMP recognized that the area was prime for industrial development, but also contains areas of unique natural value. The program's DEIS also stated that overlap areas need further study. The CZMP has looked at the Biles Island area in greater detail and now shows the center of the island as an Economic Development Opportunity Area, and the 100 foot setback along the water's edge as a natural value area. These new considerations reflect local zoning. This change is reflected in Part II, Chapter 3 of the FEIS.

Comment

In conclusion, we believe that protection of our country's coastal assets is of vital interest, but only when balanced with appropriate development opportunity which is not impeded with additional development controls.

Response

OCZM agrees and wishes to reiterate that the PCZMP offers greater predictability and coordination of State and Federal actions, and will help to facilitate the current State permitting process.

Associated Petroleum Industries of Pennsylvania

(Frank J. Bowden, Jr., 7/15/80)

Comment

We agree that it would be beneficial for coastal municipalities to include a process for energy facility siting. The absence of such a process could be a cause for delay in issuing permits for critical facilities.

Response

An energy facility siting process is contained in Chapter 3 of the PCZMP FEIS. The PCZMP will encourage and provide assistance to coastal communities to update their comprehensive plans and include the findings of the Energy Facility Siting Process in them.

Comment

The Uses of Regional Benefits section of the PCZMP adequately recognizes the concern of the Federal CZMA in addressing this important question. However, the exclusion of hydrocarbon (petroleum) production and processing facilities from the list of uses of regional benefit concerns and confuses us when such facilities are recognized as being in the national interest at page II-5-15. We suggest that petroleum-related facilities be included in the list for the Final EIS.

Response

The CZM program approval regulations at 15 CFR 923.12 and 923.52 demonstrate that while it is a permissible option to list uses in which there is a national interest as uses of regional benefit, there is no requirement to do so. States, at their option, may distinguish between uses of regional benefit and uses in the national interest. In order for a use to be listed as a use of regional benefit, it must meet the criteria for identifying uses of regional benefit, and there must be a method available to the State to assure that it is not unreasonably restricted or excluded by local land and water use regulations. Pennsylvania has chosen to include all uses which meet these two requirements as uses of regional benefit.

Comment

The State's override of arbitrary local exclusion of energy facilities is clearly discussed. However, it is not clear what the legislative mandate or other authority is which provides for the override mechanism. The list on page II-A-1 does not seem to include anything which would provide this authority. We suggest that the Final EIS include this information with adequate discussion.

Response

The legislative authority to provide this override mechanism is contained in Act of October 25, 1970 (P.L. 707, NO. 230), Pennsylvania Consolidated Statutes, Title 66, Chapter 1, et. seq. The Energy Facility Planning Process in Part II, Chapter 3 of the FEIS cites this authority. The authority is not described in Appendix A because it is not adopted as part of the PCZMP. For purposes of program approval, the State is required to have a method which provides the State with the ability to override arbitrary local exclusion of uses of regional benefit (see 15 CFR 923.12). This method is incorporated in Part II, Chapter 3 of the FEIS.

Comment

Although petroleum refining in the Lake Erie area is not currently a factor, there is no guarantee that the situation will not change. Our national concern and effort towards energy self-sufficiency may bring about a set of circumstances in which a refinery located near Lake Erie would be desirable. If allowance for such an eventuality were included in the CZM plan, it might make such a siting decision more expeditious.

Response

The PCZMP is not a static plan, but rather a dynamic management program. The PCZMP does not prohibit the siting of an oil refinery in the coastal zone. Siting any such facility would require that State performance standards be met (see Enforceable Program Policies, Part II, Chapter 2). The Commonwealth has identified development opportunity areas (Part II, Chapter 3) where siting of such types of facilities are preferred. OCZM considers the PCZMP to be sufficiently flexible to deal with the siting of oil refineries in the Lake Erie Coastal Zone, including consideration of the national interest in such siting.

Comment

Drilling for gas and development of resources in Lake Erie should not be delayed any longer.

Response

Policy VIII-2 of the PCZMP calls for the production of natural gas to be facilitated, provided that the standards provided in the Commonwealth's environmental statutes are met. To aid the oil industry in meeting these requirements, PCZM has established Policy IX-1, designed to expedite permit processing.

Comment

The major national interests as shown in page II-5-16 and the policies immediately following that list are strong and positive affirmation of the Commonwealth's recognition of the criticality of energy facilities and their importance to all of us. APIP supports and endorses those statements.

Response

No response necessary.

Comment

The Pennsylvania CZM Program is a constructive attempt at articulating a balanced approach to multiple land use in the coastal zone. Our major concern with the CZM Program revolves around the question of State over-sight of the decisionmaking process regarding uses of regional benefit, especially petroleum-related energy facilities.

Response

Petroleum-related energy facilities are defined to be in the national interest by the PCZMP. The means for continued consideration of the national interst are provided in the Commonwealth's permit procedures, the Executive Order, and the Memoranda of Understanding between the Department of Environmental Resources and the Fish Commission, Historic and Museum Commission, and Public Utility Commission. At the State's option and pursuant to OCZM's Program Approval Regulations (see 15 CFR 923.12), the State has chosen not to define petroleum-related energy facilities as uses of regional benefit. OCZM Program Approval Regulations (15 CFR 923.12 and 923.52) allow for this distinction between uses of regional benefit and uses in the national interest to be made.

League of Women Voters

(Margot Hunt, Edith Stevens, 7/15/80)

Comment

We are, for the most part, pleased with the program that has developed for Pennsylvania. We feel it is a realistic balance of the environmental and economic needs in our State.

Response

No response necessary.

Comment

A great proportion of Pennsylvania's coast, particularly in the Philadelphia area, is a working coast. It serves a large industrial State, and, as such, must carry a relatively heavy burden of activities which degrade the natural environment. We believe that the CZM program recognizes the needs of the ports to better use and improve their existing facilities, and to concentrate new facilities in areas already affected by industrial activities.

Response

No response necessary.

Comment

The "networking" mechanisms proposed to implement Pennsylvania's CZM program are, we believe, a realistic approach to achieving uniform application of policy in the coastal zones. This approach can be successful and will avoid an additional layer of government.

Response

No response necessary.

Comment

The League is concerned about one facet of the program: the method of dealing with Geographical Areas of Particular Concern (GAPC). The CZM study has identified these areas in a satisfactory manner. However, in the case of "nominated GPAC," there appears to be no mechanism in the program to assure that the nominated areas are managed in the recommended fashion. We would like to have some mechanism addressing this problem included in the program. Perhaps, a municipality which has a nominated GAPC within its boundaries should have to agree to manage these areas in accordance with the CZM program recommendations in order to qualify for CZM funds.

Response

In almost all cases, nominated GAPC's reflect local zoning; therefore, this increases the likelihood that these areas will be managed in the recommended manner. Additionally, the PCZMP will strive through program funding incentives to work with local governments having jurisdiction over GAPC's which are not subject to State regulatory control or State ownership. Through contractual agreement, these local jurisdictions agree to abide by the priorities of uses established for each class of nominated GAPC's.

Ameriport, Delaware River Port Authority

(James R. Kelly, 7/17/80)

Comment

Since our Regional Planning group will be guided by the study findings to make recommendations for land use in the Delaware River Coastal Zone areas, we recommend that the Coastal Zone Management Plan incorporate by reference the Delaware River Regional Port Study under Section 306(c)(1). The study will be completed by September 1, 1981, and specific land use recommendations will be available for incorporation in the Coastal Zone Management Plan.

We are particularly concerned that the following sections reference our study:

Policy VII-1 - Encouragement
Policy II-3-4 - Outer Continental Shelf Support Facilities
Policy II-3-25 - Coal Related Facilities

Response

Upon completion and favorable review of the Delaware River Regional Port Study, the PCZMP will work with the Port of Philadelphia, the Pennsylvania Department of Commerce, Federal agencies such as the Maritime Administration, and other affected units of local government to implement the recommendations of this study and to carry out Policies VII-1 and VII-2 relating to port development in the FEIS.

Margaret Nagel and Barbara Bol

(7/17/80)

Comment

We have found that the citizens along the coast of Erie County are very concerned about current and future air quality when the proposed U.S. Steel Plant and the Coho facility are constructed, and about the severe impact they will create. As stated in the Statement on page II-3-32, "Recent relaxation (1979) of the sulfur emission regulations within the Erie Air Basin could have a deleterious effect on the region..." - we emphasize and hope that monitoring and monitoring devices will be implemented as part of the CZM Program so that air standards will not be relaxed any further. The Erie County coastal zone is comprised of large areas of vineyards, nurseries, orchards, and other agricultural regions. Possible future impacts on these commodities from air pollution could be disastrous. We hope the CZM Program will address this air problem to the fullest.

Response

The PCZMP has adopted by reference the requirements of the Federal Clean Air Act (Policy IX-B.2 Air Quality). As a result of this, the PCZMP funds and technical expertise will be utilized to insure the implementation of the State Air Quality Implementation Plan in the Commonwealth's coastal areas. This will involve monitoring the issuance of State air quality permits as they affect the Lake Erie and Delaware Estuary coastal zones (see Part III, Chapter 4 Program Monitoring and Evaluation).

Comment

The Lake Erie Coastal Zone boundary extends northward in Lake Erie to the international boundary with Canada; therefore, should not the Great Lakes Water Quality Agreement of 1978 be mentioned as part of the Policy Enforcement Regulations?

Response

The CZMP has adopted the requirements of the Pennsylvania Clean Streams Law (Policy III-1). This law is enforced by the Commonwealth according to established regulations. This law provides Pennsylvania adequate authority to ensure water quality in the Commonwealth's coastal zone. The Great Lakes Water Quality Agreement of 1978 is an agreement only between the U.S. Government and Canada; provisions of the agreement are enforced by EPA in American waters, utilizing the Federal Clean Water Act. The PCZMP has adopted by reference the requirements of the Federal Clean Water Act (Policy IX-B.1).

OCZM believes that the incorporation of these two laws into the program provides sufficient authority to protect the waters of Lake Erie.

Comment

"Cooperation between inter-governmental bodies" should be better structured and clarified so that policies concerning the CZM Program are accurate and firm when communicated to State and local agencies.

Response

The OCZM agrees with this concept. We believe that the State's intergovernmental coordination mechanisms are outlined in Part II, Chapter 5 of the FEIS and, as stated in policy IX-A, Intergovernmental Coordination/Consistency, in Part II, Chapter 2 of the FEIS, adequately addressed this concern. If, however, our annual review of the Commonwealth's program determines that these mechanisms are not working satisfactorily, then we will require the Commonwealth to restructure its intergovernmental coordination component of its program.

Comment

We think that the mandate of using implementation funds for further planning in 1980-81 is superfluous after four years of program planning. The citizens of Erie County had expected to finally receive funds for actual implementation. We feel that CZM funding now should be used to meet the needs of the people in the coastal zone (for recreational access and acquisition, parking facilities, historic preservation, etc.)

Response

Program implementation funds will no longer be used for program planning activities, but rather for program management. This will include administration of State statutes, coastal access design, port and economic development feasibility studies, and administration of Federal consistency procedures. OCZM regulations 15 CFR 923.94 place most importance on implementation of program authorities. A limited amount of program implementation funds (up to $50,000 per grant) may be used for expendable materials or construction activities in areas designated for preservation and restoration. No program

implementation funds may be used for land acquisition. By using program implementation funds for improving State and local government management capabilities and for feasibility and design studies, development and acquisition funds from other State and Federal agencies will be more easily acquired. The PCZMP will work with the Pennsylvania Department of Community Affairs to see that funds from the Coastal Energy Impact Program are utilized to carry out the recommendations of feasibility studies conducted during implementation of the PCZMP.

Philadelphia Electric Company

(J. O'Brien, 7/8/80)

Comment

Industry has not been made aware of the potential restrictions the PCZMP might impose on water-based facilities. The proposed act has the intent of fostering a no-growth economy. There is need for more input from industry before final approval is given to the plan.

Response

Industry has been involved in the development of the PCZMP since 1974. The Philadelphia Electric Company holds a permanent membership on the Delaware Estuary Steering Committee. The role and function of this committee is described in in Part II, Chapter 5, of the FEIS. Also, a summary of meetings of this Committee and Citizen Committees of Bucks, Philadelphia and Delaware Counties, was included in Appendix C of the DEIS. Further, in the spring of 1980, the PCZMP held several meetings with representatives of public and private organizations to discuss issues relating to economic development activities. These meetings have provided a better understanding of the goals and objectives of the PCZMP to the concerned parties. As a result of the meetings, the policies related to economic development and port planning activities have been modified in order to provide increased emphasis on economic development with respect to these issues (see Part II, Chapter 2, policies VII, VIII and IX of the FEIS).

The PCZMP in no way endorses the concept of a no-growth economy. The State has attempted to develop a balanced program with regard to land and water uses by supporting and encouraging activities that protect the coastal land, water and air resources, and at the same time stimulate the economic use of river or lake and certain related waterfront properties. In particular, some of these opportunity areas could be considered as potential locations for waterfront facilities serving the regional, State or national economic interests. These uses may include port facilities, energy facilities, or other commercial and industrial activities. In the opinion of the OCZM, the State has given adequate consideration of the economic effect of the PCZMP relating to industry (see policies VII-1, VII-2, and VII-3, of the FEIS for further clarification).

Comment

It appears that the approval of the PCZMP will superimpose on industry another set of regulations, while there is no clear policy that supports industrial development.

Response

The approval of the PCZMP will not superimpose on industry another set of regulations, but rather will strengthen the ability of the State to carry out existing State laws in a uniform fashion throughout the coastal zone. Ultimately, this will provide coastal industry a greater certainty in the permit process and in the ability to realize industrial and economic projects in the coastal zones in a timely manner. The Commonwealth has added policies VII-3, and IX-D to the FEIS to strengthen the economic and industrial development dimensions of the PCZMP.

Pennsylvania Electric Company

(Paul S. Feldman, 6/5/80)

Comment

Editorial and technical comments related to electric generating plants and transmission facilities cited in the Energy Facility Planning Process, Part II, Chapter 3.

Response

These changes have been made and are reflected in the FEIS.

Borough of Marcus Hook

(Curtis Weldon, 7/16/80)

Comment

The CZMP has done a great service to the Commonwealth of Pennsylvania and its coastal communities through the identification of GAPC's and the utilization of demonstration funds to address high priority uses in GAPC's. We recommend that funding for these activities and the provision of technical assistance to the coastal communities continue under program implementation.

Response

The CZMP will continue to expand upon these activities during program implementation.

Comment

It is important for the PCZMP to use the Coastal Energy Impact Program or other funds, as appropriate, to follow through on feasibility studies to provide tangible results to coastal residents.

Response

The use of program implementation funds for development, construction or land acquisition purposes is extremely limited. However, by using program implementation funds as seed money (for feasibility studies, etc.), the PCZMP will be able to more effectively utilize funds from the Coastal Energy Impact Program and access development, acquisition, and construction funds from other State and Federal programs.

Bucks County Local Government Representative of the Delaware Estuary Coastal Zone Steering Committee, Pollution Control Group of Lower Bucks County, Pennsylvania and the Borough of Morrisville, Pennsylvania

(Gretchen V. Leahy, 7/21/80)

Comment

Early in its development, the citizens of Bucks County expressed their desires that the PCZMP should function within the existing permitting structure without establishing another layer of government, and that the approach should be balanced between the environment and the economy, that is, that our coastal resources should be protected without imposing undue or excessive costs, delays or constraints on the business community, particularly the private sector. We are pleased to find that these three concerns are reported in the Draft EIS under "Areas of Controversy."

We were surprised, however, to find our concerns omitted altogether from Appendix C, "Local Government and Public Coordination (Delaware Estuary)." Pennsylvania's Coastal Zone Management Program experienced numerous slippages, problems, delays and revisions and considerable controversy during the six-year course of its development, as the minutes of its meetings attest, but nowhere in the Draft EIS is it indicated that the course of program development, including its public participation aspects, was anything other than smooth and free of controversy. The columns of Appendix C entitled "Summary of the Meeting" read like agendas, not summaries, for both Lake Erie and the Delaware Estuary meetings.

We recommend for the sake of accuracy and the integrity of the public participation program that the comments under "Summary of the Meeting" in the Draft EIS in Appendix C be corrected to reflect each meeting's salient points, including identification of controversial areas.

Response

The salient points of all meetings of the public, Coastal Zone Steering Committees, Coastal Zone Advisory Committee, interstate committees, are contained in the minutes maintained by the PCZMP. The large number of meetings and efforts to limit the volume of the DEIS and FEIS to a reasonable size make it impossible to reprint these minutes in the FEIS. OCZM is aware of the scope of the controversial areas in the development of the PCZMP. Major areas of controversy included the issues of consumptive use of water on the upper Delaware River and lack of a complete and accurate technical data base on which to base program decisions. The issue of consumptive use of water is addressed as it would impact water quality or other coastal resources. The technical basis of the program is the set of laws and regulations which are incorporated into the PCZMP. Supporting information in the form of technical studies was collected throughout program development and is listed in Appendix D of the DEIS.

Comment

We find the information presented in the Draft EIS does not suport the document's conclusion that, because the proposed PCZMP is based on existing legislation, there will be no additional layers of government added to the present structure. Federal and State consistency with the proposed program are required, and the mechanisms proposed to administrate and regulate the proposed program seem elaborate. Required would be, for example, additional inter-agency coordination at Federal and State levels, expanded DER reviews, revised permitting procedures and expanded committee involvement by interested citizens at statewide and regional levels. As "lead agency," DER's increased authority would come from requiring that all other plans and programs be altered to be made consistent with the proposed Coastal Zone Management Program. Additionally, the State would have override authority where land and water uses of regional impact are involved. For example, energy facilities, water supply, waste water treatment, recreation and other facilities.

Response

The additional coordination and review of State and Federal actions that will result from the PCZMP is designed to accomplish two major objectives: (1) Assure that State and Federal actions are consistent with the policies of the PCZMP (as required under 15 CFR 923.43); (2) Provide other State agencies and interested citizens of the Commonwealth an early opportunity to learn of proposed actions that will affect the coasal zones. For State agency actions, the review and monitoring process will occur concurrently with the review period established in State law. For Federal actions, the process of determining consistency of Federal actions with the State coastal management programs occurs within reasonable time periods as described in 15 CFR 930 et. seq.

At this time, no revised permitting procedures have been established as a result of the PCZMP. However, the program proposes to work to reduce the time required for issuance of State and Federal permits and to make the results of State decisions more predictable.

The State override authority for uses of regional benefit (Part II, Chapter 3 of the FEIS) meets the requirements for program approval as stated in Section 306(e)(2) of the Coastal Zone Management Act and 15 CFR 923.12 of Program Approval Regulations. The methods used by the State to meet this requirement represent no new methods developed for the PCZMP. They are part of existing State law and procedures and would operate even in the absence of the PCZMP.

Comment

The Commonwealth's authority is also increased over certain specific areas to be designated as "Geographic Areas of Particular Concern" (GAPC's). Bucks County has more at stake than either Delaware or Philadelphia County because 23 of the toal of 47 specific sites nominated to be "Geographic Areas of Particular Concern" in the Delaware Estuary Coastal Zone are located in Bucks County.

Additionally, lower Bucks County municipalities are being solicited to apply for grants to study other specific sites as well as to study various Comprehensive Plans. This solicitation pressures us to accept the entire program as presently proposed because until it is officially accepted, the grant money won't be available.

Response

No additional authority is granted to the Commonwealth through nomination or designation of GAPC's. Areas which are designated as GAPC's must be State-owned, subject to a contractual agreement between the DER, or subject to regulation by the DER (see Part II, Chapter 4 of the FEIS).

Solicitation for local grants by the Commonwealth must be conducted at this time in the eventuality the program does receive Federal approval. To delay this process until after approval would result in a period in which no Federal funds would be available to the Commonwealth and its municipalities for the PCZMP. However, Bucks County is under no obligation to apply for program funds.

Comment

The Delaware Estuary Coastal Zone inland boundary is not clearly displayed on the Draft EIS map, but should be. This, too, has been a matter of some controversy, again, undocumented in the Draft EIS. For example, Morrisville Borough is given three different specific boundary lines in the Technical Record, and a fourth non-specific one in the Draft EIS. Still another specific boundary is presented in the concurrent Proposed New Jersey Coastal Zone Management Program. New Jersey's document by contrast includes a number of large scale maps.

Response

The official inland coastal zone boundary maps are on file and open to the public for inspection during regular business hours at the following locations:

(1) Department of Environmental Resources
Third and Reilly Streets
Harrisburg, Pennsylvania

(2) Delaware Valley Regional Planning Commission
1819 John F. Kennedy Boulevard
Philadelphia, Pennsylvania

(3) Erie County Metropolitan Planning Commission
Erie, Pennsylvania

(4) Office of Coastal Zone Management
3300 Whitehaven St., N.W.
Washington, D.C. 20235

Comment

The only map of the Delaware Estuary Coastal Zone in the Draft EIS (opposite page II-1-12) is very small, has no scale and combines all four "GAPC" categories together without differentiation, although applicable State regulations would vary widely according to category. The Draft Environmental Impact Statement (Draft EIS) does not stipulate what other maps or means will be used to show the exact locations of these areas, nor does it record that this was a matter of considerable controversy.

As shown on the Draft EIS map, the combined "Geographic Areas of Particular Concern" actually extend out into the water nearly to the New Jersey State line in the middle of the Estuary. This is significant because the Federal Office of Coastal Zone Management recommended to the Commonwealth's Department of Environmental Resources (DER) three months ago that the Delaware Estuary "pollution block" be considered as a "GAPC," noting that fish life would benefit from "enhanced management." Fish are important because in addition to their commercial and recreational uses, they are a good indicator of water quality: if water quality is satisfactory for fish life and propagation, it is generally satisfactory for other purposes. This Federal comment was also omitted from the Draft EIS without explanation.

Response

The official boundary maps for the coastal zone boundary and for GAPC's can be inspected at the locations in the response to the previous comment. This has been noted in Part II, Chapters 1 and 3 of the FEIS.

GAPC's are not intended to extend out into the Delaware River. However, citizens, agencies, and interest groups are able to nominate any areas of the coastal zone as GAPC's through the annual nomination process described in Part I, Chapter 3 of the FEIS. There is no requirement for program approval that the Commonwealth designate the Delaware River as a GAPC.

Comment

It is of no small concern that there is a substantial amount of misleading and obsolete information given in the "Technical Support Information" (Appendix D) of the Draft EIS regarding, for example, water quality, electric energy facility siting and population statistics. DER has not updated information and data known to be inaccurate and obsolete in other plans. One such example is DER's information in its COWAMP/208 Comprehensive Water Quality Management Plan for Southeastern Pennsylvania which has not been corrected, and this and other "COWAMP/208" maps are to be used as part of the "Technical Support Information" in the proposed Coastal Zone Management Program. Another example is the use of 1970 Census data.

We believe current data and information should be used and that to maintain flexibility, the proposed program should include a simple means of incorporating such material. We do not find in the Draft EIS workable provisions for correcting the program's inaccurate, obsolete or misleading data and information. Preliminary findings of the 1980 U.S. Census are now being made available, and we think the proposed program and associated planning efforts should relfect the needs of the actual population of respective municipalities, especially where proposed undertakings entail on-going long range costs which must be locally absorbed.

Furthermore, the Draft EIS includes a lot of information, the necessity of which is not clear since there are no proposed policies reflecting the information. For example, there is an extensive amount of 1970 U.S. Census information related to housing, population make-up and distribution, and income. Inclusion of this information would appear to interfere unnecessarily with local land use decisions. We note that New Jersey's proposed program, which is subject to the same Federal regulations, has several pages covering a wide range of housing policies and regulations. Since local land uses are amply covered by local land use and zoning regulations, why should this information be included at all if the State does not want authority to override local land use and zoning ordinances?

Response

Appendix D of the DEIS summarizes information accumulated throughout program development. Much of the information, however, is not relevant to implementing the management program. Moreover, the examples cited of inaccurate and obsolete information are the responsibility of other agencies and not the PCZMP. In addition, the 1980 census figures are preliminary and subject to change.

This information to which the Comment refers has come from numerous working papers developed in the early stages of program development. These papers are obsolete and the data are irrelevant to implementation of the PCZMP.

Comment

Clarification is essential as to which documents and maps will and will not be used as the program's technical base. Although the Technical Record (December, 1978) was developed for this purpose and distributed to the municipalities last fall, we were informed by DER and its consultant at the Bucks County Citizens' Meeting of June 25, 1980, that the Technical Record is "out" and will not be used. If this is so, why is it not being used, why have we not been officially notified by either DER or the Federal Office of Coastal Zone Management that it is not being used, and what specific documents that the public has had a chance to become familiar with will be used instead?

Response

The Comment is correct that, except for its maps, the Technical Record will no longer be used in the PCZMP. It is not being used because it does not accurately describe the PCZMP, especially its organizational structure and policies, and because much of the information contained in it is irrelevant to the management program. The Technical Record was never intended to to describe the PCZMP. It was simply a document designed to identify the problems and issues which the program would address, with supporting material to document the need to address certain issues. The FEIS on the PCZMP is the official program document.

Comment

Adoption of a Coastal Zone Management Program by each state is optional, not mandatory, and Federal law requires each state to hold two public hearings on its proposed program. We have learned the DER planned to use a previously scheduled hearing or hearings to meet this requirement and also that DER planned to hold a hearing jointly with the Federal Office of Coastal Zone Management (OCZM) on the Draft EIS. No notification has been received from the State or any of its consultants of any public hearings held or to be held either jointly or singly (including OCZM's July 1, 1980 hearing) on Pennsylvania's proposed program. We question whether the public hearing requirements of the Coastal Zone Management Act have been fully met both literally and in spirit. It does not seem appropriate for the Federal government to act on the approval of a proposed state program on which the affected public has not had prior opportunity to comment directly to the state.

We recommend that the Commonwealth hold a public hearing in the Delaware Estuary area on its proposed program, including all documents to be used as the proposed program's technical base, including all maps. We also recommend that the Commonwealth promptly identify all these documents and grant the affected public ample time to review this material prior to the State's public hearing on the proposed program. We further recommend that those documents presently included which will not be used also be specifically identified and retracted. At this writing, it is not clear whether or not Pennsylvania's proposed Coastal Zone Management Program has a technical base at all, precisely what this technical base may be, or in fact precisely what it is that other Federal and State policies, plans and projects must be consistent with.

Response

Extensive public meetings have been conducted throughout the process of program development, as documented in Appendix C of the DEIS. Joint State and Federal hearings on the PCZMP and the DEIS were conducted on July 1, 1980, in Philadelphia and July 2, 1980, in Erie. Public notice of these hearings was provided by the State in newspapers in these areas. A letter dated June 12, 1980, from Mr. William Johnson of the PCZMP to the commentor, Ms. Gretchen Leahy, was sent announcing the times and location of the July 1, 1980, public hearing on the PCZMP in Philadelphia.

In addition, the Commonwealth will hold a final set of hearings on the PCZMP in September during the 30-day FEIS review period. Upon completion of this final set of hearings and receipt of hearing transcripts or summaries by OCZM, the Commonwealth will have met all public hearing requirements pursuant to 15 CFR 923.58.

The DEIS contains the entire scope of the PCZMP, including regulations that will be administered pursuant to relevant authorities incorporated into the program. The technical base of the PCZMP is the set of laws and regulations which are incorporated into the program as stated in the DEIS and FEIS. Federal and State actions must be consistent with the policies found in Part II, Chapter 2 of the FEIS.

Comment

The PCZMP does not address the issue of consumptive water use in the Delaware River both within and outside the coastal zone. The issue of consumptive water use - water taken away from the Delaware River or Estuary, not returned, and not available for re-use anywhere in the Delaware Basin - is central to wise and responsible management of the Delaware Estuary.

It is disturbing to find that the issue is addressed in the Technical Record, but that it is not addressed in the DEIS. It is even more disturbing that there are no water use classifications in the DEIS. We seriously question whether responsible, technically sound water and related land use decisions can be made in the absence of full and public evaluation of this basic issue.

Response

The decisions on the consumptive use of water are the responsibility of the Delaware River Basin Commission, an interstate compact commission, on which Pennsylvania is one of five voting members. The PCZMP addresses the issue of water quality and other coastal resources of the Delaware Estuary through its policy framework (see Part II, Chapter 2 of the FEIS). To the extent that proposals for water diversions may impact water quality and other coastal resources of the Delaware Estuary, the PCZMP will address the consumptive use issue through its representative on the Delaware River Basin Commission. Because this is a generic issue that cuts across all policies of the PCZMP, this level of involvement is discussed in Part II, Chapter 5 of the FEIS under Interstate Coordination Activities.

Comment

No policy has been established setting any upper limit on the amount of water that can be taken away from the Delaware Basin whether by exportation, evaporation or other means; and there is no legally guaranteed minimum flow to the Estuary at Morrisville (Trenton, New Jersey).

The people, the commerce, and the industry of the Delaware Basin are in constant competition with the City of New York for the priceless water resources coming into the Estuary. The more water exported out of the Delaware Basin, the more deteriorated the water quality in the Estuary becomes because the net impact of consumptive water use basin-wide is on the Estuary. In the light of updated technical knowledge about our Estuary, hard choices must be made not only between competing in-basin and out-of-basin interests, but also between competing in-basin water demands which affect the River's flow to the Estuary.

The upper Estuary is the most sensitive part of the entire Delaware system, and the most significant determinant of its water quality is the quantity and quality of the main stem of the Delaware River as it enters the Estuary.

Because the upper Estuary acts as a siltation basin for the Upper Delaware Basin's drainage, it cannot be assumed that all water quality problems in the Delaware Estuary are caused by local dischargers, or that water quality in the Estuary will be improved either by increased regulation in the coastal zone or by construction of additional upstream storage reservoirs.

We see nothing in the Draft EIS or in Pennsylvania's proposed Coastal Zone Management Program dealing with this basic problem, nor anything to protect us from it happening. Nor do we find in the Draft EIS any evaluation of the possible consequences of implementing Coastal Zone Management policies which ignore this problem and are premised on an unidentified technical base.

Response

These issues are the responsibility of the Delaware River Basin Commission (DRBC), an interstate compact commission, on which Pennsylvania is one of five voting members. They will be addressed by the PCZMP as indicated in the Response to the previous Comment. It should be noted that the two largest diversions of water from the Delaware River, one of 800 mgd to New York City and one of 100 mgd to northern New Jersey, are the results of a 1954 U.S. Supreme Court decree. Both diversions are embodied in the DRBC compact. All five members of the DRBC are currently negotiating a three-tier plan on the future use of water from the Delaware River. This would provide (1) a drought emergency management plan with minimum flow allocations at Trenton, New Jersey; (2) a consumptive use allocation budget based on the availability of water supplies; (3) a designation of new water resource development projects designed to maintain a minimum stream flow at Trenton, New Jersey.

In developing this three-tier approach to the management of water resources in the Delaware River, the Commonwealth is considering the impact of increased frequency of low flow occurrence on the water quality of the Delaware.

The PCZMP will provide input to these considerations as applicable to the water quality and coastal resources of the Delaware Estuary Coastal Zone.

The consequences of approving a program which ignores the issue of consumptive use of water from the Delaware will be that water quality may deteriorate and the amount of fresh water supplied to the estuary may diminish, assuming the consumptive use of water diminishes the amount of fresh water contributed to the estuary. However, the PCZMP does consider the consumptive use of water as it may affect water quality and other coastal resources.

Comment

We recommend that all policies concerning out-of-basin and intra-basin diversions present and planned and any appurtenances which would impose adverse water quantity and quality impacts and costs on the Estuary be made consistent with a mandatory policy of protection of the Estuary.

Response

The Commonwealth has a number of enforceable policies which are related to protection of the Delaware Estuary. These are policies I-B, Floodplains; II-1, Dredging; IV, Wetlands; and IX-B.1, Water Quality. Policies on out-of-basin, intra-basin, and minimum stream flow will not be developed at this time. If proposed diversions are likely to have a deleterious effect on water quality or other coastal resources within the estuary, the PCZMP will address this issue with the DRBC.

Comment

The Federal law requires that all Federal actions be consistent with the State's Coastal Zone Management Program and that the policies, programs, plans and projects of all other State agencies shall to the greatest extent possible be consistent with the State's Coastal Zone Management Program.

For there really to be genuine Federal and State consistency, the primary responsibility of the Federal government should be to make protection of the Delaware Estuary a national priority and to require that all other Federal policies, plans, programs and projects be consistent with this priority, and we so recommend. We recommend that the Federal government disapprove Pennsylvania's Coastal Zone Management Program: until such time as the Commonwealth publicly acknowledges that protection of the Delaware Estuary is in the national interest; until the Commonwealth can clearly demonstrate that its own policies, plans, programs and projects are directly to accomplish such protection; and until it has clearly identified the specific technical documents, maps and means that will be used to accomplish the protection of the Estuary; and until the affected people have been given the opportunity to comment at public hearing on a program revised to reflect this priority.

Response

The primary responsibility for managing the Pennsylvania coastal zone lies with the Commonwealth. The Federal government has indicated its priority to protect all waters of the U.S., including the Delaware Estuary, through enactment of the Clean Water Act. The Commonwealth also acknowledges that protection of its coastal waters, including the Delaware Estuary, is in the national interest. This is found in Part II, Chapter 5 of the FEIS, under National Interest.

The only means by which there can be genuine State and Federal consistency in the coastal zones of the Commonwealth is for the State to have a Federally-approved coastal zone management program. OCZM believes the PCZMP is designed to provide the protection desired in this comment.

The technical documents of the PCZMP are the laws and regulations which are incorporated into the program. Official maps are on file at the Department of Natural Resources in Harrisburg and the Delaware Valley Regional Planning Commission in Philadelphia. The public has been given ample opportunity to comment at the numerous public meetings conducted by the PCZMP during program development and listed in Appendix C of the DEIS, and at public hearings conducted jointly by OCZM and the PCZMP on July 1, 1980, in Philadelphia and July 2, 1980, in Erie.

HEARING COMMENTS - PHILADELPHIA AND ERIE

Pennsylvania Fish Commission

(Robert B. Hesser, 7/17/80; Gene Sporl 7/1/80; J. Gary Moore 7/2/80)

Comment

The Pennsylvania Fish Commission in general supports the CZM concept and feels the DEIS is well done, with a few minor exceptions.

Response

No response needed.

Comment

The recent improvement of the water quality in Lake Erie and the lower Delaware River has increased the demand for access to these waters for boating and shore angling activities.

Response

The State has identified the need for more access relating to recreational and shoreline angling on Lake Erie and the Delaware River. The PCZMP will provide both active and passive recreational opportunities, as well as additional public access opportunities along the waterfront of Lake Erie and the Delaware River through the acquisition of fee simple purchase, leaseback, saleback and other less than fee simple arrangements. Funds from the Coastal Energy Impact Program and other sources will provide the State an opportunity to acquire and develop sites for public access. Section 306 funds will be utilized to develop plans for recreational and access facilities. Policy V-1 of the FEIS contains additional information on this issue.

Comment

On pages iv and v of the Summary, we do not feel that the extent of the coastal boundary on the Delaware River is sufficiently defined. Item 3 gives the upper extent of tidal influence on the main stem, but shouldn't the boundary also include the upper extent of tidal influence on all tributaries in this zone as well?

Response

The coastal boundary on the Delaware River does include the upper extent of tidal influence on all tributaries in this zone, including the following: Schuykill River, Ridley, Tacony, Pennypack, Neshaminy, and Poquessing Creeks, and this determination is clarified in Part II, Chapter 1 of the FEIS.

Comment

On page vii in the discussion of economic changes, No. 5 may not be a major improvement to a property owner.

Response

The regulatory aspects of the program will in the long run protect property owners from economic hardships due to flooding, bluff recession, etc. In the short term, some economic losses may result. For example, the Bluff Recession and Setback Act requires structures to be set back from bluff areas determined to be hazardous as a result of shoreline erosion. This will result in fewer structures being lost to the effects of shoreline erosion, and will also reduce the level of pollutants added to the lake as fewer septic tanks and sewer lines are washed into the lake, but may also cause a drop in the value of the property.

Comment

On page I-3 in the Purpose and Need Section, item 5 from Sections 308(b) and (d), it occurs to us that grants to coastal states who suffer unavoidable loss of valuable resources is fine, but are mitigation measures other than financial ones considered? Financial renumeration cannot help if the resource is lost with none to replace it.

Response

The statement referred to in item 5, page I-3, relates to grants given under Section 308(b) and (d)(4) (Coastal Energy Impact Program) of the CZMA. These grants are given to coastal states for preventing, reducing, or ameliorating unavoidable losses of valuable coastal environmental or recreation resources when such losses result from coastal energy activity. These activities are allowed to occur only when benefits outweigh the negative impacts. Furthermore, the PCZMP has the necessary authorities to balance the siting of energy activities with their impacts on coastal resources through the regulatory process (see Part II, Chapters 2 and 4, and Appendix B, Dam Safety and Encroachments Act Regulations).

Comment

Several editorial corrections are suggested in Part II of the DEIS.

Response

The editorial corrections have been made in Part II of the FEIS.

Pennsylvania Boating Association

(Henry Koch 6/23/80)

Comment

The PCZMP has raised the consciousness level of many persons in government, increasing the responses of agencies in providing recreational opportunities to everyone. We heartily recommend adoption of the DEIS.

Response

No response needed.

Delaware County Planning Department

(H. Edward Miles, 6/27/80)

Comment

The Delaware County Planning Department has actively participated in the planning process and development of the PCZMP. The Program offers positive opportunities to better manage the resources and diverse land uses unique to our coastal zones. Request that NOAA approve the PCZMP so that implementation can proceed.

Response

No response needed.

New Jersey Department of Environmental Protection

(Allan Campbell, 7/7/80)

Comment

New Jersey CZMP supports the Pennsylvania Coastal Zone Management Program. Similarities in start-up dates for program implementation and their common coastal zone boundary (i.e., up to the limit of tidal influence) was noted. The two programs should therefore be able to complement each other. The people who live along the Delaware River will benefit from rational management programs on both sides of the river.

Response

No response needed.

Future Alternatives Surface Transit

(Kenneth Springirth, 7/2/80)

Comment

Expressed concern about the problems associated with port activities (pp. II, 2-21). One of the major problems relates to the viability of the railroads as a transportation link and not so much a lack of highway access. He related the example of the Erie Emporium Line, which links central Pennsylvania with Harrisburg. He requested that the PCZMP address the issue of ports and rail transportation with a "protective" statement on the Erie Emporium Line.

Response

Inadequate inland transportation networks is part of the reason for the decline of Pennsylvania's ports. In its efforts to preserve and enhance the economic viability of the Commonwealth's coastal ports, the PCZMP, as described in policy VII-1, will utilize its fiscal and other pertinent resources to support long-range, comprehensive planning for the future development and growth of the Ports of Erie and the Delaware Estuary. These efforts will include looking at future alternatives for surface transportation such as rail and highway.

Comment

He also expressed concern about the air pollution problems in the Erie Air Basin, and recommends that the PCZMP address this problem. Incorporation of air quality requirements is insufficient if there is no valid data from the monitoring. The PCZMP should ensure that the quality of the monitoring is improved.

Response

The Commonwealth has incorporated the requirements of the Clean Air Act into its PCZMP. Any action or proposal which would violate State air and water quality laws and regulations (including the Erie Air Basin) is considered to be inconsistent with the PCZMP. Air permits will be monitored by the PCZMP following the process outlined in Part II, Chapter 4, page 7 of the FEIS.

If there is a lack of valid data on certain air pollutants and it adversely affects the ability of the PCZMP to monitor the issuance and denial of air-quality permits, the intradepartmental conflict resolution procedures described in Part II, Chapter 4 of the FEIS will be instituted by the PCZMP in an effort to upgrade the quality of information necessary to monitor air quality permit actions. In addition, any person aggrieved by an action of the DER may enter the decisionmaking process provided by the Environmental Hearing Board, citizen suits under the Environmental Rights Amendment, and judicial procedures pursuant to the Commonwealth's administration of its statutes. A more detailed discussion is described in Part II, Chapter 4, of the FEIS.

Comment

He requested assistance as a shorefront property owner faced with erosion problems, and asked if the PCZMP could address how individual property owners can get some technical advice and assistance.

Response

Technical advice and assistance have been provided by the PCZMP staff.

Central Coastal Zone Management Steering Committee of the Lake Erie Coastal Zone

(John Horan, 7/2/80)

Comment

The Central Coastal Zone Management Steering Committee of the Lake Erie Coastal Zone at one time consisted of 40 citizens, but they have had a number of setbacks caused by internal disputes over such issues as management control, boundaries, etc. He requested that no change to the boundary be made until the Steering Committee could reconsider it.

Response

In a July 23, 1980, meeting of the Central Steering Committee of the Lake Erie Coastal Zone, the Committee endorsed the concept of expanding the coastal zone boundary to Route 5-A, through the City of Erie. The PCZMP has agreed to expand the coastal boundary to Route 5-A to include the Bayfront neighborhood. This neighborhood is bounded by Hess Avenue on the east and Cranberry Street on the west. The rationale for this decision is the long-standing cultural tradition that ties the Bayfront neighborhood to Lake Erie. In addition, this area was considered to be within the coastal boundary during the early stages of development of the PCZMP.

Bayfront NATO Martin Luther King Center

(A. W. Thompson, 7/2/80)

Comment

Expansion of the coastal zone boundary throughout the City of Erie is requested. Two criteria, presence of geographic areas of particular concern and firm neighborhood or statistical boundaries, are the basis of this request. Boundary expansion would provide for inclusion of the entire Bayfront neighborhood in the Pennsylvania coastal zone.

Response

The PCZMP has agreed to expand the coastal boundary to Route 5-A to include the Bayfront neighborhood. This neighborhood is bounded by Hess Avenue on the east and Cranberry Street on the west. The rationale for this decision is the long-standing cultural tradition that ties the Bayfront neighborhood to Lake Erie. In addition, this area was considered to be within the coastal boundary during the early stages of development of the PCZMP.

Sierra Club - Lake Erie Alliance

(William Welch, 7/2/80)

Comment

Will submit a written statement for the Alliance, but wanted to highlight some of the areas of concern.

- Recreation - It is unfortunate that more in-depth studies have not been conducted, particularly on access. Boat launching facilities are limited and cause parking problems for community residents. The Erie area services a larger regional area, and the program should do more to address this issue.

Response

The PCZMP has, through contractual arrangement, conducted in-depth studies on various issue areas relating to basic technical support studies and material that were utilized in the development of the PCZMP. These include studies on access, recreation, erosion, flooding and others. A complete listing of these reports and studies is described in Part II-D-1 of the FEIS. In addition, the PCZMP has funded four demonstration projects to determine what improvements can be provided to enhance the Lake Erie economic and recreational potential. Three of the studies have been completed, and reports on these are available through the PCZMP for public inspection.

A fourth grant for $25,000 was awarded to the Pennsylvania Fish Commission for a Coastal Fisheries Study, to determine how commercial and recreational fishing along the Erie coast can be improved. Completion of this study is expected by September 30, 1980.

Comment

- Waste Disposal - There may be problems in the future if New York begins drilling for oil. There is a problem associated with sulfur dioxide emissions which affect Erie County, but have their source in other Great Lakes states.

Response

The PCZMP recognizes the potential problems associated with oil and drilling in Lake Erie, and intends to utilize the Federal Consistency and interstate coordination mechanisms as outlined in Chapter 5 of the FEIS, activities which affect the Pennsylvania coastal zone. The PCZMP also recognizes that sulfur dioxide emissions are a very complex problem, and the State is currently working with various Federal agencies to devise a strategy to address this issue.

Comment

- Transportation - Rail transportation has steadily deteriorated and must be improved if the vitality of the Port is to be maintained or increased.

Response

The Commonwealth has identified a deficiency in its port facilities, and also the inadequacy of surface transportation relating thereto. In an effort to improve the future development and growth of the Ports of Erie and Delaware Estuary, the PCZM will provide funds and other pertinent resources to support long-range, comprehensive planning. Various modes of surface transportation will be looked at as well as other areas related to revitalizing the coastal ports of the Commonwealth.

Comment

- Utilities - The PCZMP does not address the issue of hazardous wastes associated with the utilities industries and how to maintain the integrity of the estuaries and streams. These areas become dumping grounds for utility wastes.

Response

The PCZMP will address the issue of hazardous waste disposal through the monitoring of water quality permits issued pursuant to the Clean Streams Law.

Lillian Tate

(7/2/80)

Comment

She visits the area during the summer and is having problems with shoreline erosion. Requested information or assistance on the amelioration of erosion impacts.

Response

The PCZMP has provided information and technical assistance, as requested.

Mel and Priscilla Zuck

(7/2/80)

Comment

They are frustrated that the citizens of western Erie County (Springfield, Fairview, Girard and Lake City) have had little participation in the Coastal Steering Committee. The citizen appointees had not been named; therefore, they feel no sense of due process or clear access to the planning-supervisory process.

Response

The citizen appointees will be named by the Township Managers prior to approval of the PCZMP. Two citizen representatives from each municipality will be appointed. This will give the Western Study Area Committee a total of eight citizen appointees.

Comment

He stated that the zoning requirements and setback regulations do not adequately handle the problem of overcrowding in the Trout Run corridor by fishermen during the salmon spawning runs, and that he has not found a way to be involved in addressing this issue.

Response

The Bluff Recession and Setback Regulations were not designed to overcome the problem of overcrowding by fishermen in the Trout Run Corridor. However, as this becomes a significant problem, the PCZMP will work with the local CZSC, local planning authorities, and the Pennsylvania Fish Commission to resolve this problem.

Paul Knuth

(7/2/80)

Comment

Read a prepared statement with comments relative to the following areas: hazard zone occupance, shore access, and program management.

- Hazard Zone Occupance - Deficiencies in the Bluff Setback legislation and, hence, local ordinances to implement the legislation include the fact that the ordinances do not deal with activities (or structures) in the beach zone, nor does it regulate or control activities on the bluff face. In both instances, structural measures aimed at decreasing site problems complicate erosion downdrift. The problems are minimized because of the Dam Safety and Encroachments Act and by the COE's regulatory programs.

Response

The Commonwealth intends to use the Bluff Recession and Setback Act to control structures from the landward extent of the erosion hazard area to the toe of the bluff. The Commonwealth is able to control activities up to the high water mark of Lake Erie under the Dam Safety And Encroachments Act. Any remaining area above the high water mark and below the toe of the bluff is subject to the Floodplain Management Act.

Comment

- Shore Access - The program provides for an opportunity to acquire and develop sites for public access. Concerned citizens, local officials and Regional Steering Committee should ensure that the highest priorities of coastal management are met.

Response

PCZMP will solicit these during 306 implementation.

Comment

- Program Management - Indecisiveness and hesitancy of OCZM in promoting guidelines and criteria to severely reduce the efficiency and overall benefits of the CZM program. Failure of OCZM to establish consistent and constant guidelines in the past has led to unnecessary confusion and suspicion.

Response

The Regulations have been the same with minor changes since 1977, and precisely the same since 1978. All criteria of the State CZM program approved by OCZM have been under these specific standards.

Township of Falls, Bucks County

(J.J. Desmond, Township Manager, 7/1/80)

Respresents Board of Supervisors and Citizens of Falls Township (Population 43,000)

Comment

Favors the concept of the Pennsylvania Coastal Zone Management Program. The PCZMP favors a concept which is compatible for industry and recreation. Bucks County has a shoreline of 10 miles with two major industries located along the shoreline, including U.S. Steel and the Warner Company. There are no municipal recreational facilities available at this time.

Response

Plans to increase coastal recreational facilities are underway, with funds being provided by the PCZMP.

Comment

He believes the PCZMP will preclude crisis decisionmaking, and that Federal grants are important elements to local governments' participation. He related a case example of a study which led to a mutual land exchange between the Warner Company and Falls Township which benefitted both parties. The township gained a recreational facility and the industry improved its manufacturing capability. The Delaware River must be made available for both industry and public access.

Response

A large percent of the Delaware Estuary coastal zone is committed to industrial activities. Efforts are underway to improve the recreational and public access opportunities along the Delaware River. The PCZMP is currently funding two access projects - Marcus Hook Burough and Falls Township - related to determining the feasibility of improved recreational opportunities by providing access to the Delaware River waterfront. Also, the PCZMP is presently funding a fisheries management study to determine appropriate methods for improving recreational fishing along the Delaware and Erie shorelines. The project is being carried out by the Pennsylvania Fish Commission.

Comment

Local governments cannot handle shoreline problems by themselves. CZM is a joint program from which all will benefit.

Response

The PCZMP will provide a joint effort for managing the Commonwealth's coastal resources. As a result of program implementation, funds and technical assistance to State and local governments will enhance the State's ability to jointly preserve and protect its coastal resources, while allowing coastal development to take place.

Comment

Strongly recommends approval of the PCZMP.

Response

No response needed.

Comment

Provided OCZM with a copy of resolution signed by the Board of Supervisors urging program approval, and a draft report on the proposed Waterfront and Marina.

Response

No response needed.

Charles C. Kolb

(7/2/80)

Comment

The DEIS prepared on the PCZMP is a useful initial compendium which addresses a set of problems which are of concern to many citizens of the Commonwealth of Pennsylvania and neighboring states.

Response

No response needed.

Comment

While the public hearings on the proposed PCZMP were not well-publicized, they, along with written comments submitted to OCZM, should ultimately strengthen the program and eventually result in a viable FEIS approved by the Governor and OCZM.

Response

The State and OCZM publicized the hearings in accordance with CEQ's guidelines. Hearing notices were placed in the Philadelphia Inquirer, the Pennsylvania Bulletin, the Erie Morning News, and Federal Register, while announcements of the hearings were posted at public libraries in both cities. Also, OCZM included a notice of both hearings in each copy of the DEIS before distribution was made. An additional set of hearings will be held by the Commonwealth during the FEIS thirty-day review period.

Comment

A major oversight in the DEIS is omission of prehistoric/protohistorical cultural resources, including archaeological sites. These comments are specific to Erie County only, but have important implications for the Delaware Estuary coastal area.

Response

The PCZMP agrees that archaeological sites are significant, and have made changes to its policy on historic preservation to reflect this (see Part II, Chapter 2, Policy VI of the FEIS).

Comment

The FEIS should include a section relating to archaeological resources as well as the historic ones.

Response

Policy VI, Historic Preservation has ben rewritten to include archaelogical resources as well as historic ones.

Philadelphia Port Corporation

(Ronald Petrofsky, 7/1/80)

Comment

In principle, the Philadelphia Port Corporation agrees with the goal of the Pennsylvania Coastal Zone Management Program as an effort to achieve a balanced use of the coastal zone area.

Response

No response needed.

Comment

There are major differences between the navigable Delaware and Schuylkill estuarine areas and the remainder of those water resources affected by the draft regulations for the Dam Safety and Encroachments Act.

Response

OCZM assumes this comment is in reference to the amount of traffic on the Delaware and Schuylkill Rivers. The Dam Safety and Encroachments Act applies statewide and permits issued by the State are subject to provisions of the Act, which includes impacts on navigation as well as public health, safety and welfare.

Comment

It is refreshing to note that the Pennsylvania Coastal Zone Management Plan addresses the necessity for port activity and development as specified in policy VII-I and VII-II which recognizes the economic advantages of port development.

Response

An additional policy related to port and economic development has been added to the FEIS (see Policy VII-3).

Comment

We have staunch reservations with regard to the method of permit granting which presents an impediment to the development, rehabilitation and maintenance of maritime trade facilities in the Delaware estuaries. These problems, however, are not insurmountable, and efforts are underway to continue working with officials of the DER to resolve the differences.

Response

The permit review and issuance/denial process as described in Chapter 4 of the DEIS should not present an impediment to coastal economic development activities, provided performance standards of regulatory authorities are met. The regulatory aspects of the PCZMP apply statewide and therefore must be adhered to. However, in its first year of program implementation, the PCZMP will conduct a review of its permit review and issuance process. The major objective of the review will be to simplify and improve upon the permit application, issuance procedures, and monitoring activities of all permits.

The Pennsylvania DER, lead agency for the PCZMP, will continue to work to overcome impediments to port activities in the Delaware estuary, through consideration of delegation of portions of the State's permitting authorities, under the Dam Safety and Encroachments Act, to the City of Philadelphia.

Keystone Alliance

(Jacqueline Rattenberg, 7/1/80)

Comment

The Keystone Alliance is primarily an Anti-Nuclear Power Citizen Group, but is concerned with energy issues in general.

Response

No response needed.

Comment

The PCZMP contains conflicts in its priorities of preserving the "clean air and water goals" in coastal areas and simultaneously planning for the projected future of energy generating plants.

Response

The PCZMP acknowledges the need for future energy facilities, and has developed a policy (VIII-1) which is designed to ensure that the development of future energy facilities occurs in a manner that does not conflict with clean air and water quality goals. Further, the Commonwealth, through State law, has incorporated the requirements of the Federal Water Pollution Control Act and the Clean Air Act into the PCZMP. Any action or proposal which would violate State air and water quality laws and regulations is considered to be inconsistent with the PCZMP. The PCZMP will review and monitor air and water quality permits in accordance with the process outlined in Part II, 4-7 of the FEIS, clean air and water quality goals.

Comment

The PCZMP fails to distinguish the difference between energy needs and demands. It assumes an increase in overall energy needs when in reality many electric customers used less than in the previous year. This provides us with an opportunity to look at our future energy needs for new ways that are less polluting than conventional methods of energy generation.

Response

The projections quoted by the Program are to demonstrate that at some time in the future additional energy facilities will be needed in the coastal zones, and hence the need for a policy to ensure that they are sited in an environmentally responsible manner. The management program covers the Lake Erie as well as the Delaware Estuary coastal zone, and even revised projections indicate that at some time in the future new energy facilities will be needed in the coastal zone; hence the need for the policy. It may not be as soon as the projections the program quoted indicate, but it is still likely to occur.

Comment

It is desirable for the PCZMP to include standards beyond those of the PUC and other regulatory bodies, which only consider the forms of energy already offered by the utilities from centralized locations.

Response

The PCZMP is a management program based on existing authorities, designed to address coastal related issues. This issue is not coastal related, and what is recommended is beyond the scope and intent of the management program. The program will, however, closely monitor any energy facility siting to insure adherence to air and water quality standards.

Comment

The impact of the Limerick nuclear power plant, now being constructed at Pottstown by PECO, is not mentioned in the PCZMP DEIS.

Response

The Limerick site is not in the coastal zone. Any impacts the plant may have on coastal resources will be closely reviewed by the management program through its review process of permits referenced in these policies and in Part II, Chapter 4 of the FEIS.

Comment

No more such capital intensive projects should be allowed through the CZM "one stop" siting procedure.

Response

The PCZMP DEIS does not cite a "one stop" permit siting process. Rather, the program will be working on a permitting simplification process. This process is designed to facilitate the current permitting procedures, and thus the decisionmaking, but it is not and should not be designed to influence the outcome of the existing siting procedure.

Comment

The Keystone Alliance urges that all energy related funds and policies be used to develop and encourage alternative energy programs. The fewer adverse impacts we make upon our environment with our energy supply system, the more our air and water will be able to absorb the inevitable effluents from further coastal developments.

Response

Development of alternative sources of energy are beyond the scope of the PCZMP. However, alternatives for siting any types of energy facilities subject to the regulation authroities of the PCZMP will be considered.