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PROPOSED NEW JERSEY COASTAL MANAGEMENT PROGRAM

AND

DRAFT ENVIRONMENTAL IMPACT STATEMENT

COASTAL ZONE
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May 1980

U.S. National Oceanic and Atmospheric Administration
Office of Coastal Zone Management
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STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF THE COMMISSIONER
P. O. BOX 1390
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Dear Friend of the Coast:

I am proud to submit to you the Proposed New Jersey Coastal Management Program and Draft Environmental Impact Statement. Preparation of this document begins the last phase of the review process under Section 306 of the federal Coastal Zone Management Act.

This proposed program is based upon our experience administering the Coastal Management Program approved by the National Oceanic and Atmospheric Administration for the Bay and Ocean Shore Segment in September 1978, and more than five years of coastal management and planning. The program will provide the substantive framework for Governor Byrne's Riverlands Renaissance Program, while also enabling New Jersey to continue balancing the many coastal interests and pressures to both protect sensitive resources and promote necessary development. New Jersey has already demonstrated that these two objectives need not be mutually exclusive.

The Department of Environmental Protection (DEP), as New Jersey's lead coastal agency, will undertake a series of public hearings and informal workshops throughout the State to discuss this Proposed Program with a wide range of federal, state and local agencies, interest groups and citizens to help identify the revisions that may be appropriate before the Governor's formal review and request for federal approval of the program.

While the responsibility for this document rests with DEP, the Proposed Program is already much better than it would otherwise have been because of the time taken by hundreds of New Jersey residents, elected officials, public agencies, and other interested people to review and comment upon earlier drafts and papers, and to attend public meetings we have held during the past five years.

I invite you to carefully review this Proposed Program and to discuss your comments and suggestions with us.

Sincerely,

JERRY FITZGERALD ENGLISH
Commissioner

NOTE TO READER/NEPA SUMMARY

The National Environmental Policy Act of 1969 (NEPA) mandates that an environmental impact statement be prepared as part of the review and approval process of major actions by Federal agencies. The action contemplated is approval of the Proposed New Jersey Coastal Management Program under Section 306 of the Federal Coastal Zone Management Act of 1972, as amended (CZMA). An immediate effect of approval is the qualification of the State for Federal matching funds for use in administering the Coastal Mangement Program. In addition, New Jersey will be eligible for continued funding under the Coastal Energy Impact Program (CEIP). The federal Coastal Zone Management Act stipulates that Federal activities affecting the coastal zone shall be, to the maximum extent practicable, consistent with an approved State coastal management program.

This document is organized as follows:

Part I - Summary

Part II - New Jersey Coastal Management Program - Description of the Program

Part III - Description of the New Jersey Coastal Zone - Affected Environment

Part IV - Environmental, Economic and Institutional Consequences

Part V - Alternatives to the Proposed Action

Appendices A-I - The appendices are also part of the Program.

For purposes of reviewing this proposed action, the key concerns are:

- whether the Coastal Management Program is consistent with the objectives and policies of the national legislation,
- whether the State management authorities are adequate to implement the program,
- whether the award of Federal funds under Section 306(h) of the Federal Act will help New Jersey to meet those objectives, and
- whether there will be a net environmental gain as a result of Program approval and implementation.

The Federal Office of Coastal Zone Management believes the answers to these key questions are affirmative. The Office is widely circulating this document to all interested agencies and parties in order to receive the fullest expression of opinion on these questions. The Federal Office of Coastal Zone Management thanks those participating in the review of the Proposed New Jersey Coastal Management Program and this draft environmental impact statement.

This Program is of major significance, not only to New Jersey, but to the Nation. New Jersey is the nation's most densely populated state and the resources of its coastal zone are under intense pressure from development decentralizing out of the nation's first and fourth largest cities, from exploration and potential

development of offshore oil and gas reserves, and from development attracted to the Atlantic City area by casino gambling. Yet New Jersey still has miles of undeveloped tidal marsh along the shore of Delaware Bay and undisturbed beaches and dunes in Island Beach State Park. In no other state do coastal planners face a greater challenge in achieving the national interest in providing for the wise use of coastal resources while preserving the sensitive ecology of the coastal zone.

NEPA Summary

(X) Draft Environmental Impact Statement ( ) Final Environmental Impact Statement

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

Office of Coastal Zone Management
National Oceanic and Atmospheric Administration
Attn: Ms. Kathryn Cousins
Regional Manager, North Atlantic Region or
David R. Duncan
Program Assistant, North Atlantic Region
3300 Whitehaven Street, N.W.
Washington, D.C. 20235
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1. Type of Action

Proposed Federal approval of Proposed New Jersey Coastal Management Program

(X) Administrative ( ) Legislative

2. Brief Description of Action

It is proposed that the Secretary of Commerce approve the Coastal Management Program of the State of New Jersey pursuant to P.L. 92-583. Approval would permit implementation of the proposed Program, allowing program administration grants to be awarded to the State, and require that Federal actions be consistent with the Program, to the maximum extent practicable.

3. Summary of Environmental Impacts and Adverse Environmental Effects

Approval and implementation of the Program will allow the State to implement more effectively existing State management within the coastal zone. The State will condition, restrict, or prohibit selected land and water uses in some parts of the New Jersey coast, while encouraging development in other parts. Each coastal municipality will retain primary responsibility for managing land use along its coast. The impacts of the New Jersey Coastal Management Program will be generally beneficial, although there may be some adverse, short-term economic impacts on some coastal users, and the Program will entail the irreversible commitment of coastal resources.

4. Alternatives Considered

A. Federal Alternatives

The Assistant Administrator could delay or deny approval of the New Jersey Coastal Management Program under the following conditions if:

1. The authorities necessary to implement the Coastal Management Program were not in place at the time of Program approval.

2. The Program does not adequately achieve the goals of the Coastal Zone Management Act as expressed by Congress in Section 303 of the Act.

3. The national interest in the siting of facilities in the coastal zone were not adequately considered.

B. State Alternatives

1. The State could withdraw its application and not seek Federal assistance.

2. The State could wait until new legislation is adopted before submitting a final EIS for federal approval.

3. The State could choose not to reinterpret the Waterfront Development Law to encompass an upland jurisdiction.

4. The State could designate DEP as the management agency for the coastal zone part of the Hackensack Meadowlands District.

5. A list of all Federal, State and Local Agencies and other parties from which comments were requested is listed in the Appendix H.

6. This DEIS was submitted to EPA on _____, 1980.

7. The Final Environmental Impact Statement (FEIS) will be sent during the thirty-day review period only to persons commenting on this DEIS and persons who specifically request it.

DESIGNATION: Draft Environmental Impact Statement

TITLE: Proposed Federal Approval of the New Jersey Coastal Management Program

ABSTRACT: The State of New Jersey has submitted its Coastal Management Program to the Office of Coastal Zone Management for approval. Approval would permit implementation of the proposed Program, allow program administration grants to be awarded to the State, and require that federal actions be consistent with the Program. This impact statement includes a copy of the Program (Part II) which is a comprehensive management program for land and water use activities. It consists of numerous policies on diverse management issues which are enforced by various state laws, discusses areas of special interest to the State, 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 some 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 considerations and increase public awareness of 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.

Alternatives include delaying or denying approval if certain requirements of the Coastal Zone Management Act have not been met, or the State could modify parts of the Program or withdraw or delay their application for Federal approval.

APPLICANT: New Jersey Department of Environmental Protection, Division of Coastal Resources, Bureau of Coastal Planning and Development

LEAD AGENCY: U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmopsheric Administration
Office of Coastal Zone Management

CONTACT: Mr. David R. Duncan
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3300 Whitehaven Road, N.W.
Washington, D.C. 20235 (Tele. 202/634-4126)

COMMENTS: Comment period on this statement ends July 7, 1980

PROPOSED NEW JERSEY COASTAL MANAGEMENT PROGRAM

AND

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Commissioner's Letter
Note to Reader
Table of Contents

PAGE

PART I - SUMMARY

Program Summary 1
Changes Program Will Make 6
Major Issues, Opportunities, and Areas of Conflict 7
Major Conclusions 10

PART II - DESCRIPTION OF THE PROPOSED NEW JERSEY COASTAL MANAGEMENT PROGRAM

Chapter One: INTRODUCTION 15

Chapter Two: BOUNDARY 17

Introduction and Summary
Inland Boundary
Seaward and Interstate Boundary

Chapter Three: MANAGEMENT SYSTEM 21

Introduction and Summary 22
Administrative Framework - Department of Environmental Protection 23
Principal Implementation Programs 29

Introduction
Waterfront Development Law
Coastal Area Facility Review Act
Wetlands Act
Tidelands Management
Hackensack Meadowlands Development Commission
Department of Energy
Green Acres Funding
Shore Protection
Federal Coastal Program Funding

Supplementary Programs in DEP 44

Water Quality Program

NPDES Permits
Areawide Water Quality Management (208) Plans
Wastewater Treatment Facilities: Regulation and Funding

TABLE OF CONTENTS - Cont.

	PAGE
Stream Encroachment and Flood Hazards	
Wild and Scenic Rivers	
Delaware and Raritan Canal State Park	
Regulation of State Owned Lands	
Air Quality Regulation	
Solid Waste	
Harbor Clean-Up	
Other State Agencies	55
Department of Agriculture	
Department of Community Affairs	
Department of Labor and Industry	
Department of Transportation	
County Land Use Authority	57
Municipal Land Use Authority	57
Regional Land Use Authority	58
Delaware River Area	
Northern Waterfront Area	
Federal Agency Authority	61
Public Participation	62
Conflict Resolution - Appeals	63
Chapter Four: COASTAL RESOURCE AND DEVELOPMENT POLICIES	65
Note to Reader	
SUBCHAPTER 1 - Introduction	
SUBCHAPTER 2 - Location Policies	
SUBCHAPTER 3 - Special Areas	
SUBCHAPTER 4 - General Water Areas	
SUBCHAPTER 5 - General Land Areas	
SUBCHAPTER 6 - General Location Policies	
SUBCHAPTER 7 - Use Policies	
SUBCHAPTER 8 - Resource Policies	

TABLE OF CONTENTS - Cont.

	PAGE
Chapter Five: SPECIAL REQUIREMENTS OF THE FEDERAL COASTAL ZONE MANAGEMENT ACT	247
Introduction	247
Federal Consistency	248
National Interests	257
Regional Benefit Decisions	267
Geographic Areas of Particular Concern Hackensack Meadowlands Development Commission District	269
Areas for Preservation and Restoration	290
Energy Facility Planning Process	291
Shoreline Access and Protection Planning Process	298
Shoreline Erosion Mitigation Planning Process	307
Chapter Six: NEXT STEPS IN COASTAL MANAGEMENT IN NEW JERSEY	313
PART III - DESCRIPTION OF THE NEW JERSEY COASTAL ZONE - AFFECTED ENVIRONMENT	317
Introduction	317
Delineating the Proposed Boundary	317
Municipalities Within the Proposed Coastal Zone	321
Description and Visions of the Proposed Coastal Zone	326
Northern Waterfront Area	
Bay and Ocean Shore Area	
Delaware River Area	
PART IV - ENVIRONMENTAL, ECONOMIC AND INSTITUTIONAL CONSEQUENCES OF FEDERAL APPROVAL	337
Introduction	337
Direct Effects - Environmental Consequences	337
Environmental Consequences	
Economic Consequences	
Institutional Consequences	
Possible Conflicts Between Coastal Program and the Plans or Policies of Local Governments, Regional and Insterstate Agencies	342
Introduction	
Local Governments	
Regional and Interstate Agencies	
PART V - ALTERNATIVES TO THE PROPOSED ACTION	363

TABLE OF CONTENTS - Cont.

		PAGE
APPENDICES		
A.	The Coastal Planning Process	367
B.	Excluded Federal Lands	375
C.	Memorandum of Understanding Between DEP and DOE	377
D.	Proposed Waterfront Development Rules and Attorney General's Opinion	383
E.	Legal Authorities	395
F.	Legal Commentary	411
G.	Secretarial Findings Index	419
H.	Recipients of Draft Environmental Impact Statement	421
I.	List of Preparers of New Jersey Proposed Coastal Management Program and Draft EIS	426
FIGURES		
1.	Proposed New Jersey Coastal Zone - Map	2
2.	Proposed New Jersey Coastal Zone - Boundary Sketch	19
3.	Department of Environmental Protection Organizational Chart	24
4.	Division of Coastal Resources Organizational Chart	25
5.	Jurisdiction of Proposed Rule for Waterfront Development Law - Concept Sketch and Sample Map	31
6.	Wetlands and Waterfront (Riparian) Development Permit Application Processes	33
7.	CAFRA Inland Boundary	34
8.	CAFRA Permit Application Process	36
9.	Bay and Ocean Shore Area Coastal Permit Jurisdiction	38
10.	Tidelands Application Process	39
11.	Delaware and Raritan Canal State Park Overlap with Proposed Coastal Zone	50
12.	Overlap Between Delaware River Basin Commission Jurisdiction and Proposed Coastal Zone	59
13.	Special Water's Edge Types - Mainland	99
14.	Special Water's Edge Types - Barrier Island	100

TABLE OF CONTENTS - Cont.

		PAGE
15.	Existing Lagoon Edge	102
16.	Beach and Dune System	104
17.	Coastal Bluffs	118
18.	Intermittent Stream Corridor	120
19.	Pinelands Jurisdictions	131
20.	HMDC Location and Boundary	134
21.	Water Area Policy Summary Table	136
22.	Water Body Types	137
23.	Growth Regions of the Proposed Coastal Zone	159
24.	Infill Diagram	164
25.	OCS Oil and Gas Leasing Areas	195
26.	Pine Barrens Exclusion Area	200
27.	Flood Hazard Areas	241
28.	Geographic Areas of Particular Concern	270
29.	Higbee Beach GAPC	272
30.	HMDC Location and Boundary (Same as Figure 20)	276
31.	HMDC Approval Process for Subdivisions Outside of SPA	279
32.	HMDC Approval Process for SPA and Planned Unit Developments	280
33.	HMDC Zoning Map	283
34.	HMDC Land Use, Present and Projected	285
35.	HMDC Wetland Biozones	286
36.	Energy Facilities and their Major Impacts	292
37.	Proposed New Jersey Coastal Zone (Same as Figure 1)	319
38.	Municipal Government Policies	343
39.	Potential Regional Government Conflicts	361
40.	Major Excluded Federal Lands	376
41.	Jurisdiction of Proposed Rules for Waterfront Development Law - Sketch and Sample Map (Same as Figure 5)	384

PART I

SUMMARY

PART I - SUMMARY

Program Summary
Program History
Changes Program Will Make
  Outside of the Bay and Ocean Shore Segment
  In the Bay and Ocean Shore Segment
Integration of the Two Segments
Major Issues and Opportunities
Major Conclusions - Basic Coastal Policies

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Program Summary

The Proposed New Jersey Coastal Management Program has been prepared to determine and describe New Jersey's strategy to manage the future protection and development of the coast. The State of New Jersey is seeking approval of the Program by the U. S. Department of Commerce to obtain the benefits of the federal Coastal Zone Management Act, which will aid State efforts to manage the often conflicting pressures facing the coast.

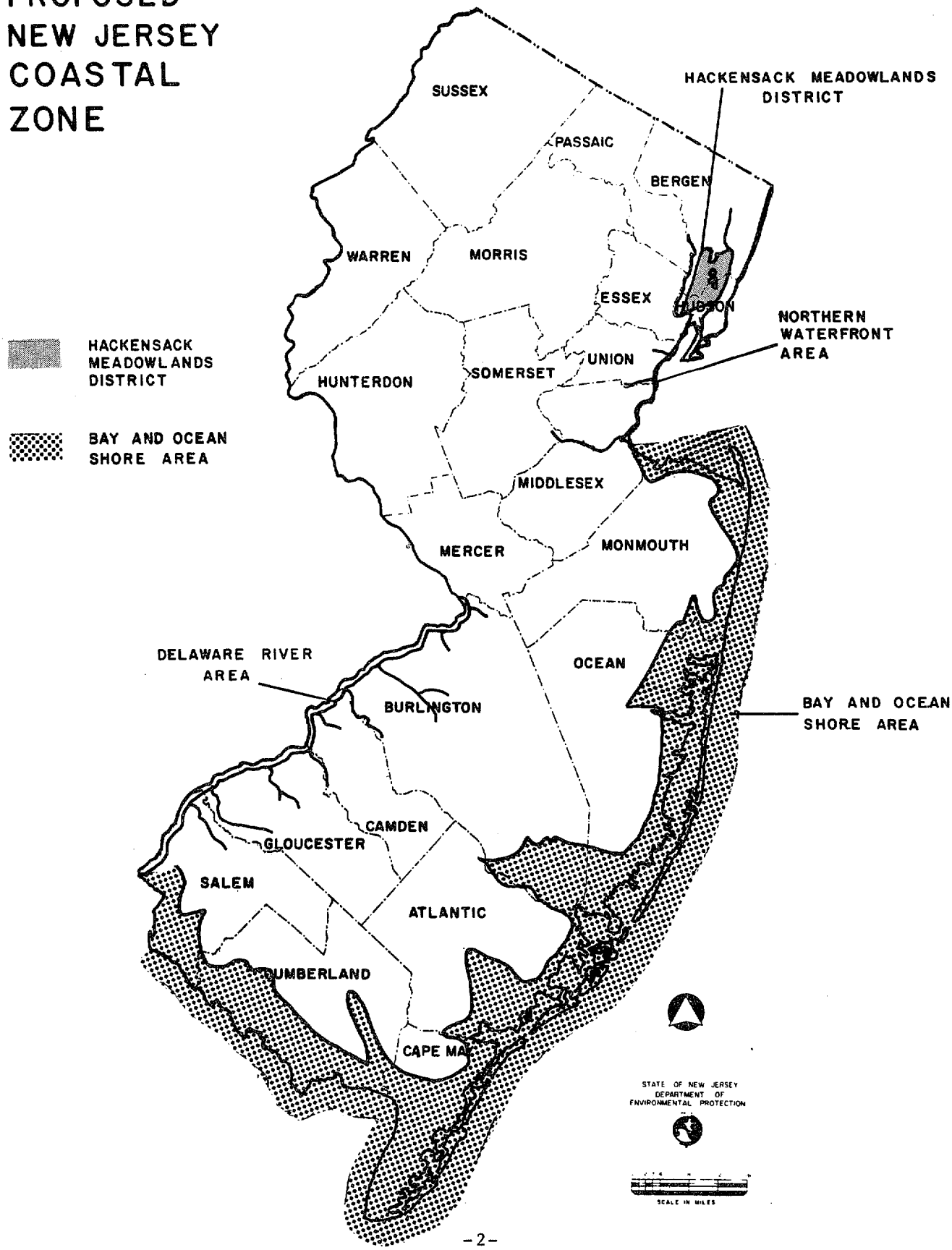
This document serves as a combined Proposed Coastal Management Program and as a Draft Environmental Impact Statement, because federal approval of a state coastal management program is considered a "major action" requiring an environmental impact statement under the National Environmental Policy Act (NEPA). The New Jersey Department of Environmental Protection, Division of Coastal Resources (NJDEP-DCR) is preparing the Coastal Management Program in part with funding provided by the National Oceanic and Atmospheric Administration, Office of Coastal Zone Management (NOAA-OCZM).

New Jersey, along with other coastal states, is using the federal Coastal Zone Management Act of 1972, as amended, to prepare a program intended to promote the wise use of its coastal areas. The Governor has assigned this responsibility to the New Jersey Department of Environmental Protection (DEP). The New Jersey program is being developed in two parts. The first part, called the Bay and Ocean Shore Segment, begins at the Cheesequake Creek in Middlesex County, and includes the area south of Sandy Hook to the tip of Cape May and then north along the Delaware Bay to near the Delaware Memorial Bridge. The Coastal Management Program for this area received federal approval on September 29, 1978.

This Proposed Coastal Management Program and Draft Environmental Impact Statement addresses New Jersey's entire coastal zone. It integrates the Coastal Management Program approved for New Jersey's Bay and Ocean Shore Segment by NOAA, with proposals for New Jersey's other tidally influenced waterfront areas in the northeastern part of the State along the Hudson River and related waters, and in the Hackensack Meadowlands, and in the southwestern part of the State along the Delaware River and its tributaries. These areas have been referred to as the "Developed Coast", a term which does not fully connote their diversity. While the coastal management program is designed to recognize regional as well as site specific differences, this document will avoid use of the phrase "Developed Coast", referring instead to the Bay and Ocean Shore area, "Delaware River Area", "Northern Waterfront Area", and "Hackensack Meadowlands", the specific counties, municipalities or water bodies of concern, or to "the coastal areas outside of the Bay and Ocean Shore Segment" (See Figure 1).

Figure I

PROPOSED NEW JERSEY COASTAL ZONE



This document defines and explains the Coastal Resource and Development Policies and the management system the New Jersey Department of Environmental Protection, the New Jersey Department of Energy (NJDOE), and the Hackensack Meadowlands Development Commission (HMDC) will use in managing activities in this Coastal Program. The Coastal Policies are divided into three groups: (1) Location Policies evaluate specific types of coastal locations, such as wetlands and prime farm land; (2) Use Policies are directed at different uses of the coastal zone, such as housing and energy facility development; and (3) Resource Policies focus on controlling the effects of development, such as water runoff and soil erosion, and on the protection of natural and cultural resources. The use of these three groups of policies to evaluate a proposed development is termed use of the Coastal Location Acceptability Method (CLAM).

The Coastal Management Program will be implemented through existing laws and agencies. The principal legal authority will be the coordinated use of the Coastal Area Facility Review Act (CAFRA), Wetlands, and Waterfront Development permit programs, shore protection program, tidelands management program, the regulatory activities of the Department of Energy and the Hackensack Meadowlands Development Commission, and the funding programs available under the federal Coastal Zone Management Act and through the New Jersey Green Acres Administration.

Program History

New Jersey's interest in its tidal waters precedes the American Revolution, for under the public trust doctrine of English common law, tidal waters and the lands thereunder belonged to the sovereign for the common use of all the people. With the Revolution, the royal rights to the State's tidelands became vested in the people of New Jersey. In 1821, the State Supreme Court in Arnold v. Mundy (6 N.J.L. 1) articulated the State's right to convey, regulate, improve and secure the tidelands for the common benefit of every individual citizen, but also determined that neither the State nor the purchaser or licensee of tidelands could impair the public's common rights of fishing and navigation in tidal waters. In 1869, the General Riparian Act was passed setting forth the procedure by which an administrative agency, then the Riparian Commissioners, could alienate State-owned tidelands. Subsequent State Supreme Court decisions have declared that because tidal lands are held in public trust, the State must consider the broad public interest and must receive adequate compensation for these lands.

In 1914, the State Legislature showed its first interest in regulating the land areas along tidal waters when it passed the Waterfront Development Law. The Law requires that prospective developers obtain State agency approval for "all plans for the development of any water-front upon any navigable water or stream of this State or bounding thereon ..." (N.J.S.A. 12:5-3).

The next major law affecting the State's coastal area was the Hackensack Meadowlands Reclamation and Development Act passed 55 years later in 1969. To ensure the orderly development of the Meadowlands District, the law created the Hackensack Meadowlands Development Commission, provided it with authority to regulate all forms of development within the District, and instructed it to develop a master plan for the District.

Concern about the environment of the State's coastal zone was reflected in the Wetlands Act of 1970. The Wetlands Act delegated authority to the newly created Department of Environmental Protection to delineate and regulate development in all coastal wetlands of the State from the Raritan River Basin southward.

The next major legislative advance in coastal zone management occurred in 1973 when the State passed the Coastal Area Facility Review Act (CAFRA) giving DEP authority to regulate major development in the Bay and Ocean Shore Segment of the coastal zone to preserve environmentally sensitive sites and ensure a rational pattern of development, and also requiring the Department to prepare a strategy for the management area by September, 1977.

In 1972, the U.S. Congress passed the Coastal Zone Management Act, declaring a national interest in the effective management, beneficial use, protection and development of the coastal zone, and encouraging and assisting the states to develop and implement management programs to achieve wise use of the land and water resources of the coastal zone. In response to this federal initiative, the State has been working since 1974 to prepare and obtain federal approval for a statewide coastal management program.

Because DEP, under CAFRA, had already prepared a coastal management strategy for the Bay and Ocean Shore area in 1977, DEP elected to seek federal approval of this segment first, and to then complete the boundary, policy and management system suitable for the remainder of the State's coastal zone. Between 1974 and 1978, the Department collected data and viewpoints, and met with interested groups throughout the State, which provided a foundation for the coastal management program for the segment and for the rest of the State. One end result was a comprehensive set of Coastal Resource and Development Policies to be used by the Department to ensure consistent and predictable permit decision-making in the coastal zone. These were adopted as Departmental rules effective September 28, 1978 and the Coastal Management Program for the Bay and Ocean Shore Segment received federal approval the next day.

The first step toward continuing the coastal management program into the more developed portions of the State was publication of Options for New Jersey's Developed Coast in March 1979. In the report, DEP candidly discussed the opportunities and choices available to New Jersey under the federal Coastal Zone Management Act, with a particular emphasis on the state's more developed coastal areas. This report served as a basis for public comment and discussion in the Spring and early Summer of 1979.

Publication of this Proposed New Jersey Coastal Management Program and Draft EIS is the second step. The third step is the public review and comment on it and on the Options report. DEP staff have already met with, and received comments from many interested public agencies and interest groups. Now, the Department will continue to meet with residents and people representing federal, state, county and municipal elected representatives and agencies, regional planning groups, and interest groups with environmental, civic, residential, industrial development, and other concerns to discuss this document. In addition, NJDEP and NOAA-OCZM will jointly hold formal public hearings on the State's proposed coastal management program (see back cover for dates and places of hearings).

NJ DEP and NOAA-OCZM will then use the public comments to refine and, where necessary, rewrite the State's proposed coastal management program. This is the fourth and final step in the coastal program completion process. The product of this effort will be a final environmental impact statement. DEP will then ask the Governor to submit the final coastal program to NOAA-OCZM for federal approval. DEP expects to seek this federal approval in August 1980.

Changes the Program Will Make

Federal approval of the New Jersey Coastal Management Program will not cause any dramatic immediate effects. Rather, the changes that will occur stem from the beginning of concerted coastal planning in New Jersey in the early 1970's, and will be realized gradually as the results of that planning are accepted and applied. A description of the proposed coastal zone as it is today and as it will become through implementation of a Coastal Management Program may be found in Part III. Federal approval is a major step toward the acceptance of the state's coastal planning activities which will help accelerate those changes which have begun in recent years.

Three general areas of change are being produced by the coastal program. In each case, these changes have already been brought about in the Bay and Ocean Shore Segment of the coast and will be realized in the remainder of the coastal zone with implementation of a Coastal Management Program. The first change caused by the proposed coastal management program is improved procedures for coastal land and water use decision-making. The adoption of the Coastal Resource and Development Policies as administrative rules will result in greater predictability of DEP coastal decisions. These rules substitute publicly debated and refined written policies for case-by-case decision making. The largely federally funded coastal planning effort has enabled New Jersey to employ a professional coastal planning staff for the past five years which has been able to incorporate new, as well as previously underused, information into State coastal policies. In some cases, the policies codify what had become administrative practice, while in others they will result in different decisions. The major change caused by these policies will be better use of New Jersey's coastal resources. The policies are summarized at the end of this Chapter and presented in full in Chapter Three.

In addition, DEP has adopted procedural rules for CAFRA and the Wetlands Act, established innovations such as the pre-application conference, and most recently reorganized the former Division of Marine Services into a Division of Coastal Resources, with a single permit office (instead of three) and increased monitoring and enforcement capabilities. These actions, coupled with the Legislature's enactment of the "90 Day Construction Permit Law", are creating a regulatory process in which developers and others can make their own plans on the basis of binding, and increasingly predictable, beneficial and efficient policies and procedures.

The second change caused by the coastal management program will be the availability of increased funding in New Jersey for coastal management. The State is currently receiving $800,000 a year to implement the coastal program in the Bay and Ocean Shore Segment. Assuming that NOAA-OCZM approves New Jersey's statewide program, the State will then become eligible to receive an estimated annual grant of $1.5 million to implement the coastal program, and an estimated $1.8 million in grants and $4 million in credit assistance under the federal Coastal Energy Impact

Program. Part of the program implementation grant New Jersey receives will be used to administer the State's coastal permit programs and to increase the Department's monitoring and enforcement of coastal activities and decisions. The funds will also be used for research projects and continued planning to refine the Coastal Resource and Development Policies as necessary and to focus on additional issues and information which could improve the state's coastal management program. In addition, DEP intends to use part of the grant to initiate or promote specific state, county or municipal projects which would help further the Coastal Resource and Development Policies described in Chapter Four. Thus, a municipality could apply to DEP for up to $25,000 to conduct a feasibility study for a specific project which would increase recreational, commercial, or industrial use of the waterfront in a manner consistent with the State's coastal policies. DEP expects that these small grants could also be used, in combination with funds available from other public and private programs, to stimulate larger projects. Federal approval of the statewide program will extend these benefits to 241 municipalities in seventeen counties.

Lastly, the coastal management program is bringing increased public focus on the coast. This is the change which makes other more specific changes possible. As people become more aware of the resources of the coast, and of the problems and opportunities the resources present, they become willing to devote more attention, support and money to various coastal issues. Issues such as public access to the waterfront, high rise construction, energy facility siting, and the use of urban waterfronts have all been subject to recent public discussion and debate. The Coastal Management Program has certainly not been the only cause of this concern, but it has sponsored, and will continue to promote, educational programs and publications, research, pilot projects, and revisions to state policies to increase public awareness and use of the coast.

Changes the Program will make Outside of the Bay and Ocean Shore Segment

Completion and federal approval of a Statewide Coastal Management Program will bring the remainder of the coast the same benefits of consistent and predictable coastal permit decision making, federal funding for planning and permitting, and increased public awareness to coastal issues that is now enjoyed in the Bay and Ocean Shore Segment.

In addition, completion of the management program beyond the Bay and Ocean Shore Segment will entail a defining of DEP's jurisdiction under the Waterfront Development Law. This law gives the Department authority to regulate construction in the navigable waters of the State and the adjacent "waterfront". The inland extent of the "waterfront" has never been defined formally in the sixty-five year history of this law. Based upon its legislative history, the Department (with the agreement to the Attorney General) has decided that a boundary ranging from 100 to 500 feet inland of mean high water is consistent with the intent of the legislation. This change would be accomplished through the adoption of an administrative rule. If adopted, this change will entrust DEP with project review responsibility over all upland development along a narrow strip of land along coastal waters in the Delaware River Area and Northern Waterfront Area. It would cause no change in the CAFRA area. This proposal is not an extension of the CAFRA boundary. It is discussed in detail in Part II, Chapter Two, and the text of the proposed rule is included in Appendix D.

In the Hackensack Meadowlands District, the Coastal Management Program will not replace the adopted Meadowlands District Master Plan and associated policy documents as the guiding policies for the District. What the program will do is bring about closer coordination between the HMDC and the Department, provide federal funds to improve planning and program implementation in the District, and bring greater public awareness to the coastal resources of the Meadowlands District.

Changes the Program will make in the Bay and Ocean Shore Segment

The Coastal Management Program for the Bay and Ocean Shore Segment is in place and has received federal approval. Continuation of the program into the remainder of the State's coastal zone will have little impact on the Bay and Ocean Shore Segment. The one change that will be made is that the Coastal Resource and Development Policies will be amended to make them applicable statewide. There will be some substantive changes in the policies affecting the Bay and Ocean Shore Segment. These will be changes suggested by staff planning activities, public comment and project review experience, which would be deemed advisable even if the Coastal Management Program were not being extended beyond the Segment. The changes, which are relatively minor, are stated explicity in Chapter Three, where proposed additions to the Coastal Resource and Development Policies are underlined and proposed deletions are bracketed.

Integration of the Two Segments

Upon federal approval of a statewide coastal management program there will no longer be any distinction between the Bay and Ocean Shore Segment and the remainder of the coastal zone, except that the Segment will be a wider zone in which CAFRA is the principal regulatory authority. The Coastal Resource and Development Policies will be a unified set of policies to guide Departmental policies throughout the statewide coastal zone. The policies will, however, recognize site specific and regional differences, and will be more restrictive of new development in land areas in certain "low growth" regions, all of which are in the segment, than in "moderate" or "high growth" regions, which are located both within and without the segment. In one area outside the segment, the Hackensack Meadowlands District, development will be regulated by the Hackensack Meadowlands Development Commission as lead agency, in accordance with its adopted Master Plan Zoning Regulations.

The overall result will be a comprehensive state-wide coastal management program in which environmentally sensitive "special areas" receive special protection wherever they are found, but in which the regulation of development in land areas will be most restrictive in the relatively pristine area near the shores of the Mullica River, Great Egg Harbor and Delaware Bay, and least restrictive in urban areas, and in the urban/suburban areas along the Delaware River, in northeastern New Jersey, and in the Hackensack Meadowlands District. Planning, funding and permitting will be carried out in a uniform statewide manner, except that different laws will be used to implement coastal objectives in different portions of the coastal zone.

Major Issues and Opportunities

This section of the Summary describes major coastal issues in New Jersey, including areas of controversy and issues to be resolved. The conflicting interests and viewpoints held by different groups on coastal issues demand that a

meaningful coastal program be controversial, while the complexity of the issues together with the dynamic quality of the coast itself suggest that no coastal program will ever be "complete" in the sense of having resolved all outstanding issues.

Sand dunes, power plants, surf clams, and the State's largest cities all share the resources of New Jersey's coast. Over the years numerous competing and often conflicting activities have converged on the Jersey Shore. New Jersey residents and tourists from all regions of the country spend their vacations at the Jersey Shore, which accounts for the vitality of New Jersey's second largest revenue-producing industry, tourism. Boaters, fishermen, divers, young and old enjoy the ocean breezes and salt air. Rapid development of the Shore area to accommodate those seeking relief from hot summers in the city, as well as those desiring permanent residence in a healthy environment, however, has created many competing pressures for the coast's fragile resources. New Jersey's wetlands were disappearing rapidly until the passage of the Wetlands Act in 1970. The barrier islands are overbuilt. The shoreline is eroding. Fish and shellfish resources are under intense pressure from recreational, commercial and industrial interests. The energy industry continues to examine the coast for potential sites for energy facilities. How can the New Jersey coast be maintained as a healthy ecosystem and guarded against the depletion of natural resources, while accommodating those resort-oriented and other activities and facilities which belong on the coast?

Away from the shore, the New Jersey coast is even more diverse and in demand for a wider range of activities. Despite, and in some cases because of, the more built up nature of the waterfront along the state's rivers and bays, the maintenance of existing natural areas and the restoration of spoiled areas is of great concern. In addition, the economic revitalization of New Jersey's cities is an increasingly recognized coastal issue, as urban waterfronts are seen to offer opportunities for rejuvenating and creating attractive residential and commercial areas. The more developed areas also support the state's ports and considerable industrial development which contribute to the state and national economy. A need to facilitate and in some cases expand these operations is likely, and will need to be considered in terms of the multiple coastal issues.

One of the major issues the Coastal Program addresses is water quality. The water bodies in the coastal area are crucial to the vitality of the coastal ecosystem and the protection of the health and safety of coastal and many inland residents. Proper management can alleviate problems of contaminated ground and surface water, stream turbidity and land and bank erosion. Good water quality is also essential to the fish and shellfishing industry, as well as to sport fishermen and boaters.

Recent storms and increased development have contributed to New Jersey's eroding shoreline. Beach restoration and preservation are essential for maintaining New Jersey's thriving tourist industry. Construction along the beach and waterfront areas can also limit public access to the shore. High-rises built in the past have obstructed some panoramic vistas, and some beachfront development has interfered with passive and active coastal recreation.

The coast does not just include pristine areas. Many of the once thriving urban waterfronts in New Jersey are now vacant land and unused, poorly maintained docks. Atlantic City and its region faces a unique set of development pressures from casino gambling and offshore oil and gas exploration. Camden, Jersey City, Newark and other cities face more traditional urban problems while possessing greatly underused waterfront areas.

Energy is one of the most complex issues facing the entire country. The Jersey coast currently has two operating nuclear plants and four more are under construction. Oil and gas exploration off New Jersey's coast is now a reality, and development is still a possibility. New Jersey will have to grapple with the new demands which will be placed on the coast's resources by these activities and associated facilities.

Public concern for prudent coastal management reflects a general concern for the quality of life. People want to live in a healthy environment, and provide a healthy environment for all the other living resources which are part of the coastal ecosystem. However, the public often expresses concern over the morass of regulations at all levels of government directed toward management of public goods and resources. Often, the applications, fees, permits and time delays appear to overshadow the intended benefits of a resource management program.

Despite the federal and state legislation for coastal management in New Jersey, the coastal program faces several constraints. New Jersey's coastal laws, while progressive by national standards, are not perfect. By relying primarily upon laws passed in 1914, 1968, 1970, 1973 and 1977, the state's coastal management program is faced with both regulatory duplication, so that development proposals may require more than one coastal permit, and regulatory gaps which prevent the State from fully protecting potentially valuable natural resources and developments. DEP has addressed some of those issues through the reorganization of the Division of Coastal Resources. The Coastal Management Program will provide a focus for additional steps in this direction. The result is that New Jersey has adequate legal authority for federal approval of its coastal management program but also faces challenges for future legislative and administrative reform.

In addition, the real property tax system has led to inter-municipal rivalry for ratable-producing property. Construction and development often take precedence over concern for open space in some financially hard pressed municipalities. New Jersey's strong tradition of home rule has meant that some municipalities make individual development decisions with little regard for regional impacts, posing severe constraints for the proper management of coastal regions. Also, the actions, or lack of action, of neighboring states can affect New Jersey's coast.

Coastal management in New Jersey is a delicate process, balancing fragile and sensitive environmental resources with development essential to the economy of the state. The public wants to work, live, and play, in the coastal zone, as well as to develop, restore and protect the coast. The agenda of coastal zone management ranges from dredge spoil disposal to rehabilitation of urban neighborhoods, from protection of surf clam beds to preservation of dunes. This requires a program that is dynamic and flexible to change, and, most important, responsive to the concerns of the citizenry, while being sufficiently specific to indicate to public officials and private interests the implications of the program.

This Coastal Management Program is a tool for making decisions, but it is not a panacea. It is important to understand that this document is not a detailed, rigid plan indicating only one activity which can or should take place on each site, block, or acre in the coastal zone. New Jersey has deliberately designed a program which accommodates the creativity, interests, and initiative of individual land owners, developers, citizens, and others, and recognizes the State's historic commitment to a strong role for local governments in land use decision-making. The Program, therefore, focuses on coastal resource management decisions with greater than local significance that the Legislature has entrusted to State agencies. The Coastal Program provides enforceable policies to form predictable and consistent decisions which will best manage New Jersey's coast.

Major Conclusions - Basic Coastal Policies

The major conclusions of the Proposed New Jersey Coastal Management Program are summarized by eight proposed basic coastal policies. These policies are recommended objectives for all public and private land and water use decision-making in the coastal zone, and they summarize the direction of the legally binding, specific Coastal Resource and Development Policies included in Chapter Four of the description of the New Jersey Proposed Coastal Management Program (Part II of this DEIS).

1. Protect and Enhance the Coastal Ecosystem

Note: As adopted for the Bay and Ocean Shore Segment, this basic policy said only "Protect the coastal ecosystem". The added words are intended to make the policy applicable to the entire coastal zone.

Although severely stressed by centuries of use as a waste disposal area, the estuarine complex in developed coastal areas is showing some signs of recovery under the influence of recent federal and state water quality legislation and resulting waste treatment facility construction. Portions of the Hackensack Meadowlands, for example, are witnessing a return of species absent for many years due to poor water quality. While the industrial and commercial nature of the waterfront together with high population densities preclude reattainment of the pristine conditions of the distant past, it is not unreasonable to expect that ambient standards set under the Federal Clean Air Act and Federal Clean Water Act can be attained, that certain natural areas can be restored, and that the urban waterfront can once again provide recreational and employment opportunities for area residents.

The coastal ecosystem is fragile and special, and is characterized by a combination of beaches and the ocean, tidal and inland wetlands, flood plains, estuarine areas, bays, streams and stream corridors, vegetation communities and wildlife habitats. These natural features make the area a desirable place to visit, which in turn fosters the state's tourist industry. The same features make the coastal region a productive area for agriculture and commercial and recreational fishing. If the ecosystem is not protected, not only will natural resources and processes be harmed, but the economy of the area and of the state will suffer.

2. Concentrate Rather than Disperse the Pattern of Coastal Residential, Commercial, Industrial, and Resort Development and Encourage the Preservation of Open Space

The special characteristics of the coast attract many different types of development to an area which is limited in size. The concentration of development is the most efficient way to use this limited space because it allows a large variety of activities to be located in the coastal zone while minimizing conflicts which could occur between activities such as industry and housing if they were located near each other. In addition, the concentration of development can provide large expanses of open space which can, in some areas, be more useful to the public than a similar amount of open space scattered among many small private parcels. The policy to concentrate development does not apply to nuclear generating stations and liquefied natural gas (LNG) facilities.

3. Employ a Method for Decision-Making Which Allows Each Coastal Location to be Evaluated in Terms of Both the Advantages and the Disadvantages It Offers for Development

Traditionally, land and water use planning has focused exclusively on environmental features which offer disadvantages for development or which should be preserved. Each location, however, can also be evaluated in terms of the advantages it offers for development. A site near existing roads, for example, could be developed with less coastal and environmental disturbance than a more isolated site. This policy insures that both types of factors will be considered in decision-making under the Coastal Management Program.

4. Protect the Health, Safety and Welfare of People who Reside, Work and Visit in the Coastal Zone

This basic policy is a reminder that people use the coast for different purposes and have different needs and expectations. The quality of human life improves if needed development is built in a manner which respects the natural and built environment.

5. Promote Public Access to the Waterfront Through Linear Walkways and At Least One Waterfront Park in Each Waterfront Municipality

Along much of the waterfront, particularly in developed areas, highways or underutilized private property prevent residents from being able to walk, fish or otherwise enjoy the shores of rivers and bays. In some locations, high-rise buildings immediately adjacent to the waterfront block visual access to the water. Discouraging new highways and high-rise buildings adjacent to the waterfront, providing pedestrian bridges over existing highways, publicly purchasing selected waterfront properties, and obtaining easements for public access over other properties can increase the value of the waterfront to the surrounding communities, by making possible linear walkways, bikeways and vita courses along the waterway.

The waterfront in much of the coastal zone does provide sites where urban and suburban residents can relax, walk, fish, or play, even in areas where swimming is not currently advisable. The waterfront offers views of boats and shorelines, fresh breezes and a sense of openness not otherwise available in most urban areas. Waterfront parks, by bringing people to the waterfront, also help raise public consciousness about water quality and waterfront use and development.

Waterfront parks do not have to be large or elaborate. The success of Liberty State Park in Jersey City has demonstrated that an attractive, green area by the water can attract many people. It has also proved that a park can be extremely beneficial in a location which many believed was unsuited to a park. Nevertheless, for some municipalities, a waterfront park may make little sense due to the lack of an appropriate site or too small a nearby population. The specific policies on recreation, therefore, will exempt such areas from the policy.

6. Maintain Active Port and Industrial Facilities, and Provide for Necessary Expansion in Adjacent Sites

The proposed New Jersey coastal zone includes thriving port and industrial facilities along both the Northern Waterfront and the Delaware River Areas. The continued vitality of these facilities is important to the state's economy and helps New Jersey contribute to several national interests.

7. Maintain and Upgrade Existing Energy Facilities, and Site Additional Energy Facilities Determined to be Needed by the N.J. Department of Energy (DOE) in a Manner Consistent with the Policies of this Coastal Management Program

The Northern Waterfront and Delaware River Areas of the proposed coastal zone contain many of the East Coast's energy facilities for crude oil refining, petrochemical manufacture and electricity generation. Crude oil refining and petrochemical manufacture serve national needs. Electricity is generated for regional needs. Provided these facilities comply with federal air, water, toxic substance and other applicable regulations, the continued operation and needed expansion of existing petrochemical and oil refining facilities are expected to be acceptable under the New Jersey Coastal Management Program. Electric generating facilities must be in compliance with the same federal standards, and also must be determined to be needed by the N.J. Department of Energy.

The New Jersey Department of Energy (DOE) is responsible for determining what new energy facilities are needed in the State. DEP will use the specific policies of the coastal management program to ensure that the facilities determined to be necessary by NJDOE are located on sites where they can operate efficiently without threatening the health or welfare of area residents or natural resources.

8. Encourage Residential, Commercial, and Recreational Mixed-Use Redevelopment of the Developed Waterfront

Sections of abandoned and deteriorating waterfront property are suitable for residential, commercial or recreational reuse depending on their location. DEP will aid counties, municipalities, and developers in design of plans and programs to redevelop these lands to more beneficial uses.

The waterfront in or near urban areas can be creatively designed and used to accommodate diverse activities which might, at first glance, be considered infeasible or incompatible. Waterfront projects will be encouraged which include, for example, housing, public open space and commercial developments such as restaurants and stores.

Others have suggested combining industry and ports with recreation and education. If safely constructed, for example, a bike path could follow the outskirts of an industrial facility to a park, or a public area near a port could be designed to give people a view of the port in action, as the more familiar "nature interpretative trails" offer ecological understanding.

This Basic Policy is a recognition that developed waterfront areas in New Jersey, because of the views they offer and the large nearby population, provide unique opportunities for nontraditional, as well as traditional, forms of development and redevelopment.

PART II

DESCRIPTION OF THE PROPOSED NEW JERSEY COASTAL MANAGEMENT PROGRAM

Chapter 1: Introduction

Chapter 2: Boundary

Chapter 3: Management System

CHAPTER ONE - INTRODUCTION

This part of the draft environmental impact statement describes the Proposed New Jersey Coastal Management Program. This is the heart of the document and the focus of the other parts and of the appendices. Unlike some EIS's, it does not repeat all the information in Part I, but rather assumes the reader is somewhat familiar with this introductory material.

The Department of Environmental Protection (DEP) has prepared the Proposed New Jersey Coastal Management Program to protect the state's coastal resources while accommodating needed future development. The Program contains the statements of policy which will be followed by DEP in making coastal decisions and which will guide other public and private actions affecting the coast. The Coastal Management Program is also designed to enable New Jersey to meet the requirements, and thereby reap the benefits of the federal Coastal Zone Management Act. These include greater consistency between state and federal actions in the coastal zone, and the provision of federal funds for New Jersey's coastal management efforts.

DEP was given responsibilty for preparing and administering the State's coastal management program by the Governor. DEP's enabling legislation, the Coastal Area Facility Review Act (CAFRA), Wetlands Act, Waterfront Development Permit law, and tidelands and shore protection statutes provide a strong mandate and basis for direct State agency involvement in key decisions involving the coastal region. The Department of Energy Act and the Hackensack Meadowlands Reclamation and Development Act give some coastal responsibilities to other State agencies, and these are also included in the Coastal Management Program.

The Coastal Management Program also contains the standards DEP will use to determine the consistency of actions proposed in the coastal zone by federal, state, and local agencies. New Jersey's coastal policies will be used to determine the consistency with the approved program of federal activities, development projects, licenses, permits, and financial assistance to the State and local governments under Section 307 of the federal Coastal Zone Management Act. The Coastal Program will aid DEP when it is called upon to review federal domestic financial assistance applications under the A-95 Project Notification and Review Process, as well as Environmental Impact Statements prepared under the National Environmental Policy Act. From time to time, DEP is also likely to receive requests for advice or comments on the adequacy or appropriateness of plans and proposals by government agencies and private interests. The Coastal Policies provide a visible basis for offering an informed comment on the consistency of these plans and proposals.

State funding decisions that affect coastal resources will also be guided by the Coastal Program. In particular, several important State aid, and direct State financing programs administered by DEP involve decision-making in the coastal zone: (1) the Green Acres Open Space Acquisition and Outdoor Recreation program of grants to local governments and direct DEP efforts, (2) the Shore Protection program of matching grants to local governments, and (3) the pass through grants DEP will make to local governments with funds available under the federal Coastal Zone Management Act.

The strong direct State role does not mean that DEP will regulate every proposed use of coastal resources within the defined coastal zone. Local governments in the coastal zone will continue to be solely responsible for the considerable amount of land and water use decision-making in the coastal zone which has no regional impact, as defined by State law.

New Jersey's coastal management program has three interrelated, basic elements: first, a boundary defining the general geographic scope of the program; second, Coastal Resource and Development Policies defining the standards for making decisions on what activities may take place within the boundary; and third, a management system defining the types of decisions subject to the program, and the process by which those decisions will be made. The Coastal Management Program, a guide to decision-making, resembles a tripod. All three legs, or elements, must be firmly in place for the Program to stand and work. All three elements function together and must be read and understood together, especially because of New Jersey's direct state control approach.

For example, if read out of the context of the overall management program, the Coastal Resource and Development Policies could be applied to every land and water use decision in the coastal zone, from the location of a single gas station to a nuclear generating station. That is not the intent here. Rather, the Coastal Resource and Development Policies are to be applied as substantive standards for decision-making for only those selected coastal decisions defined in the management system, particularly CAFRA, Wetlands, and waterfront development permit applications. The Coastal Policies could, however, because of their comprehensive nature, be used to guide other decisions not strictly subject to the New Jersey Coastal Management Program. The heart of the program remains, however, the combination of boundary definition, policy statements, and decision-making processes that in concert spell out New Jersey's approach to managing its coastal resources.

This Part of the EIS is presented in six chapters. Chapter Two defines the boundary proposed for the coastal zone. Chapter Three describes the management system which will be used within the boundary to carry out the Coastal Resource and Development Policies. Chapter Four presents the definitions, policies and rationales for the Coastal Resource and Development Policies which describe what should and should not take place in the coastal zone.

Chapter Five addresses seven special requirements of the federal Coastal Zone Management Act: Federal Consistency, National Interests, Regional Benefit Decisions, Geographic Areas of Particular Concern, Areas for Preservation and Restoration, Shoreline Access and Protection Planning, Shoreline Erosion Mitigation Planning Process, and the Energy Facility Planning Process. These sections, for the most part, repeat information in the first four Chapters but in a format which directly addresses the specific federal requirements and which provides greater detail. The proposed inclusion of the Hackensack Meadowlands Development Commission District is discussed in detail in this Chapter at the end of the section on Geographic Areas of Particular Concern.

Finally, Chapter Six outlines the next steps in the coastal management process in New Jersey, including public review and comment on this draft coastal management program, preparation of a final program, and activities New Jersey plans to pursue once the program receives federal approval.

CHAPTER TWO - BOUNDARY

Summary
Inland Boundary
Seaward and Interstate Boundaries

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Summary

New Jersey's proposed coastal zone extends from the New York border south to Cape May Point and then north to Trenton. It encompasses the waters and waterfronts of the Hudson River and related water bodies south to the Raritan Bay, the Atlantic Ocean and some inland areas from Sandy Hook to Cape May, the Delaware Bay and some inland areas, and the waterfront of the Delaware River and related tributaries. This Chapter describes the proposed boundary, while Appendix B provides more detail and maps of the boundary, and the process for its delineation.

The proposed coastal zone encompasses areas in which the State, through the Department of Environmental Protection and the Hackensack Meadowlands Development Commission, has the authority to regulate land and water uses that have a significant impact on coastal waters. These authorities include the Coastal Area Facility Review Act (CAFRA), the Wetlands Act, the Waterfront Development Law, Tidelands statutes, and the Hackensack Meadowlands Reclamation and Development Act.

Inland Boundary

The inland boundary for the portion of the coast from Raritan Bay south to Cape May Point and then north along the Delaware Bay (consisting of parts of Middlesex, Monmouth, Ocean, Burlington, Atlantic, Cape May, Cumberland and Salem Counties), is defined as:

> the landward boundary of the Coastal Area as defined in the Coastal Area Facility Review Act (CAFRA, N.J.S.A. 13:19-4), or the upper boundary of coastal wetlands located landward of the CAFRA boundary along tidal water courses flowing through the CAFRA area, whichever is more landward, including State-owned tidelands.

In the more developed portions of the State (including portions of Salem, Gloucester, Camden, Burlington, Mercer, Middlesex, Somerset, Union, Hudson, Essex, Passaic and Bergen Counties), the coastal zone boundary is defined as:

> the landward boundary of the State's jurisdiction under the Waterfront Development Act (N.J.S.A 12:5-3)* or Wetlands Act (N.J.S.A. 13:9A-1), or the landward boundary of State-owned tidelands, whichever extends farthest inland.

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* The proposed definition of the inland jurisdictional boundary of the Waterfront Development Law is: the first public road, railroad right-of-way, or property line generally parallel to any navigable waterway, but in no case more than 500 feet or less than 100 feet inland from mean high water.

This boundary (discussed below in "Principal Program Authorities") ensures that the State will regulate at least the first 100 feet inland from all tidal waters. The State will consider all land within 500 feet of tidal water to be within this boundary unless demonstrated otherwise. This represents a substantial reduction from the coastal zone boundary DEP proposed in several publications between December 1976 and March 1979, which would have extended the coastal zone inland to the first road or railroad, regardless of its distance from the water (See Appendix B).

The boundary of the Hackensack Meadowlands region is defined as:

> the boundary of the area defined as the Hackensack Meadowlands District by the Hackensack Meadowlands Reclamation and Development Act. (N.J.S.A. 13:17-4)

A generalized map of the Statewide Coastal Zone Boundary is shown in Figure 1 in Part I of this document, and Figure 2 is a sketch of the boundary in different parts of the State.

The proposed boundary encompasses approximately 1,792 miles of tidal coastline, including 126 miles along the Atlantic Oceanfront from Sandy Hook to Cape May. It ranges in width from one hundred feet to twenty-four miles (near Batsto and the Mullica River, in Burlington County). The total land area of the Bay and Shore region is approximately 1,376 square miles or 17 percent of New Jersey's land area.

Research indicates that there has been a rising trend in the level of the ocean, relative to coastal land, along the northern East Coast of the United States. Hicks* data places the rise at about 8 inches between the 1890s and 1970. If this trend continues, tidal waters will penetrate further up the State's coastal rivers. Should this change become significant, the coastal zone boundary and the area under the jurisidiction of the Waterfront Development Law, will be redelineated accordingly.

Seaward and Interstate Boundaries

The seaward boundary of the coastal zone is the three nautical mile limit of the United States Territorial Sea, and the interstate boundaries of the States of New York and Delaware and the Commonwealth of Pennsylvania.

In most of Salem County, the Delaware-New Jersey State boundary is the mean low water line on the eastern (New Jersey) shore of the Delaware River. The New Jersey and Delaware Coastal Management agencies have discussed this issue and have concluded that any New Jersey project extending beyond mean low water must obtain coastal permits from both states. New Jersey and Delaware, therefore, will coordinate reviews of any proposed development that would span the interstate boundary to ensure that no development is constructed unless it would be consistent with both state coastal management programs.

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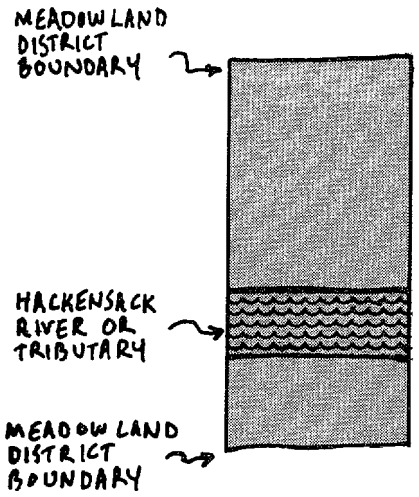
* S.D. Hicks, "As the Oceans Rise", National Ocean Survey, NOAA, Vol. 2, No. 2, pp. 22-24, 1972.

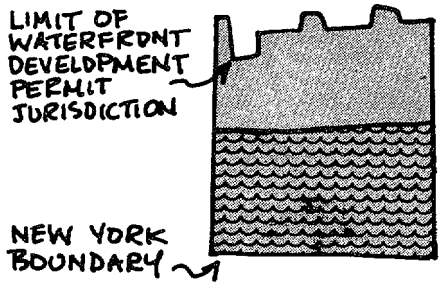
Figure 2

PROPOSED NEW JERSEY COASTAL ZONE-BOUNDARY SKETCH

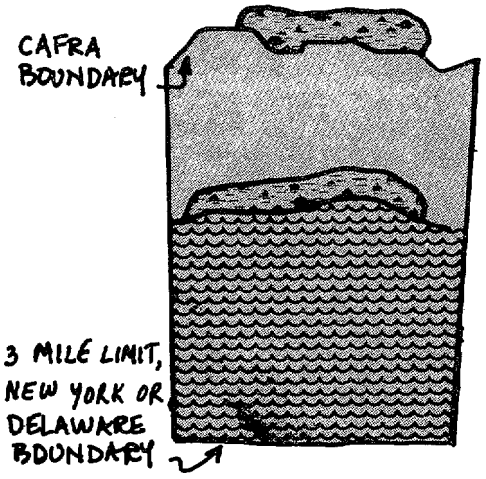
1 HACKENSACK MEADOWLANDS GENERALIZED CZ BOUNDARY



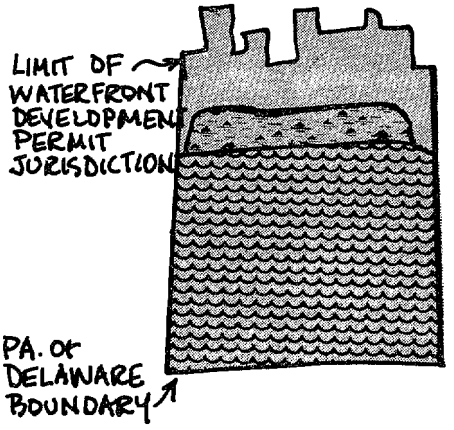
2 NORTHERN WATERFRONT GENERALIZED CZ BOUNDARY



3 BAY & OCEAN SHORE SEGMENT GENERALIZED CZ BOUNDARY



4 DELAWARE RIVER AREA GENERALIZED CZ BOUNDARY



REGULATED WETLANDS

TIDAL WATERS

PROPOSED COASTAL ZONE

CHAPTER THREE - MANAGEMENT SYSTEM

MANAGEMENT SYSTEM
- Introduction and Summary
- Administrative Framework-Department of Environmental Protection
- Principal Program Authorities
  - Introduction
  - Waterfront Development Law
  - Coastal Area Facility Review Act
  - Wetlands Act
  - Tidelands Management
  - Hackensack Meadowlands Development Commission
  - Department of Energy
  - Green Acres Funding
  - Shore Protection
  - Coastal Program Funding
- Supplementary Program Authorities
  - Water Quality Program
    - NPDES Permits
    - Areawide Water Quality Management (208) Plans
    - Wastewater Treatment Facilities: Regulation and Funding
  - Stream Encroachments and Flood Hazards
  - Wild and Scenic Rivers
  - Delaware and Raritan Canal State Park
  - Pinelands Protection
  - Regulation of State Owned Land
  - Air Quality Regulation
  - Solid Waste
  - Harbor Clean-Up
- Other State Agencies
  - Department of Agriculture
  - Department of Community Affairs
  - Department of Labor and Industry
  - Department of Transportation
- County and Municipal Land Use Authority
  - County Authority
  - Municipal Authority
  - Regional Land Use Authority
    - Delaware River Area
    - Hackensack Waterfront Area
    - Northern Waterfront Area
  - Federal Agency Authority
  - Public Participation
  - Conflict Resolution

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MANAGEMENT SYSTEM

Introduction and Summary

In passing the federal Coastal Zone Management Act of 1972 (CZMA), Congress recognized both the importance of the coastal zone and the need to strengthen existing public controls over resources and development in order to protect it. Section 302(h) of the Act states that:

> The key to more effective protection and use of the land and water resources of the coastal zone is to encourage the states to exercise their full authority over the lands and waters in the coastal zone by assisting the states ... in developing land and water use programs for the coastal zone, including ... methods and processes for dealing with land and water use decisions of more than local significance.

This section of the Proposed New Jersey Coastal Management Program describes the methods and processes that New Jersey has developed to guide decision-making in the coastal zone.

Section 305 of the CZMA requires that participating coastal states demonstrate one of three methods of exercising control over those land and water uses in the coastal zone which have a direct and significant impact on coastal waters. New Jersey's approach corresponds to management technique "B" -- Direct State regulation and planning -- as described in Section 306(e)(1) of the CZMA. This is the only feasible approach under New Jersey's existing legislative framework that is in compliance with the requirements of the CZMA. It requires no new legislation.

This Chapter describes the administrative framework and program structure under which New Jersey proposes to exercise these controls. It contains a description of the three state agencies involved in significant coastal decision-making: the Department of Environmental Protection, the Hackensack Meadowlands Development Commission and the Department of Energy. It describes the principal legal authorities and programs to be used in implementing the policies found in Chapter Three, including the Coastal Area Facility Review Act (CAFRA), the Wetlands Act, the Waterfront Development Law, the authority to grant title to, or license the use of State owned tidelands (sometimes referred to as riparian lands), and the Hackensack Meadowlands Reclamation and Development Act. It also describes certain capital spending programs such as the Green Acres Program, the Shore Protection Program and the coastal management funds available under the CZMA.

Also described are other state regulatory programs, largely administered by DEP, which are not focused as exclusively on the coastal zone, but which do affect the coast and supplement the State's ability to implement specific Coastal Resource and Development Policies or categories of policies. These are described as "supplementary program authorities".

The last sections of the Chapter analyze the manner in which the programs of other state, county, municipal, regional and federal agencies function with the Coastal Management Program.

ADMINISTRATIVE FRAMEWORK - THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Created by the Legislature in 1970, the Department of Environmental Protection (DEP) was given broad authority to "formulate comprehensive policies for the conservation of the natural resources of the State..." (N.J.S.A. 13:1D-9). Specific authority for preparation of the coastal program was delegated by the Governor when he designated DEP as New Jersey's coastal planning agency under Section 305 of the federal Coastal Zone Management Act. DEP also serves as New Jersey's lead agency to administer the Federally approved program, under Section 306 of the Act.

The Department is divided into nine operating units: the Division of Coastal Resources (prior to July 1, 1979, the Division of Marine Services); Division of Water Resources; Division of Environmental Quality (which includes the Bureau of Air Pollution Control and the Solid Waste Administration); Division of Fish, Game and Wildlife; Division of Parks and Forestry; the Green Acres Administration; the Division of Fiscal and Support Services; Division of Employee Management and Development; and the Commissioner's Office. The Bureaus of Coastal Project Review, Coastal Planning and Development, Coastal Enforcement and Field Services, Tidelands, Coastal Engineering, and Marine Law Enforcement are all located in the Division of Coastal Resources (See Figure 3).

The core of the Coastal Management Program's management system is the adoption by DEP of the Coastal Resource and Development Policies as administrative rules. This means that the actions of every Division in the Department will be legally bound to be consistent with the Coastal Policies to the extent permitted by the enabling legislation of each program.

DEP's regulatory authority in the coastal zone is principally based on the Waterfront Development Law, the Coastal Area Facility Review Act, the Wetlands Act, and the Tidelands statutes. These laws apply to virtually all aspects of major development within this zone. Their administration will be unchanged under the coastal management program with the exception of the Waterfront Development permit program's redefined jurisdiction.

Division of Coastal Resources - On July 1, 1979, the former Division of Marine Services was reorganized and continued as the Division of Coastal Resources. The reorganization's principal features are the consolidation of three different permit offices (the former Office of Coastal Zone Management's CAFRA Permit Section, the Office of Riparian Lands Management, and the Office of Wetlands Management) into one Bureau of Coastal Project Review, the placement into one bureau of all coastal planning and development activities, and the creation of a Bureau of Coastal Enforcement and Field Services. This reorganization became permanent in 1980 when the Legislature amended the relevant portions of DEP's enabling legislation (N.J.S.A. 13:1D-1 et seq.).

The Division's new organization is described in chart form in Figure 4, and is summarized as follows:

- The Bureau of Coastal Project Review administers the CAFRA, Wetlands, and Waterfront Development Permit Programs, in conformance with the respective enabling legislation and with the Rules on Coastal Resource and Development Policies. The Bureau assumes the permit functions of the former Offices of Coastal Zone Management, Riparian Lands Management, and Wetlands Management.

DEPARTMENT OF ENVIRONMENTAL PROTECTION
ORGANIZATIONAL CHART
JANUARY, 1980

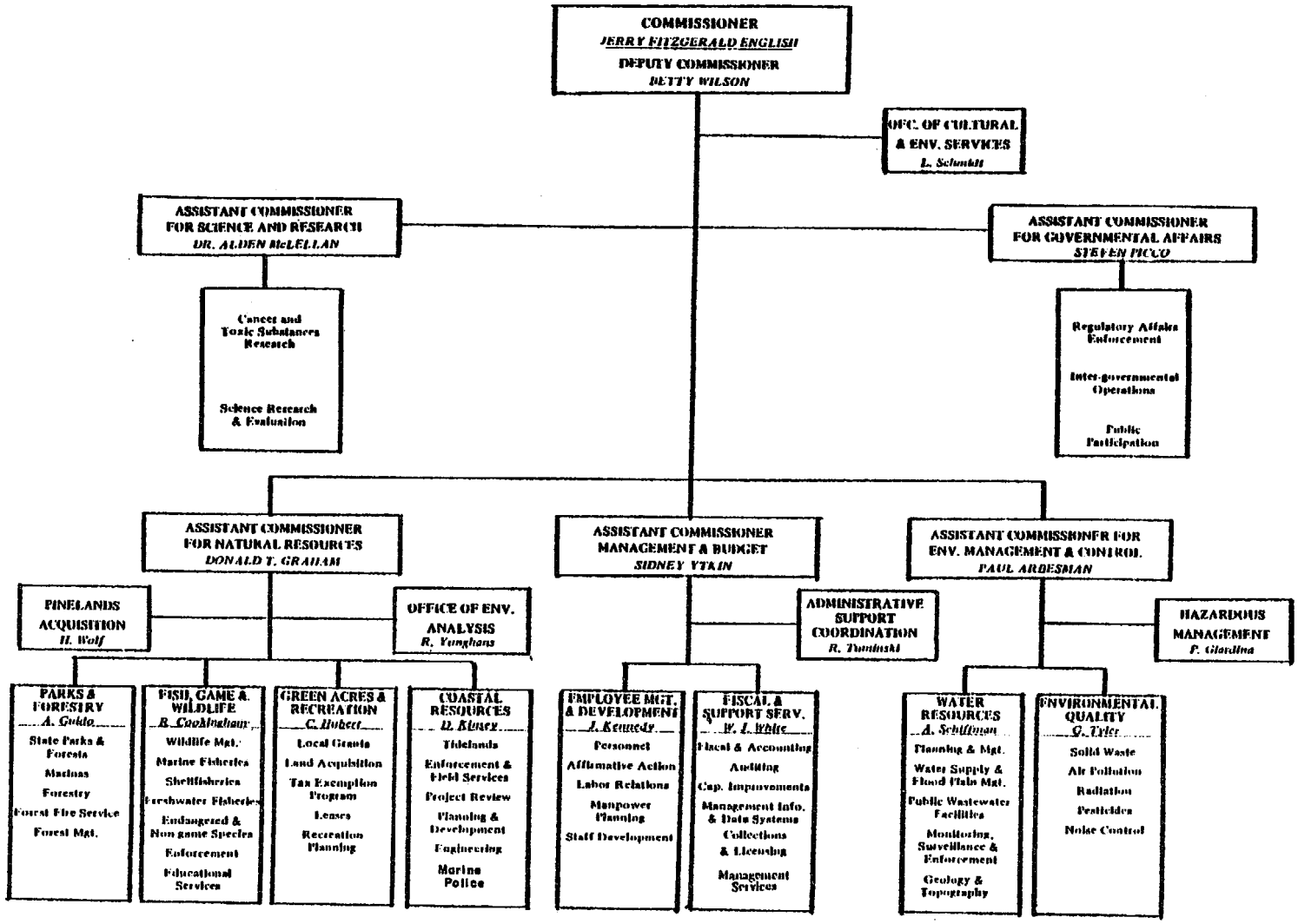
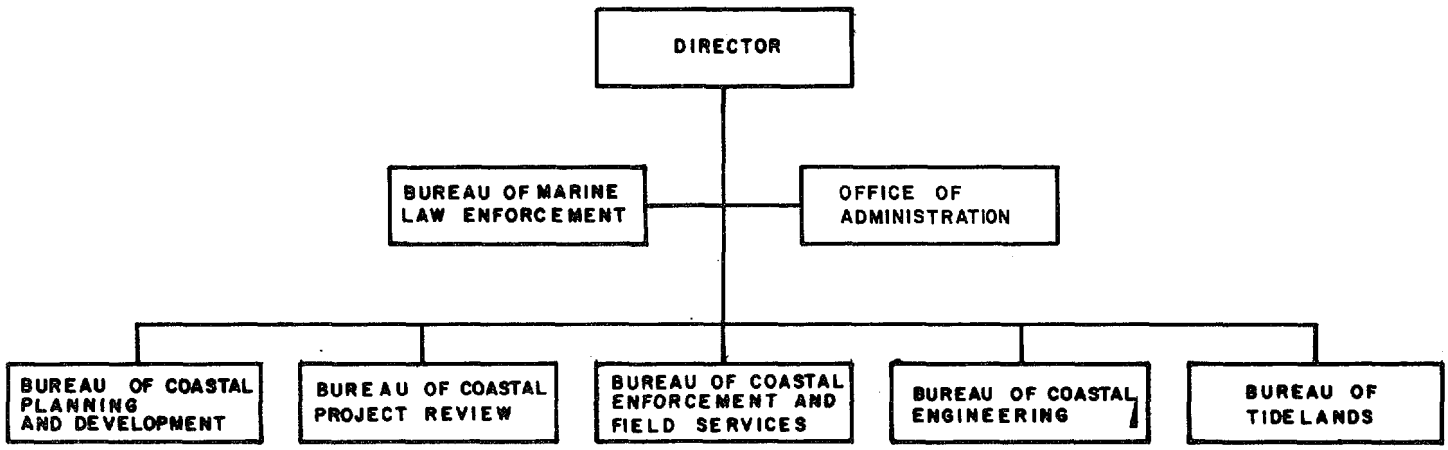


Figure 3

Figure 4

DIVISION OF COASTAL RESOURCES ORGANIZATIONAL CHART APRIL, 1980



- The Bureau of Coastal Planning and Development provides a single planning agency to assist in the development and refinement of a program to guide and regulate development and resource protection in the coastal zone. This office assumes the planning functions of the former Office of Coastal Zone Management.

- The Bureau of Tidelands serves as staff to the Tidelands Resource Council and aids in the protection and management of State-owned tidelands through the review of applications for conveyances for grants, leases and licenses. The Bureau assumes the functions of the former Office of Riparian Lands Management with respect to the description and valuation of State-owned tidelands.

- The Bureau of Coastal Enforcement and Field Services provides an interdisciplinary inspection team to support the functions of the Bureaus of Tidelands and Coastal Project Review. The Bureau assumes the inspection and enforcement activities of the former Offices of Coastal Zone Management, Wetlands Mangement and Riparian Lands Management.

- The Bureau of Coastal Engineering administers the State's shore protection and waterway maintenance programs. It assumes the functions of the former Office of Shore Protection.

Division of Water Resources - The Division of Water Resources is responsible for water quality planning and maintenance, water supply, and flood plain management. The Division is the designated water quality planning agency under Section 208 of the Federal Clean Water Act and, under the New Jersey Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.), has the authority to administer the National Pollution Discharge Elimination System (NPDES) permits once EPA delegates this responsibility to DEP. The standards set by the Division under the Clean Water Act are incorporated into the Coastal Policies, as required by Section 307(f) of the federal Coastal Zone Management Act. The Division also has the authority to regulate the building or alteration of structures within stream areas and to regulate development and land use in designated floodways under the Flood Hazard Areas Control Act, (N.J.S.A. 58:16A-50 et seq.).

Within the seventeen New Jersey counties with coastal waters, area-wide water quality planning (also known as 208) is being conducted by four county planning boards, by the Delaware Valley Regional Planning Commission in four counties, and by the Division of Water Resources in the remaining nine counties. The plans are being completed between 1979 and 1980 in different parts of the state. The water quality planning program seeks institutional and technical alternatives to control and abate water pollution. The key policies of the program are to protect the sources of potable water supply, control toxic and hazardous substances, control pollution from areawide sources, and protect environmentally sensitive areas. Water quality planning programs may utilize and refine the Coastal Location Acceptability Method for activities which need not be regulated for coastal management program approval (i.e. activities not having a direct and significant impact on coastal waters), and in parts of the state outside the coastal zone. The method could, for example, be modified and used in making land and water use decisions on and near non-tidal portions of the Delaware River and in other areas of the State where a decision-making method is needed to protect water quality.

The Division of Water Resources is also responsible for supervising the development of the State Water Supply Master Plan. The plan, financed by the State Water Conservation Bond Fund, will assess near and long-term water needs, evaluate various alternatives for meeting those needs, and provide a framework for the future planning and management of the State's water supplies. Specific recommendations will be made including those for near-term water supply development projects, conservation and management policies, interconnection programs, and drought and emergency response plans. The plan is expected to be completed by Spring, 1980. The Division of Coastal Resources will continue to work with the Division of Water Resources to assure consistency between the Water Supply Master Plan and the Coastal Policies.

Division of Environmental Quality - The Division of Environmental Quality is responsible for air quality planning and monitoring and is the agency designated to administer the federal Clean Air Act in New Jersey. The Division also is responsible for the State's radiation, noise, pesticide control and solid waste management programs. Under the requirements of the Clean Air Act, the Bureau of Air Pollution Control in the Division is developing programs to attain National Ambient Air Quality Standards. The attainment of standards for photochemical oxidants for the entire State, for carbon monoxide in central business districts, and for particulates in Camden and Jersey City, and the maintenance of clean air levels throughout the state are the major problems to be addressed.

The Division of Environmental Quality is also responsible for the development of a statewide plan to maximize use of resource recovery and minimize the adverse environmental impacts of solid waste. This was the responsibility of the Solid Waste Administration until August, 1979 when it was abolished and its functions transferred. The state has been divided into twenty-two districts (21 counties and the Hackensack Meadowlands Development Commission District). Each district is responsible for developing a ten-year plan to meet the solid waste needs for each municipality within the region. The SWA is responsible for coordinating the district planning through the development of a statewide plan and for providing guidelines, especially in the area of hazardous waste, for use by the twenty-two planning districts.

The Division of Coastal Resources works closely with the Division of Environmental Quality to develop programs directed toward attainment of the National Ambient Air Quality Standards, and to assure consistency between the Coastal Policies and statewide solid waste planning. In addition, attention will be given to the impact of Coastal Policies on air quality outside of the Coastal Zone. Coordination with the Division of Environmental Quality should result in the use of Coastal Policies to help attain statewide air quality and solid waste management goals as well as use of the State Implementation Plan and State and district solid waste plans to further Coastal Management Program goals.

Division of Parks and Forestry - The Division of Parks and Forestry manages the state's parks and is responsible for acquiring, operating and maintaining historic sites. The Division reviews CAFRA permit applications in addition to coordinating with Division of Coastal Resources on park and recreation policies.

Green Acres and Recreation - The Green Acres Administration determines where and how state funds should be spent for park and open space acquisition, development and maintenance. DEP can purchase land under this program and, if necessary, through the Division of Parks and Forestry by condemnation. The Division of Coastal Resources reviews and must approve expenditures of Green Acres funds proposed in the coastal zone.

The New Jersey State Comprehensive Outdoor Recreation Plan (SCORP), prepared by the Green Acres Administration, addresses the adequacy of open space for existing and projected demands, and the accessibility of recreation resources for all segments of the population. The plan qualifies New Jersey for funding under the Federal Land and Water Use Conservation Fund Program. In addition to studying recreation needs and uses, SCORP also includes inventories of federal, state, county, municipal and private recreation resources. The major policies in SCORP, which are fully consistent with the Coastal Resource and Development Policies, include emphasizing open space in urban areas, developing recreation facilities, increasing public access to recreation resources through mass transit, and developing barrier free recreation facilities.

Division of Fish, Game and Wildlife - The Division of Fish, Game and Wildlife is responsible for managing the fish and wildlife resources of the State. This includes research and educational programs as well as enforcement of state fish and game laws and maintenance of state fish and wildlife management areas. The Division also administers the federal Endangered Species Act of 1973, which provides funds for the purchase or management of land for research and for other activities to protect wildlife.

Office of the Commissioner - The Office of the Commissioner conducts a number of functions relating to the Coastal Management Program.

Matters relating to Coastal Resources; Green Acres and Recreation; Fish, Game and Wildlife; Parks and Forestry; and Pinelands are supervised by the Assistant Commissioner for Natural Resources. Matters relating to water and air quality, solid wastes, and toxics are supervised by the Assistant Commissioner for Environmental Management and Control.

First, the Office of Environmental and Cultural Services coordinates the review of major development proposals likely to require more than one DEP-administered permit, applications circulated through the A-95 Project Notification and Review Process, and state agency sponsored projects costing more than one million dollars (as required by Executive Order #53 of 1973). This coordinated review helps speed the permit review process and insures the application of consistent policies. This Office also reviews coastal permit applications in terms of possible archaeological impacts. In addition, the Office evaluates the potential impact of CAFRA permit applications on cultural resources, maintains the State Register of Historic Places, and makes recommendations to the Commissioner for State nominations to the National Register of Historic Places.

DEP's Assistant Commissioner for Science administers the New Jersey Spill Control and Compensation Act (N.J.S.A. 58:1-23.11 et seq.) In addition, under his direction, the Office of Cancer-Causing and Toxic Pollutants is conducting research with the assistance of computer facilities funded by the U.S. Council on Environmental Quality. The information produced by this research will be incorporated

into the Coastal Policies, and could conceivably lead to proposed alternatives to certain siting policies. In addition, this computer project is serving as a model for DEP to test the feasibility of digitizing much of the information necessary to apply the Coastal Policies.

The Tidelands Delineation Program, conducted by the Office of Environmental Analysis (under the direction of the Assistant Commissioner for Natural Resources), is a multi-year project to map the extent of State-owned tidelands by delineating the mean high tide line. The program will require several years to complete because of the complex issues of land ownership to be resolved.

The Office of Public Participation, created in 1979, directs DEP's efforts to stimulate public interest and involvement in the development and implementation of all of the Departments management and planning programs.

PRINCIPAL PROGRAM AUTHORITIES

Introduction

This section describes the Proposed Coastal Management Program's principal regulatory and capital spending programs. They are described as "principal" programs since they allow the State, through a number of agencies, to implement a broad range of Coastal Policies. This is particularly true of the three coastal permit programs administered by the Division of Coastal Resources (the Coastal Area Facility Review Act, the Waterfront Development Law, and the Wetlands Act). These authorities, in and of themselves, provide authority for land and water uses in the coastal zone sufficient for program approval. In contrast, the supplementary programs which follow this section are more limited in scope and involve the implementation of only one or a few policies (e.g. air quality or water quality).

This section also describes the process by which the Tidelands Resource Council, a twelve-member citizen body, supervises the management of State-owned tidelands (sometimes called riparian lands). This section explains how the decisions of the Council are made consistent with the Coastal Resource and Development Policies contained in Chapter Three. Also described are:

The Hackensack Meadowlands Development Commission (HMDC): A state-level regional agency regulating development and conservation in a 31 square mile area encompassing part of the Hackensack River Estuary and associated uplands. Its master plan constitutes the proposed State Coastal Resource and Development Policies for the area, and, for the purposes of the Federal CZMA, its regulatory authority constitutes the principal management mechanism;

The Department of Energy (DOE): The state agency responsible for energy planning, DOE is authorized to participate with all other state departments on any regulatory decision affecting energy facilities,

The Shore Protection Program: A program planned and administered by the Division of Coastal Resources, and

The Green Acres Program: A recreation and open space funding program administered by DEP's Green Acres Administration.

1. Waterfront Development Law - The Waterfront Development Law (N.J.S.A. 12:5-3) authorizes DEP to regulate the construction or alteration of a dock, wharf, pier, bulkhead, bridge, pipeline, cable, or other "similar or dissimilar development" on or adjacent to navigable waterways and streams throughout the State.

Past and present administrative practice under the Law (passed in 1914) has been generally restricted to tide-flowed lands on or below the mean high water line, but DEP has now proposed regulations (DEP Docket No. 022-80-04 , proposed May 8, 1980) to fully implement the law by defining both its geographic scope and the types of development to which it applies. These proposed regulations, which are reprinted in Appendix D, are intended to re-establish DEP's long neglected authority to guide development in waterfront areas. They have been reviewed by the Attorney General of New Jersey, who has issued an opinion endorsing them in terms of both geographic scope and facilities subject to the law. The Attorney General's opinion is also contained in Appendix D.

Under these proposed regulations, the following types of development in the waterfront area will require DEP approval:

a. Docks, wharves, piers, bulkheads, bridges, pipelines, cables, moorings and other submerged structures (all these already require DEP approval);

b. The construction, reconstruction, conversion, structural alteration, relocation or enlargement of any building or other structure, or of any excavation or landfill, and any change in the use of any building or other structure, or land or extension of use of land.

The waterfront area itself is defined (N.J.A.C. 7:7-2.4 as proposed) as including all tidal waterways and lands adjacent thereto up to the first property line, public road or railroad right-of-way generally parallel to the waterway, provided that the boundary is between 100 and 500 feet from the waterway. This rule will apply in upland areas beyond the mean high water line only outside the CAFRA area and Hackensack Meadowlands District (see Figure 2). The waterfront boundary for a hypothetical location is illustrated in Figure 5a, and a sample map of the boundary is shown in Figure 5b.

Persons proposing to undertake waterfront development must first apply to the Division of Coastal Resources for a permit. The applicant must hold a valid grant, lease or license for the tide flowed part of the site before the application will even be considered. The permit process is outlined in Figure 6.

Waterfront Development permits are subject to the requirements of the 90 Day Construction Permit Law (N.J.S.A. 13:10-29). Under its provisions interested persons who consider themselves aggrieved by the granting or denial of a Waterfront Development permit may appeal the Division's decision to the Tidelands Resource Council (a proposed amendment to the 90 Day Construction Permit Rules will transfer this function to the Commissioner). This includes the right to challenge decisions which the appealing party contends are in conflict with the Rules on Coastal Resource and Development Policies.

2. Coastal Area Facility Review Act (CAFRA) - The Coastal Area Facility Review Act (N.J.S.A. 13:19-1 et seq.) authorizes DEP to regulate and approve the location, design and construction of major facilities in a 1,376 square mile coastal region encompassing portions of Middlesex, Monmouth, Ocean, Burlington, Atlantic, Cape May, Cumberland and Salem Counties (See Figure 7). The CAFRA area

Figure 5a

JURISDICTION OF PROPOSED RULE FOR WATERFRONT DEVELOPMENT LAW — CONCEPT SKETCH

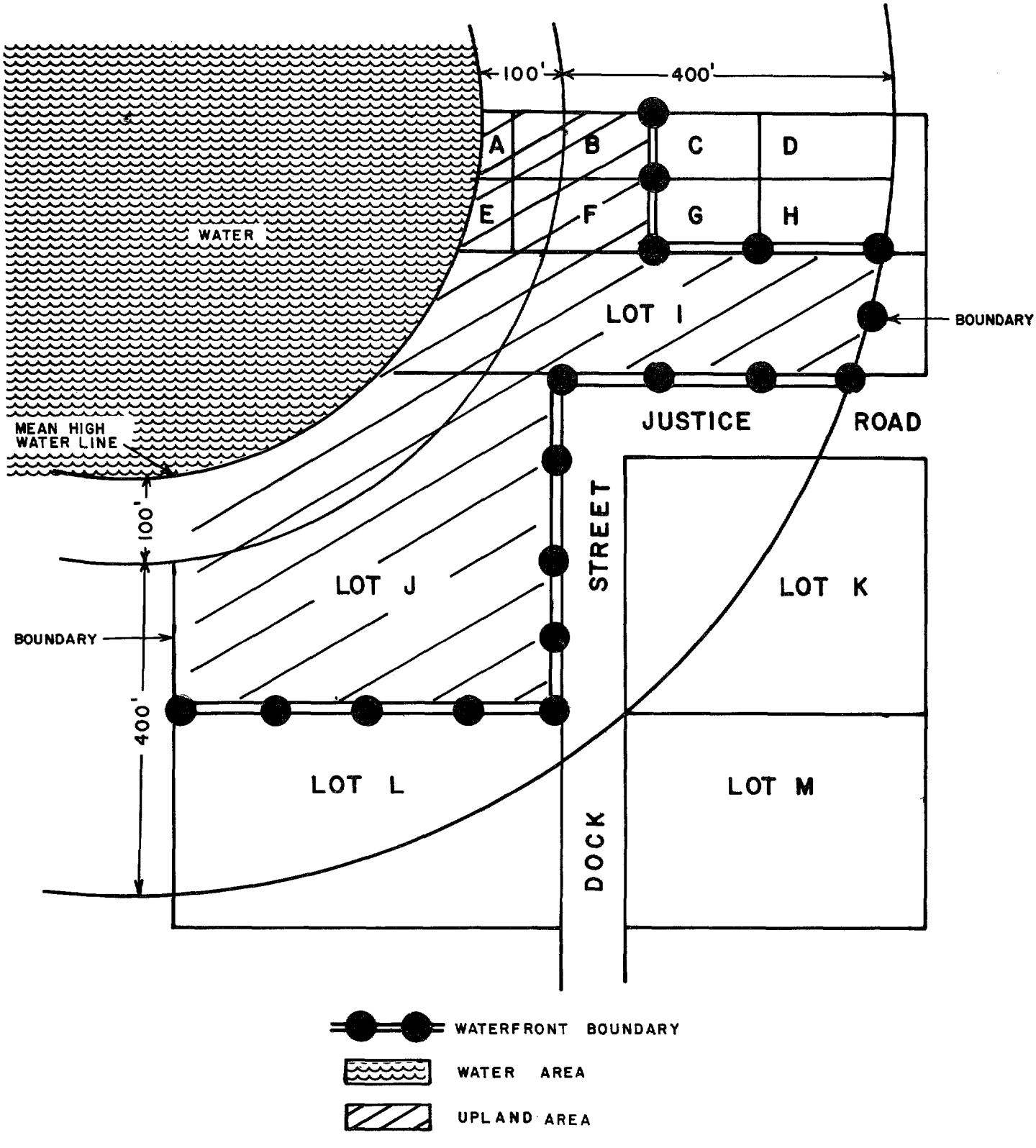


Figure 5b

JURISDICTION OF PROPOSED RULE FOR WATERFRONT DEVELOPMENT LAW – SAMPLE MAP

– JURISDICTION

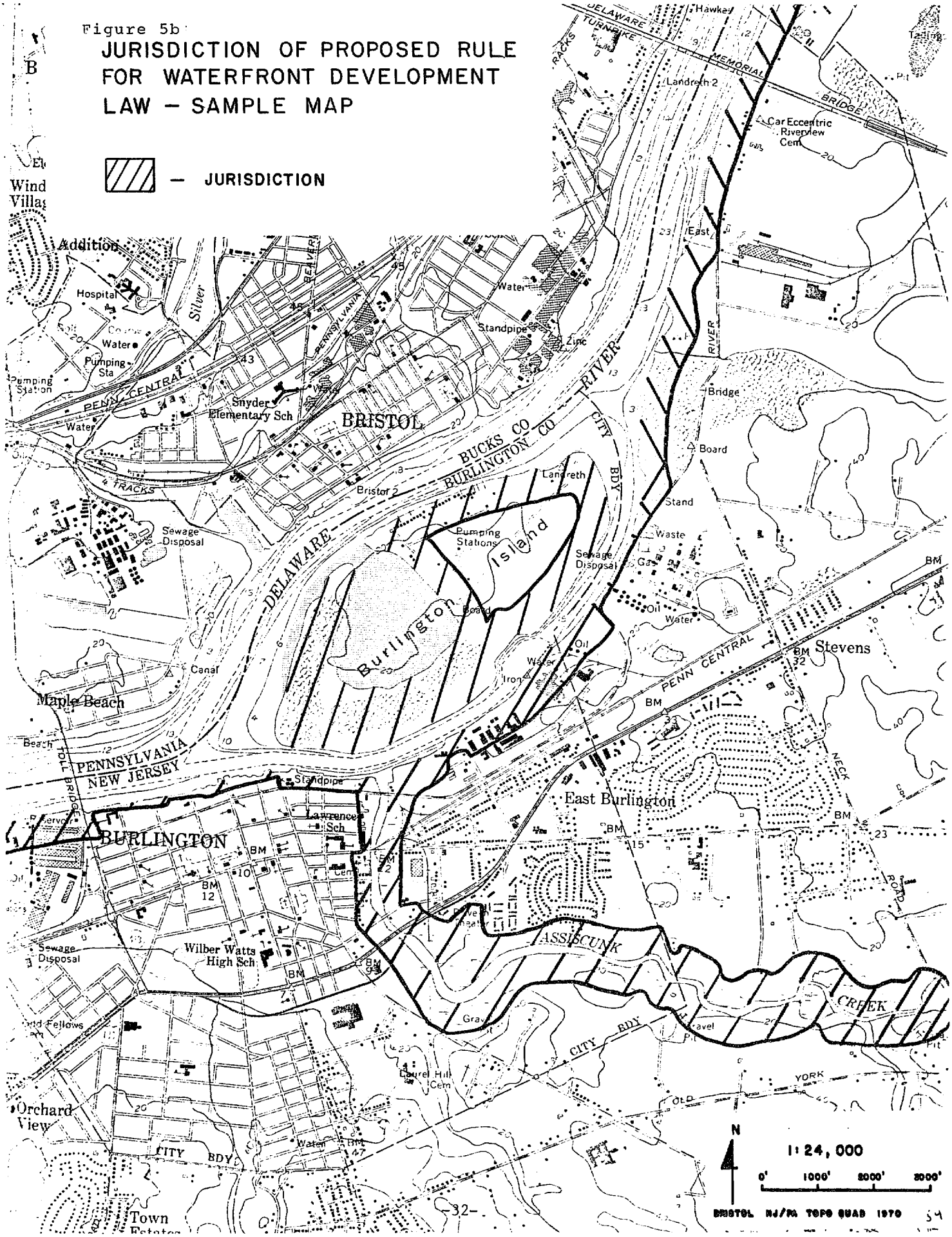
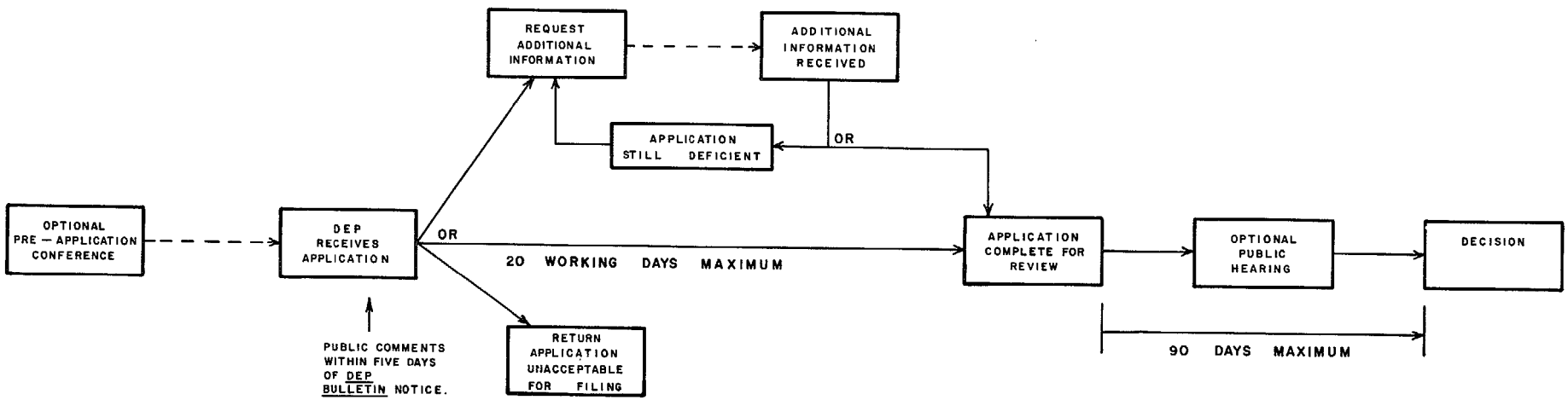


Figure 6

WETLANDS AND WATERFRONT (RIPARIAN) DEVELOPMENT PERMIT APPLICATION PROCESSES

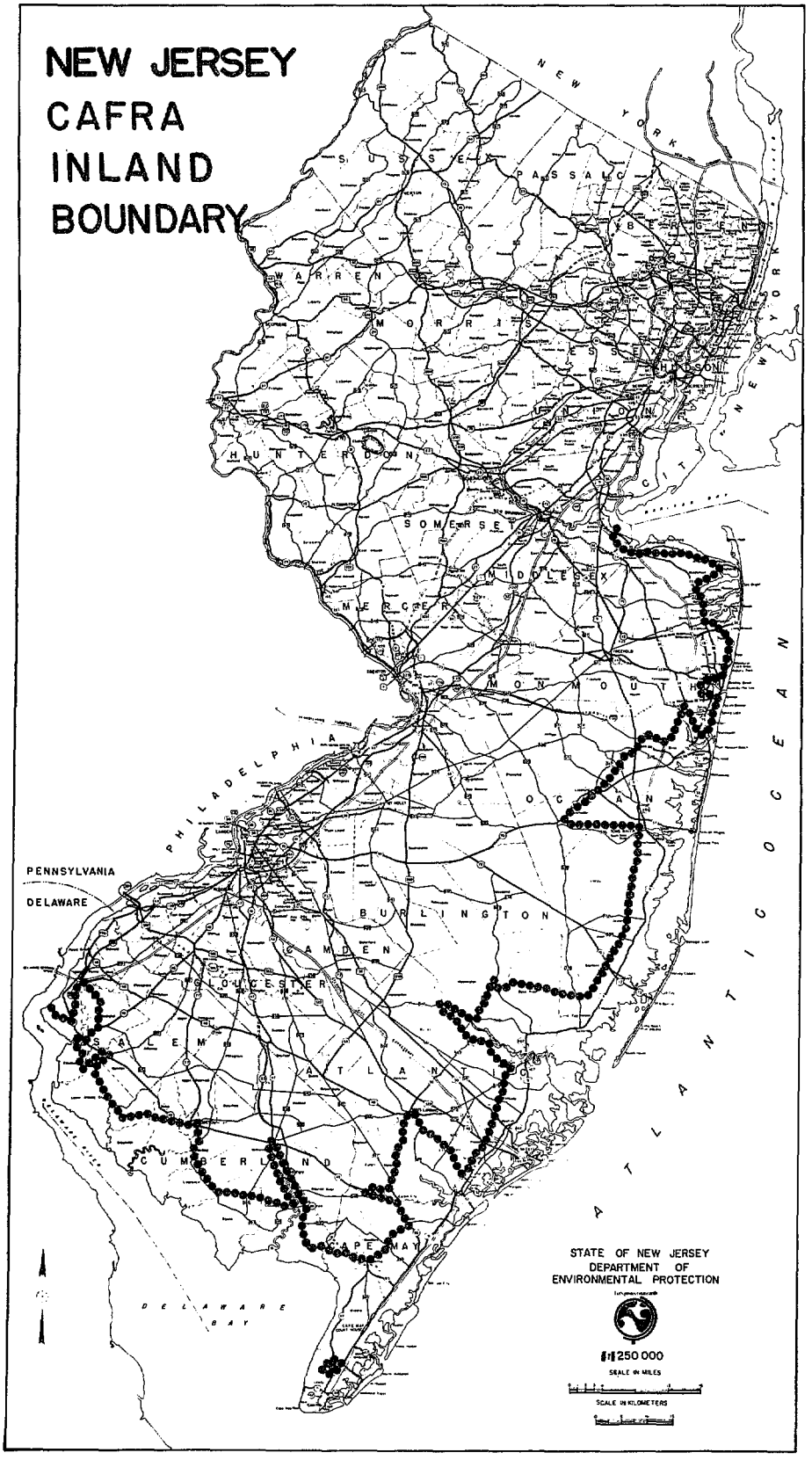


NOTE:

A WATERFRONT DEVELOPMENT PERMIT APPLICATION IS NOT DECLARED COMPLETE FOR REVIEW WITHOUT A LAWFUL RIPARIAN OCCUPATIONAL OR USE INSTRUMENT SUCH AS A RIPARIAN GRANT, LEASE, OR LICENSE.

— — — — INDICATES THAT THE TIMETABLE IS SET BY THE APPLICANT.

Figure 7


NEW JERSEY
CAFRA
INLAND
BOUNDARY
NEW YORK
SUSSEX
PASSAIC
BERGEN
WARREN
MORRIS
ESSEX
HUDSON
HUNTERDON
SOMERSET
UNION
MERCER
MONMOUTH
PHILADELPHIA
OCEAN
PENNSYLVANIA
DELAWARE
BURLINGTON
CAMDEN
GLOUCESTER
SALEM
ATLANTIC
CUMBERLAND
CAPE MAY
DELAWARE BAY
ATLANTIC OCEAN
STATE OF NEW JERSEY
DEPARTMENT OF
ENVIRONMENTAL PROTECTION
1:250 000
SCALE IN MILES
SCALE IN KILOMETERS

also includes coastal waters. Lying within the CAFRA area are New Jersey's barrier beach islands, all of its coastal resort areas, portions of the Pinelands, large agricultural areas, and New Jersey's fastest growing county (Ocean). The Act is administered by the Division of Coastal Resources.

Facilities regulated under CAFRA include all those proposed for the following purposes:

a. Electric power generation, including oil, gas, coal fired or nuclear;

b. Public facilities, including housing developments of 25 or more dwelling units, roads and airports, parking facilities of 300 spaces or more, wastewater treatment systems and components, and sanitary landfills;

c. Food and food by-products, paper and agri-chemical production;

d. Mineral products, chemical and metallurgical processes an inorganic salt manufacture;

e. Marine terminals and cargo handling and storage facilities.

The full list of facilities regulated under CAFRA, together with the text of the Act, is reprinted in Appendix E. A flow chart depicting the CAFRA permit application process appears as Figure 8.

Persons proposing to build CAFRA-regulated facilities must first submit an application and Environmental Impact Statement (EIS) to the Division. A public hearing and review of the EIS by other DEP divisions and state agencies are required before the decision to grant or deny the permit may be made by the Division Director.

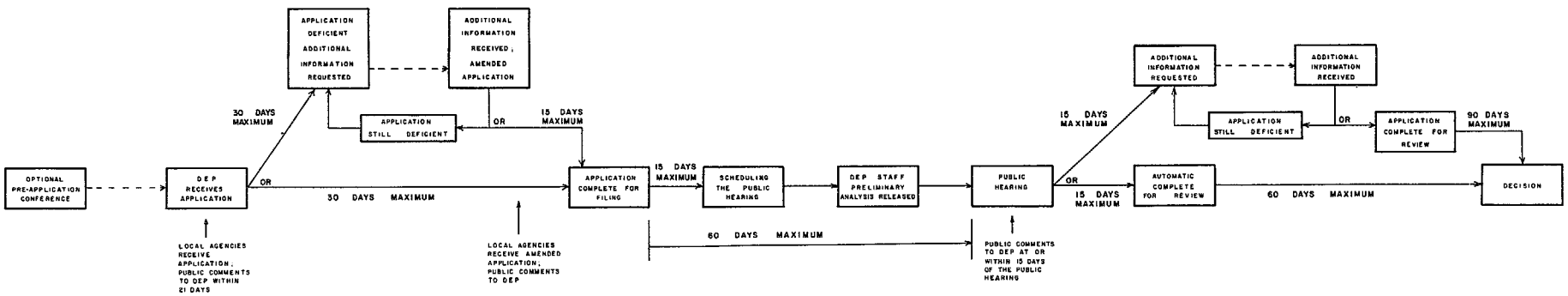
CAFRA permit decisions may be appealed by an interested person to the Commissioner of DEP, or directly to the three member Coastal Area Review Board. Appeals to the Commissioner may also be taken to the Review Board following her decision. The broad provisions of the appeals process allow challenges to permit decisions on the basis that they are inconsistent with the Rules on Coastal Resource and Development Policies.

3. Wetlands Act - The Wetlands Act of 1970 (N.J.S.A. 13:9A-1 *et seq.*) authorizes DEP to regulate activities on coastal wetlands. Since its enactment and the adoption of the Wetlands Regulations in 1972, the amount of wetlands filled in New Jersey has been reduced from 1,900 to 55 acres annually. In 1978, approximately 14 acres of regulated wetlands were filled, while in 1979, less than one acre was filled. The Act, which is administered by the Division of Coastal Resources, gives the state broad discretion in regulating virtually any form of development or disturbance on mapped coastal wetlands, except for mosquito control and continued commercial production of salt hay or other agricultural crops or activities.

Coastal wetlands are defined as those wetlands subject to tidal action along specified water bodies. They are not regulated under the Act until they have been mapped and the maps promulgated, following notice to affected property owners and a public hearing. Most coastal wetlands were mapped and the maps promulgated by 1972. The Act does not affect inland or freshwater wetlands.

Figure 8

CAFRA PERMIT APPLICATION PROCESS



NOTES.

- - - - INDICATES THAT THE TIMETABLE IS SET BY THE APPLICANT

THE DEP BULLETIN PROVIDES PUBLIC NOTICE OF THE STEPS IN THE PROCESS ONCE AN APPLICATION HAS BEEN RECEIVED.

The greatest amount of wetlands acreage is found along the Atlantic shorefront but there is also a considerable amount of acreage along the Delaware River, and approximately twenty acres of regulated wetlands on the Raritan River, in and near Perth Amboy. The Act specifically exempts the Hackensack Meadowlands District from its coverage. Small wetlands areas in the Delaware River Area have not yet been delineated and are therefore not now regulated by DEP. They would, however, be regulated under the proposed rules for the Waterfront Development Act.

Under Administrative Order No. 12 of 1977, Wetland permit decisions are made by the Division Director and may be appealed to the Commissioner of DEP. As is the case with Waterfront Development and CAFRA permits, permit decisions may be challenged on the basis that they violate the Rules on Coastal Resource and Development Policies.

The Division of Coastal Resource's jurisdiction under each of the three coastal permits in the Bay and Ocean Shore Segment is shown in Figure 9. The Waterfront Development's proposed jurisdiction in the rest of the State is depicted in Figure 2.

4. Tidelands Management - In New Jersey, "tide-flowed" (or riparian) lands are owned by the State of New Jersey, except where already conveyed. These are lands now or formerly flowed by the mean high tide, including filled lands. The State owns the lands as trustee for the public, and must administer their use in the public interest. The State exercises control over tidelands in two ways: through its proprietary role as owner, and through its regulatory role under the Waterfront Development Law.

The State's ownership interest extends to the mean high water mark, which is determined on the basis of a theoretical 18.6 year tide. DEP's Office of Environmental Analysis is presently conducting a tidelands delineation program throughout the State. Until the delineation is complete, the Division of Coastal Resources is determining the applicability of tidelands law on a case-by-case basis. Landowners proposing to build and citizens concerned about a proposed project, as well as the Division of Coastal Resources staff of Marine Lands Inspectors, bring individual cases to the attention of the Department.

The State's ownership role is exercised through the Tidelands Resource Council, which may grant, lease, or license the use of State-owned tidelands provided such action is in the public interest. Persons seeking to purchase, lease or otherwise use these lands must first obtain the Council's approval (Figure 10). Many of the State's tidelands were sold in the nineteenth and early twentieth century, but it is the present practice of the Council only to license the use of the lands, and not to grant them outright, except in unusual cases.

The Council, which is composed of twelve citizens appointed by the Governor, with the advice and consent of the State Senate, has broad discretion concerning applications for tideland conveyances. The Council may make any decision it believes to be in the public interest. DEP's Commissioner and Director of Coastal Resources, however, have the authority to veto any Council action inconsistent with state policy. Should a veto occur, the application is returned to the Council for reconsideration. Consideration of the State's Coastal Resource and Development Policies in tidelands decision-making is also assured by the fact that the Division of Coastal Resources serves as staff to the Tidelands Resource Council.

FIGURE 9

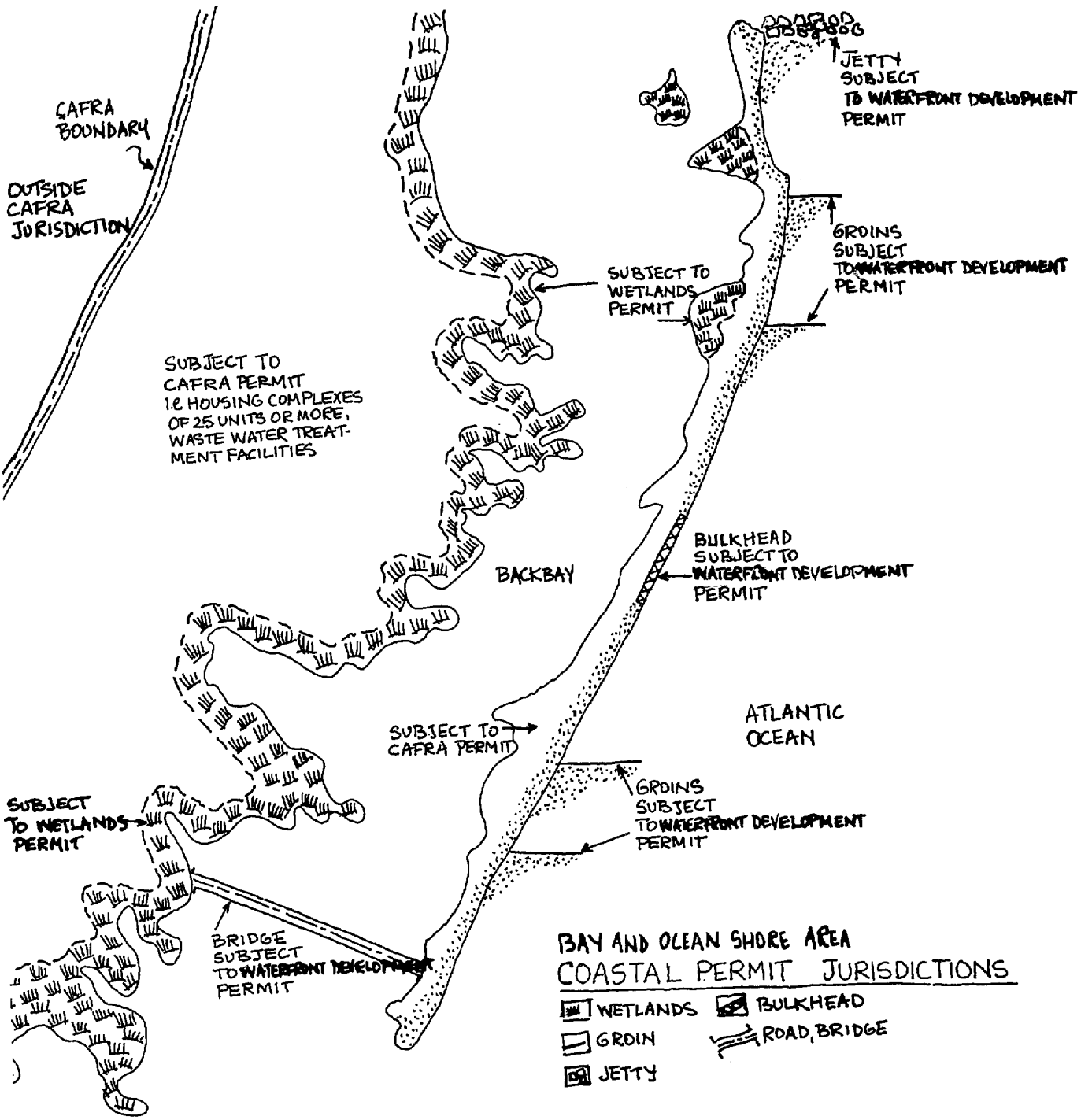
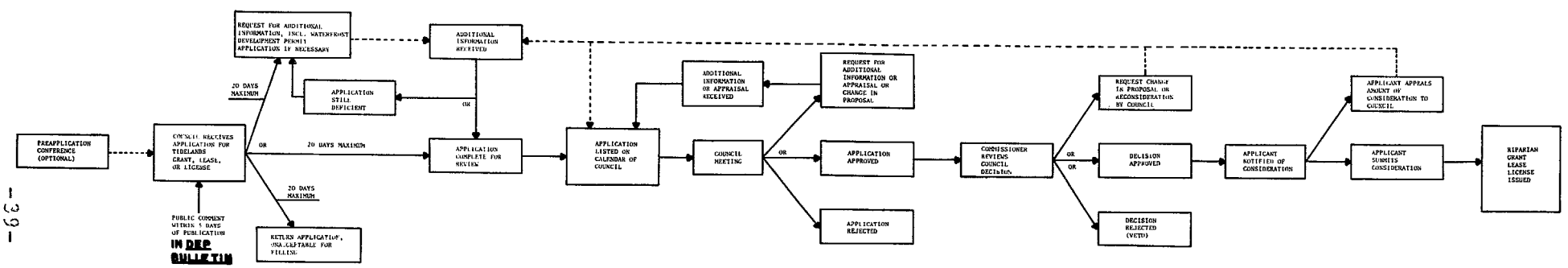

CAFRA BOUNDARY
OUTSIDE CAFRA JURISDICTION
SUBJECT TO CAFRA PERMIT i.e. HOUSING COMPLEXES OF 25 UNITS OR MORE, WASTE WATER TREATMENT FACILITIES
JETTY SUBJECT TO WATERFRONT DEVELOPMENT PERMIT
GROINS SUBJECT TO WATERFRONT DEVELOPMENT PERMIT
SUBJECT TO WETLANDS PERMIT
BACKBAY
BULKHEAD SUBJECT TO WATERFRONT DEVELOPMENT PERMIT
ATLANTIC OCEAN
SUBJECT TO CAFRA PERMIT
GROINS SUBJECT TO WATERFRONT DEVELOPMENT PERMIT
SUBJECT TO WETLANDS PERMIT
BRIDGE SUBJECT TO WATERFRONT DEVELOPMENT PERMIT
BAY AND OCEAN SHORE AREA
COASTAL PERMIT JURISDICTIONS
WETLANDS
BULKHEAD
GROIN
ROAD, BRIDGE
JETTY

Figure 10

TIDELANDS APPLICATION PROCESS



In keeping with traditional riparian law, the owners of land immediately upland have the first right to purchase or use tidelands. But before any person may make use of tidelands, the Council requires that they obtain a Waterfront Development Permit. Since the permit may only be granted if the activity is consistent with the Coastal Resource and Development Policies, this requirement insures that the use of tidelands will conform with those policies.

5. Hackensack Meadowlands District - Implementation of coastal policies in the Hackensack Meadowlands District will be a joint venture of DEP and the Hackensack Meadowlands Development Commission (HMDC), with the Commission's plans guiding both agencies in their decisions. The HMDC is composed of the Commissioner of the Department of Community Affairs and three residents each from Bergen and Hudson Counties, appointed by the Governor, with the advice and consent of the State Senate. The Commission is responsible for developing and implementing a plan for ecologically sound development of the Meadowlands District. For this purpose, it has been given planning and zoning powers for the District, which were previously exercised by the individual municipalities. In 1972, the Meadowlands Commission adopted a master plan, which, as revised in 1977, 1978 and 1979, is to guide future development of the District. The HMDC will be the State agency responsible for implementing the State's coastal program under the CZMA in the Meadowlands District, and the coastal policies for the District will be those presently adopted by the HMDC in their Master Plan and other policy documents.

Amendments to the Zoning Regulations of the Hackensack Meadowlands District will be considered as amendments to the Coastal Management Program when they meet the definition for amendments found in 15 CFR 923.80(c):

"amendments are defined as substantial changes in, or substantial changes to enforceable policies or authorities related to:

(1) Boundaries;

(2) Uses subject to the management program;

(3) Criteria or procedures for designating or managing areas of particular concern or areas for preservation or restoration; and

(4) Consideration of the national interest involved in the planning for and in the siting of, facilities which are necessary to meet requirements which are other than local in nature."

As required by 15 CFR 923.53(a)(1), DEP-Division of Coastal Resources will make federal consistency determinations for actions affecting the Meadowlands District. However, such determinations will be made after consultation with the HMDC. The District is not subject to the requirements of the Wetlands Act.

6. Regulation and Plannning of Energy Facilities - The Department of Energy (NJ DOE), created in July 1977 (N.J.S.A. 52:27F-1 *et seq.*), has broad planning authority over energy-related matters, including the authority to participate in the decision-making of other State agencies concerning the siting of energy facilities. The fact that energy generating and petroleum refining facilities often seek to locate in the coastal zone means that NJ DOE's authority is a significant element in the management system.

The Departments of Energy and Environmental Protection, recognizing their coextensive jurisdiction over energy facility siting in the coastal zone, and also recognizing the importance of such siting decisions to a successful coastal management program, entered into a memorandum of understanding in August 1978. The memorandum has three important features: a procedure for DOE review of coastal permit applications, a commitment by DEP and NJDOE to make their findings on the basis of the State's Coastal Resource and Development Policies as well as on the State Energy Master Plan, and a procedure for resolving disagreements between the two agencies. The proposed amendments to the existing Coastal Resource and Development Policies will not be adopted until agreed to by NJ DOE, at which time they will be subject to the August 1978 Memorandum of Understanding. (See Appendix C)

In the case of a disagreement between DEP and DOE concerning the siting of an energy facility, the matter will be submitted to an Energy Facility Review Board for resolution. The Board was established by the Act creating DOE, and consists of the Director of DOE's Division of Energy Planning and Conservation, the Chief Executive Officer of the state instrumentality with the power of approval over the application, and a designee of the Governor. The Board has never had to meet.

The New Jersey Department of Energy is also the lead agency for the Coastal Energy Impact Program (CEIP). The 1976 Amendments to the federal Coastal Zone Management Act created Section 308, the CEIP, to provide financial assistance to help coastal states respond to the growth and impacts of new energy exploration and development. A second objective of the CEIP is to balance the two national goals of encouraging development of domestic energy resources to further energy self-sufficiency, and to protect and manage the nation's coast in a manner consistent with the objectives of a state's Coastal Management Program. To be eligible for assistance under the CEIP, a coastal state must be receiving a grant under Section 305 of the Act, have a coastal management program which has been approved under Section 306, or be making satisfactory progress which is consistent with the policies set forth in Section 303 of the Act. New Jersey currently meets these criteria. Ensuring New Jersey's continued eligibility through federal approval of a complete statewide coastal management program is one key incentive for completing the program.

CEIP grants are based in part on the amount of OCS acreage adjacent to a particular state. As specified in the FCZMA, NOAA's Assistant Administrator for Coastal Zone Management is in the process of establishing extended lateral seaward boundaries which will be used to determine New York and Delaware, and New Jersey's respective CEIP grant allocations.

As the lead agency for CEIP, the New Jersey Department of Energy is responsible for administering the program, including soliciting applications, providing technical assistance, and evaluating and approving project applications to distribute funds according to the program's intrastate allocation process. DOE and DEP coordination is required by the federal CEIP regulations which state that CEIP assistance cannot be granted without DEP certification of compatibility with the goals and policies of the developing Coastal Management Program or consistency with the approved Coastal Management Program.

To facilitate such a finding, and to satisfy the requirement that the state's coastal planning agency review CEIP applications, the Memorandum of Understanding provides that all such applications will be forwarded to DEP for consistency review.

Another major responsibility of the Department of Energy is preparation and updating of the State Energy Master Plan. This plan considers the production, distribution, consumption and conservation of energy in the state and surrounding region. The Plan and the more specific reports it promises will become a primary resource for energy facility siting decisions by DEP. The State Energy Master Plan was formally adopted in October 1978.

The Board of Public Utilities, which is in, but not of, the Department of Energy, has broad regulatory authority over public utilities. Included in this authority is the power to supercede local zoning decisions when necessary if the service conveniences the welfare of the public (N.J.S.A. 40:55D-19). This authority comes into play only when a proposed utility facility has received required state permits (including coastal permits) and is denied a required local permit. This provision helps New Jersey fulfill a section of the federal CZMA requiring that local governments not be able to unreasonably restrict uses of regional benefit (See Chapter Four).

7. Green Acres Funding - The Green Acres Administration determines where and how state funds should be spent for park and open space acquisition, development, and capital improvements. DEP can purchase land under this program by condemnation if necessary. The Division of Coastal Resources reviews proposed expenditures of Green Acres funds in the coastal zone for consistency with the Coastal Resource and Development Policies and can suggest modifications or block inconsistent proposals. In addition, under the Use Policies for Recreation, Green Acres funds would be withheld from municipalities with recreational plans or ordinances which are inconsistent with the Coastal Resource and Development Policies.

The State Comprehensive Outdoor Recreation Plan (SCORP), prepared by the Green Acres Administration, addresses the adequacy of open space for existing and projected demands, and the accessibility of recreation resources for all segments of the population. The plan qualifies New Jersey for funding under the Federal Land and Water Use Conservation Fund Program. In addition to studying recreation needs and uses, SCORP also includes inventories of federal, state, county, municipal and private recreation resources. The major policies in SCORP, which are also proposed for adoption in the Coastal Management Program, include an emphasis on open space in urban areas, recreation facility development, increasing public access to recreation resources through mass transit, and developing barrier free recreation facilities.

In November 1978, the voters of New Jersey approved a $200 million Green Acres Bond issue, with $100 million earmarked for the acquisition of park land in urban areas. This brings to $540 million the amount of money approved by the voters for Green Acres funding since 1961. The Green Acres Administration will be spending this money in accord with SCORP priorities. One top priority is the creation of waterfront parks in urban areas. Some of the money will be used for direct state acquisition, while the majority will be channeled through local governments as matching grants. This money will help to significantly expand public access and recreational opportunities through the coastal zone.

New Jersey has also received additional funds for park rehabilitation in selected urban areas under the federal Urban Parks and Recreation Recovery Act, passed in 1978. These funds could be used by an eligible municipality to fill the local matching share of a state Green Acres grant.

8. Shore Protection - Shoreline erosion is a major concern in New Jersey, and DEP is authorized to undertake any and all actions necessary to prevent and/or repair damage caused by such erosion (see N.J.S.A. 12:6A-1). In 1977, New Jersey's voters approved a $30 million bond issue (the Beaches and Harbors Bond Act of 1977, P.L. 77-208), $20 million of which is to fund State matching grants for beach restoration, maintenance and protection facilities, projects and programs.

The Act requires that DEP prepare a comprehensive master plan that will serve as a basis for these grants. Work on this plan has been underway since 1978, and is being conducted by the Division of Coastal Resources. Shore Protection rules, which have been proposed only in draft form, would be procedural rules which cite the Coastal Resource and Development Policies relevant to shore protection for their substantive element. These include policies on Coastal Engineering, Dunes and Dune Management, Beach Nourishment, and High Risk Beach Erosion Areas. This uniformity between programs is required by the adoption of the Coastal Resource and Development Polices as Department rules governing coastal decision-making.

In addition to guiding the state's program, the Shore Protection Master Plan and the Coastal Policies will serve as a basis for the planning of joint projects with the U.S. Army Corps of Engineers. Coastal permits will be issued only in conformity with the Policies.

8. Coastal Program Funding

Coastal Management Program Implementation (306) Funds

Upon federal approval of the coastal program, New Jersey is eligible to receive implementation funds under Section 306 of the federal Coastal Zone Management Act. DEP received $800,000 in FY 1979, for example, after approval of the program for the Bay and Ocean Shore Segment. The Department made available $50,000 of this implementation money to selected county and municipal governments included within the Bay and Ocean Shore Segment boundary by inviting them to submit proposals for planning projects which would help to fulfill the objectives of the Coastal Program, and selected projects in Toms River and Bridgeton. In FY 1980, the Department received a second year implementation grant of $840,000, of which $86,000 is being passed through to six local governments.

After receiving Federal approval for the complete coastal program, New Jersey will be eligible for increased Section 306 funds to implement the entire program. DEP intends to continue to make a part of this money available for local governments to assist with projects which will help to carry out the goals and objectives of the coastal program. Other States have, for example, granted funds to local governments for the development of beach access plans or projects, land use analyses, zoning ordinance revisions, and downtown revitalization projects.

DEP has also been receiving funds for the past four years, under Section 305 of the federal Coastal Zone Management Act, to develop the Coastal Management Program. In 1977, DEP passed through $180,000 of these planning funds to twelve coastal counties. In 1978, the Department granted $75,000 to eleven of the counties to enable them to write specific reports contributing to DEP's development of a coastal program. In 1979, DEP granted $110,000 to five municipalities in the developed coast to develop plans for projects which would further the State's coastal objectives. DEP is currently receiving its last year of Section 305 federal coastal planning funds and will not be eligible to receive additional Section 305 funds.

Coastal Energy Impact Program (308) Funds

The Coastal Energy Impact Program, Section 308 of the Coastal Zone Management Act, provides funds to assist states in dealing with impacts from new or expanded energy facilities, and existing, expanded or new coastal energy activities. State agencies, counties and municipal governments are eligible to receive CEIP grants and loans from the Department of Energy, which is the state's designated lead agency for CEIP. New Jersey has been alloted almost $2 million in grants and $3 million in loans since the program's inception in 1977. The CEIP is explained in more detail in the section above which discusses the Department of Energy.

Supplementary Implementation Programs in DEP

There are a number of programs in DEP which require that new development meet regulations and standards concerning the maintenance and enhancement of water and air quality, the regulation of soil erosion, and the protection of flood hazard areas, wild and scenic rivers, and specified park areas. Programs in these areas will be useful in implementing particular coastal policies. They will be subject to the Coastal Resource and Development Policies to the extent allowed by their enabling legislation. This extent is narrow in the case of programs dealing with the quality of the ambient environment (i.e. air and water quality regulation), but is broader where a program involves land use regulations.

The policies of these programs are generally consistent with and, in several cases, are identical with the proposed Coastal Policies. The Coastal Policies on Water and Air Quality and Solid Waste adopt by reference the policies being developed by the divisions of the Department with greatest expertise in each field. The Division of Coastal Resources continues to monitor and review proposed changes to these policies through the rule-making process, and if a change were to violate the adopted Coastal Resource and Development Policies, the DEP Commissioner could refuse to allow the change.

Water Quality Program - The Federal Clean Water Act of 1977 (33 USC 466 et seq.) sets a framework for achieving a national goal of restoring and maintaining the chemical, physical and biological integrity of the nation's waters and ensuring that they be fishable and swimmable. This is to be accomplished by Federal-state partnerships under which EPA sets increasingly strict effluent standards for wastewater discharges and the states set quality standards for rivers, bays and the ocean, and develop a strategy for their attainment. The key regulatory element is the National Pollutant Discharge Elimination System (NPDES), and the key planning element is the Areawide Water Quality Management (208) Plan. These elements, as well as State wastewater treatment facility requirements, are the key programs for attaining the State's water quality goals in the coastal zone and throughout the state.

The attainment and maintenance of water quality in New Jersey is the responsibility of DEP's Division of Water Resources. The Division of Coastal Resources also plays a role in water quality enhancement through the enforcement of water quality resource policies in decision-making under CAFRA, the Wetlands Act and the Waterfront Development Law. The Division of Water Resources will consider other coastal policies not related to water quality to the extent statutorily permissible.

NPDES Permits - Any point source discharge into the waters of the United States, including the territorial sea, must receive a National Pollutant Discharge Elimination System Permit (NPDES) from either EPA or the State. There are 1,396 facilities currently regulated by NPDES in New Jersey. Perhaps as many as half of these facilities are located in the coastal zone. In New Jersey, permits are issued by EPA, Region II, but the State now has enabling legislation (the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq.) which allows DEP to take over the permitting function. Under the present arrangement, DEP's Division of Water Resources must certify that a proposed discharge will not prevent the attainment of the State's water quality standards before EPA may issue a NPDES permit, and can therefore prevent the issuance of that permit. This certification, which is required by Section 401 of the Federal Clean Water Act, focuses on the chemical and biological impact of the proposed discharge on attainment of the water quality standards for the receiving body of water. For example, water classified as TW-1, the highest classification for tidal waters, must be suitable for shellfish harvesting where permitted. If a proposed discharge would threaten the shellfish beds in TW-1 waters, the Division of Water Resources would have to withhold Section 401 Certification, and thus preclude EPA from issuing a NPDES permit. The NPDES permit process could be used to implement many of the proposed coastal policies for point sources of discharges.

When EPA approves a State program for issuing NPDES permits, the requirements remain the same -- compatibility with Federal effluent guidelines and state water quality standards -- but in New Jersey, DEP rather then EPA would make the initial permit determination. EPA would then have the authority to overrule DEP concerning any permit, just as DEP can currently prevent EPA from issuing a permit by not providing the Water Quality Certificate.

Section 6(b) of the State's Water Pollution Control Act also authorizes the Division of Water Resources to adopt regulations placing pre-construction requirements on anyone planning to build a new facility which would discharge wastewater. So-called "Preliminary Facility Approval" Regulations were proposed in the summer of 1977 which would require any person proposing to build a facility to first examine its potential impact on water quality. DEP could prevent construction or require modifications in the plan until it was satisfied that the completed facility would be compatible with State water quality requirements, thereby controlling water pollution by regulating the siting and construction of facilities in addition to regulating effluents. Adopting such regulations could significantly increase the types of development which DEP could require to follow the coastal policies. The proposed rules, however, were not well accepted and are presently being studied and revised.

The Coastal Management Program will adopt by reference the State's water quality standards as its standards, and the Division of Coastal Resources will comment on any proposed revisions. This is the same procedure adopted for the Bay and Ocean Shore Segment, which recognizes and relies upon the Division of Water

Resources' expertise. The Division of Coastal Resources will use its permitting authority, in consultation with the Division of Water Resources, to approve only those projects which will not prevent attainment of State water quality standards.

Areawide Water Quality Management (208) Plans

A Water Quality Management Plan developed according to Section 208 of the Clean Water Act is a comprehensive and implementable strategy for the control of water pollution in a county or multi-county area. Federal and State legislation require that the Coastal Management Program and 208 Plans be consistent. Through a Federal agreement between the Department of Commerce and the Environmental Protection Agency, and through a working relationship at the state level between the Divisions of Coastal Resources and Water Resources, the policies of the two programs are being coordinated and made consistent for both point and non-point sources of pollution.

Each 208 plan is to consist of a set of policies and a management system detailing how and by which agencies these policies will be enforced. The Coastal Zone is to be addressed by nine separate 208 Plans:

Counties	Planning Agency	Status as of March 1980
1. Middlesex	Middlesex County Planning Board	Certified by Governor
2. Mercer	Mercer County Planning Board	Certified by Governor and Approved by EPA
3. Burlington/Camden/ Gloucester	Delaware Valley Regional Planning Commission	Certified by Governor and Approved by EPA
4. Salem/Cumberland	DEP-Division of Water Resources	Certified by Governor
5. Bergen/Hudson/Essex/ Passaic/Union/Somerset	DEP-Division of Water Resources	Certified by Governor
6. Monmouth	DEP-Division of Water Resources	Certified by Governor
7. Ocean	Ocean County Planning Board	Draft Plan Completed
8. Atlantic	Atlantic County Division of Planning	Draft Plan Completed
9. Cape May	Cape May County Planning Board	Draft Plan Completed

The Division of Coastal Resources will not issue Waterfront Development or Wetlands permits to development proposals which conflict with a certified 208 Plan. Similarly, all other regulatory programs in DEP will not issue permits to projects in conflict with a certified plan (see N.J.S.A. 58:11A-10). The Division of Coastal Resources has been participating in the 208 planning process to assure that the plans are not only consistent with Coastal Policies, but also contain policies and strategies designed to protect water-related coastal resources. Thus, in implementing 208 plans through regulatory and other strategies, DEP, the counties and other agencies will also be implementing elements of the Coastal Management Program.

Wastewater Treatment Facilities - DEP is actively involved in the planning, financing and regulation of wastewater treatment facilities.

The State Water Pollution Control Act (N.J.S.A. 58:10A-1 *et seq.*), authorizes DEP's Division of Water Resources to require a permit for the construction, installation, modification or operation of any wastewater treatment facility, including

but not limited to sewage treatment plants, sewage collection systems including interceptors, sewer outfalls, industrial wastewater treatment plants, and cooling towers and ponds. Through another program authorized by the Water Pollution Control Act, the Division may place a ban on extensions to a sewerage system when that system is found to be receiving flows in excess of design capacity or to be discharging inadequately treated sewage.

Under the Water Supply and Sewer Systems in Realty Improvements Act (N.J.S.A. 58:11-23 et seq.), the Division must certify the adequacy of the proposed water supply and wastewater disposal system for any development involving fifty or more houses, or other structures producing wastewater, before a municipality may give the necessary subdivision approval. This requirement assures that proposed major subdivisions in the coastal zone and the entire state which employ on-site sewage disposal will not be built unless the disposal system is adequate "with respect to wells or other sources of water supply, topography, existing individual sewage disposal systems on adjacent properties, water table, soil characteristics, available area and expected volume of sewage" and meets State standards regarding design (N.J.A.C. 7:9-2.5). This law is of importance primarily in areas without regional sewerage systems. In the proposed coastal zone, this includes significant portions of Cumberland, Salem, and Cape May Counties.

In September, 1979, EPA delegated administration of the Wastewater Construction Grant Program under Section 201 of the Federal Clean Water Act to the Division of Water Resources. Under this program, DEP determines the eligibility of proposed municipal facilities for federal aid for facility planning (Step I), engineering (Step II), and construction (Step III). Since all wasterwater facilities require a Waterfront Development permit (and a CAFRA permit if located in the CAFRA zone), DEP and EPA in 1977 entered into an agreement which requires that applicants obtain these permits before Step II engineering funds are released. This practice will continue under the delegated program. This insures that wastewater treatment facilities are planned, funded and built in accordance with Coastal Policies.

The State Public Sanitary Sewerage Facilities Assistance Act of 1965, (N.J.S.A. 26:2E-1 et seq.), authorizes DEP to give grants of up to 30 percent of the State-local cost of construction projects which qualify for the 75 percent Federal construction subsidy under Section 201. The State construction aid program is designed to complement the federal sewerage construction grants, and DEP's funding priorities are in accordance with Federal priority guidelines and Areawide Water Quality Management (208) Plans. This funding program will help to carry out coastal policies related to secondary impacts and the protection of environmentally critical or sensitive areas.

Stream Encroachments and Flood Hazards

No structure or alteration within the 100 year floodplain of any stream may be made without a permit from DEP's Division of Water Resources. This permit responsibility existed under the Stream Encroachment Act (N.J.S.A. 58:1-26) until its repeal and transfer to the Flood Hazards Area Control Act (N.J.S.A. 58:16A-50 et seq., as amended, see P.L. 1979, c.359). The program is intended primarily for flood protection, "to safeguard the public against danger from waters impounded or affected by such structures".

Administration of this program supports the preservation of stream channels in their natural state, and will allow further implementation of the Coastal Policies related to hydrology and flood hazards. Of 500 stream encroachment permit applications received in 1978, DEP granted 450. The Division of Coastal Resources and Water Resources are discussing procedures for waiving the Stream Encroachment Permit requirement for projects requiring a Waterfront Development Permit.

The Flood Hazards Area Control Act also authorizes DEP to adopt land use regulations for delineated floodways "designed to preserve (their) flood carrying capacity and to minimize the threat to the public safety, health and general welfare". Under the Act, municipalities may conduct the delineation and adopt regulations concerning their use in zoning ordinances, provided that they meet the minimum standards of the DEP regulations.

DEP has adopted, or proposed for adoption, floodway delineations in various parts of the proposed coastal zone (See Resource Policy on Flood Hazard Areas in Chapter Four). The Act only applies to riverine flood hazard areas, however, so its use in coastal flood zones is extremely limited.

Wild and Scenic Rivers

The purpose of the Wild and Scenic Rivers Act of 1977 (N.J.S.A. 13:8-45 *et seq.*) is to preserve, protect and enhance the natural and recreational value of some of the State's most significant river segments. The Act allows the Commissioner of DEP to designate river segments as "wild", "scenic", "recreational", or "developed recreational". In any river segment so designated, all construction activities would be either prohibited or regulated within the river's flood hazard area. This would expand upon DEP's authority under the Flood Hazards Area Control Act in the areas designated, by permitting a much wider range of considerations as criteria for DEP's regulatory decisions.

The types of development that are controlled under the Act will depend on which designation is applied to the segment, with "wild" rivers having the strictest prohibitions and "developed recreational" the most lenient. DEP's Green Acres Administration has published guidelines for designation of the State's rivers which characterize both the Delaware and Hudson Rivers as developed recreational segments. Before these designations take effect, a long review process, including preliminary decisions on which rivers in the State will be given program priority, must occur.

The Act requires that DEP-owned land within the designated river area be managed consistent with the purposes of designation. The geographic extent of the river areas includes only the flood hazard area delineated by DEP jurisdiction. The flood hazard area around the river segment must be delineated before the nomination as a Wild and Scenic River area can be considered. The area should be bounded by significant natural or man-made features. Examples of river segments which could be designated include: Hudson River from George Washington Bridge to Liberty State Park (only characteristics of the New Jersey side, including views of Manhattan, would be considered), or the Rancocas Creek from head of tide to confluence with the Delaware. DEP has proposed the Rancocas region for adoption as a flood hazard area under the Flood Hazard Areas Control Act.

The Delaware and Raritan Canal State Park Act
(N.J.S.A. 13:13A-1 et seq.)

This law is similar to, but was enacted three years before, the State's Wild and Scenic Rivers Act. Preservation of the sixty mile Delaware and Raritan Canal is entrusted to the Delaware and Raritan Canal Commission, which is in but largely independent of DEP. The Department is required by the law to administer all State-owned lands along the Canal as a State park, in accordance with a master plan adopted by the Commission in May, 1977. The Commission is given project review authority over proposals within a delineated review zone which includes the Canal Park and any land on either side of it in which development will have drainage or visual impact on the park. Within this zone, the Commission has the authority to "review and approve, reject or modify any project ..." (N.J.S.A. 13:13a-14c).

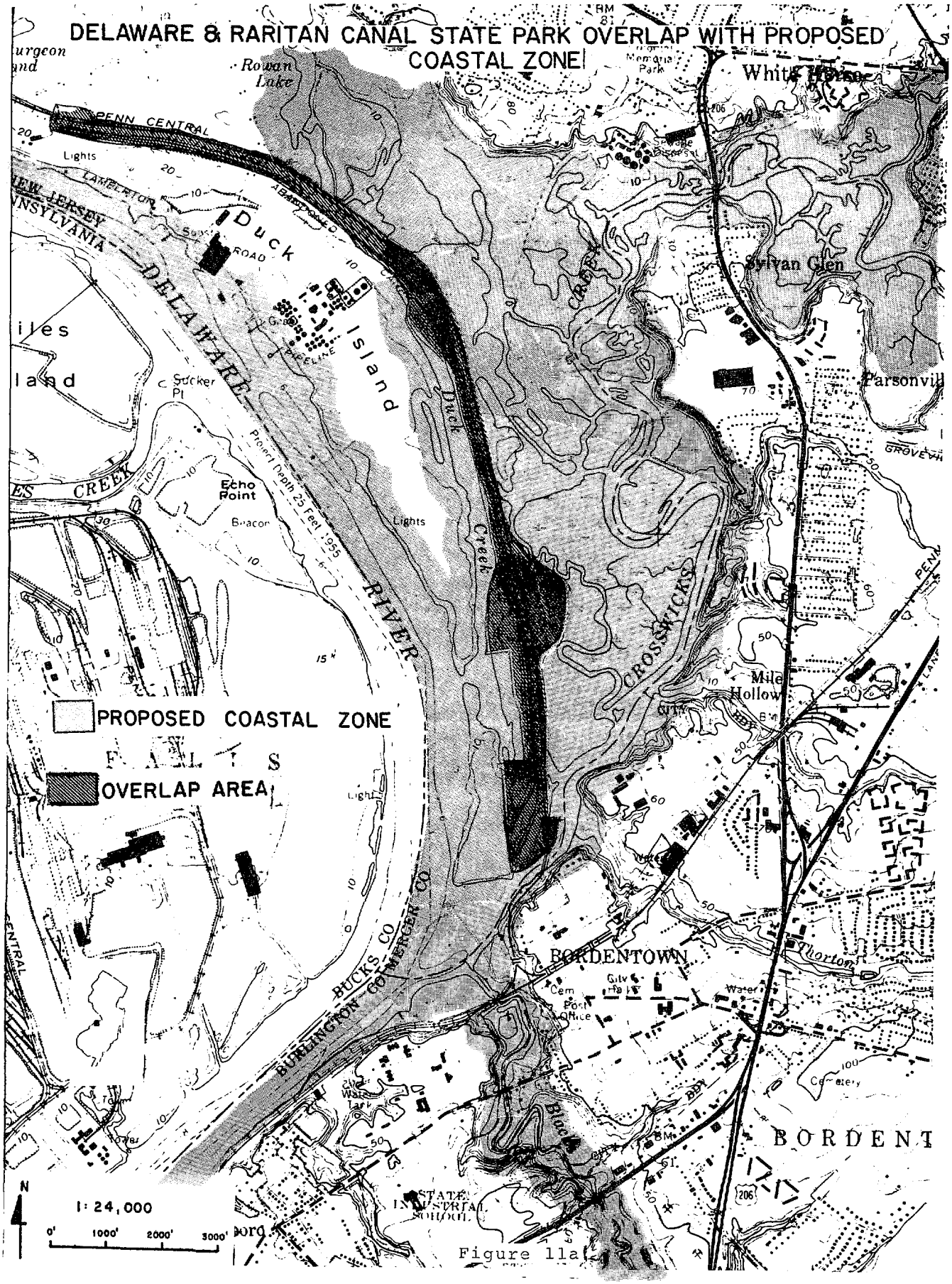
The projects to be reviewed by the Commission are set by rules adopted in 1979 (N.J.A.C. 7:45-1.1 et seq.): Within 1,000 feet of the Canal Park (the "A" zone), all projects will be reviewed for drainage, visual, noise or other ecological impacts. Outside this area, but within watersheds of streams that enter the Canal Park (the "B" zone), projects will be reviewed only for drainage impacts. Projects to be reviewed in this latter area will be those involving construction or redevelopment of twenty-five or more dwelling units, projects which will cover one or more acres of land with impervious surfaces, and projects with any of the following uses: livestock pens, corrals or feed lots; pipelines, storage or distribution systems for petroleum products or chemicals; liquid waste, storage, distribution or treatment facilities; solid waste storage, distribution or incineration or landfill; quarries, mines or borrow pits; land application of sludge or effluents.

Two small segments of the canal park, totalling approximately 288 acres, lie within the proposed coastal zone (See Figure 11). In the Northern Waterfront area, the Canal extends along the Raritan River from New Brunswick to the limits of tidal water. In the Delaware River area, it begins at Crosswicks Creek, Hamilton Township, and then leaves the coastal zone as it turns away from the river in Trenton. Within these segments, proposed development would have to meet the policy requirements of both the Canal Commission and the Coastal Management Program. The policies proposed by the Commission are consistent with the proposed Coastal Resource and Development Policies.

Pinelands Protection

The Pinelands Protection Act (P.L. 1979, Ch. 111; N.J.S.A. 13:18A-1 et seq.) establishes a framework for the comprehensive planning and regulation of development in the approximately 1,000,000 acres of fragile, highly valued pinelands that reach across central and southern New Jersey. The Pinelands Area and its sub-areas are mapped and the overlap between that area and the proposed coastal zone is shown in Figure 19 (Chapter 4).

The Act is intended to accomplish the purposes of the National Parks and Recreation Act of 1978 (P.L. 95-625), which authorized federal support for Pinelands protection through planning and land acquisition. The Federal Act directs the Department of the Interior to provide up to $3 million in planning assistance if requested by the Governor, and up to $26 million in implementation funds following submission of an acceptable master plan. Both the planning process and a


DELAWARE & RARITAN CANAL STATE PARK OVERLAP WITH PROPOSED COASTAL ZONE
PROPOSED COASTAL ZONE
OVERLAP AREA
Rowan Lake
PENN CENTRAL
Duck Island
DELAWARE RIVER
Duck Creek
CROSSWICKS
Sylvan Glen
Parsonvill
Echo Point
Project Depth 25 Feet 1955
Mile Hollow
BORDENTOWN
BUCKS CO
BURLINGTON CO
MERCER CO
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BORDENT
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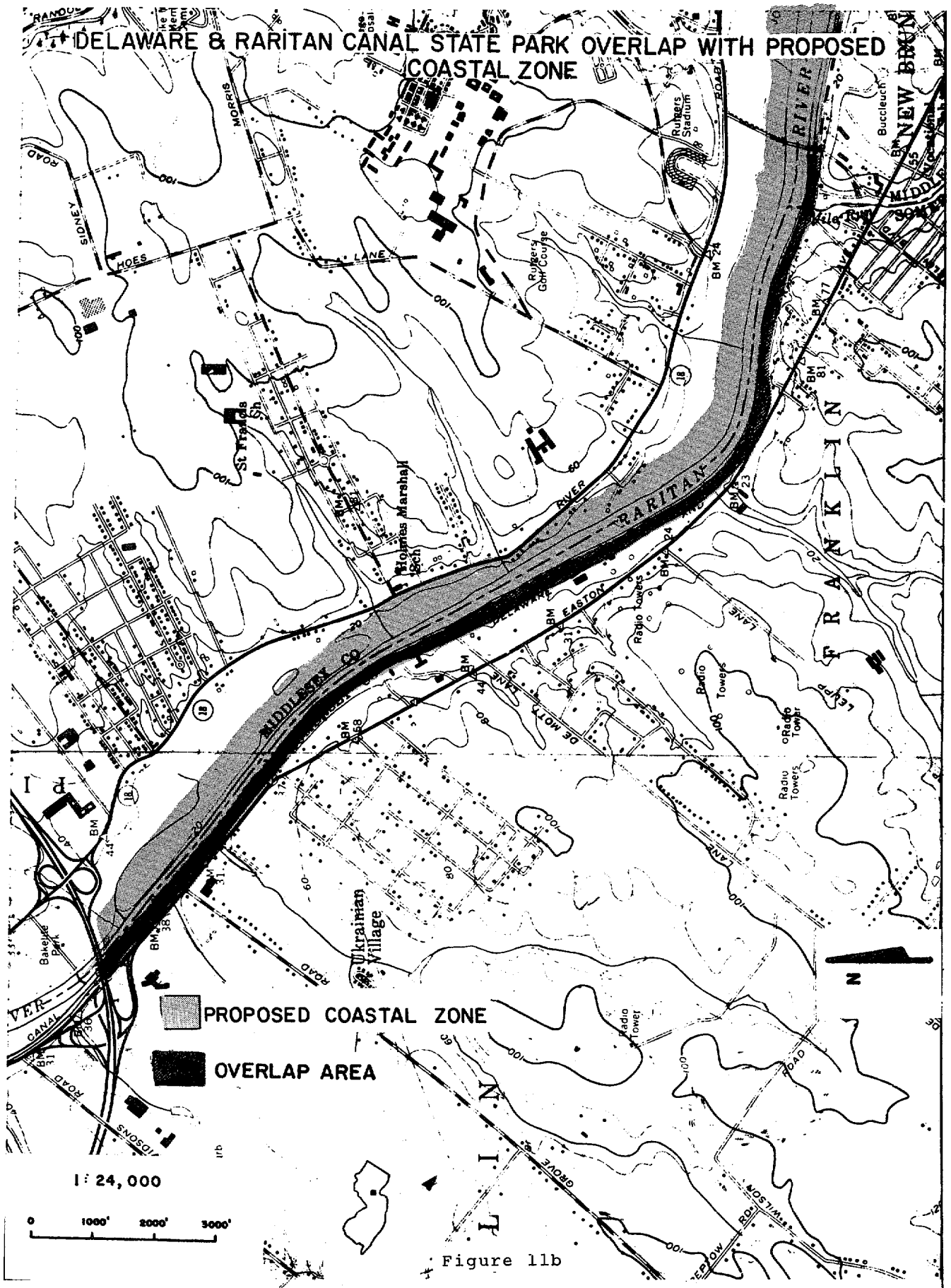
Figure 11a


DELAWARE & RARITAN CANAL STATE PARK OVERLAP WITH PROPOSED COASTAL ZONE
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RIVER
MIDDLESEX CO
FRANKLIN
Ukrainian Village
Rutgers Stadium
Rutgers Golf Course
St Francis Sch
Holmes Marshall Sch
Radio Towers
Bakelite Park
Buccleuch
HOES LANE
SIDNEY ROAD
MORRIS
EASTON
DE MOTT LANE
LEUPP LANE
GROVE
WILSON RD
CANAL
ROAD

Figure 11b

moratorium on State permit approvals and financial assistance were initiated by a Governor's Executive Order (EO No. 71, 1979) in March, 1979. The Pinelands Protection Act was subsequently passed and signed into law on June 28, 1979.

The Act establishes the following policy goals for the Pinelands:

1. The goal of the comprehensive management plan with respect to the entire pinelands area shall be to protect, preserve and enhance the significant values of the resources thereof in a manner which is consistent with the purposes and provisions of this act and the Federal Act.

2. The goals of the comprehensive management plan with respect to the protection area shall be to:

(a) Preserve and maintain the essential character of the existing pinelands environment, including the plant and animal species indigenous thereto and the habitat therefor;

(b) Protect and maintain the quality of surface and ground waters;

(c) Promote the continuation and expansion of agricultural and horticultural uses;

(d) Discourage piecemeal and scattered development; and

(e) Encourage appropriate patterns of compatible residential, commercial and industrial development, in or adjacent to areas already utilized for such purposes, in order to accommodate regional growth influences in an orderly way while protecting the pinelands environment from the individual and cumulative adverse impacts thereof.

3. The goals of the comprehensive management plan with respect to the preservation area shall be to:

(a) Preserve an extensive and contiguous area of land in its natural state, thereby insuring the continuation of a pinelands environment which contains the unique and significant ecological and other resources representative of the pinelands area;

(b) Promote compatible agricultural, horticultural and recreation uses, including hunting, fishing and trapping, within the framework of maintaining a pinelands environment;

(c) Prohibit any construction or development which is incompatible with the preservation of this unique area;

(d) Provide a sufficient amount of undeveloped land to accommodate specific wilderness management practices, such as selective burning, which are necessary to maintain the special ecology of the preservation area; and

(e) Protect and preserve the quantity and quality of existing surface and ground waters.

Coastal resources along the Hudson River north of the George Washington Bridge, most notably the Palisades, are protected by inclusion within the Palisades Interstate Park. The park is managed by the Palisades Interstate Park Commission, a bi-state agency of New Jersey and New York.

Federally owned land is excluded from the coastal zone (see Appendix B).

Air Quality Programs

As the New Jersey agency designated to administer the Federal Clean Air Act, DEP's Division of Environmental Quality conducts the planning for and the monitoring of air quality. The Division's Bureau of Air Pollution Control has promulgated, and is further developing programs by which the National Ambient Air Quality Standards (NAAQS) will be attained. In compliance with the 1977 Amendments to the Federal Clean Air Act, New Jersey has submitted a State Implementation Plan (SIP) to the U.S. Environmental Protection Agency outlining strategies for attainment and maintenance of the Standards.

The Bureau of Air Pollution Control has an extensive permitting program which reviews proposals for any operation which would result in air pollution emissions. Thus, any proposal to construct or operate manufacturing facilities, non-commercial fuel burning equipment, storage tanks to hold fuel and other organic substances, and commercial fuel burning equipment with a heat output rate of one million BTU/hour or more must receive a permit from DEP. In addition, the Bureau requires permits to install any incinerator unless it will serve a multi-family dwelling of six units or less.

The purpose of requiring permits under the State's Air Pollution Control Act is to impose controls necessary to meet established standards on potential sources of new air pollution. The Act, therefore, will serve to implement the Coastal Policies on air quality. Permits are granted when the Bureau has ascertained that the application complies with Federal and State air pollution regulations, and that its emissions control system reflects "Best Available Control Technology", also considered "state of the art" technology. In any year, the Bureau reviews 6,000 to 7,000 applications and approves all but about 120.

Solid Waste

The Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. authorizes DEP to supervise the collection and disposal of all solid wastes and related operations, including the location of disposal sites. Proposed facilities and sites are to be reviewed with reference to the quality of groundwater, erosion control, and "such other measures as shall be deemed necessary to protect the public health and safety of the environment "(N.J.S.A. 13:1E-6). Because numerous environmental impacts may be considered under this Act, DEP would apply all of the proposed Coastal Policies as criteria for site selection for solid waste collection and disposal facilities.

Under the New Jersey Solid Waste Management Act and the Federal Resource Conservation and Recovery Act (RCRA, P.L. 94-580), every county in the State as well as the Hackensack Meadowlands Development Commission must draft a solid waste management plan. After the plans are adopted, they will control the siting of solid waste disposal facilities. RCRA states that for a plan to receive EPA implementation funds, it must provide that all solid waste be recycled or disposed of in sanitary land fills meeting federal requirements. The Division of Coastal Resources will review developing solid waste management plans for consistency with coastal policies.

The Act creates a 15 member Commission (in but independent of DEP), and directs the Commission to develop a comprehensive Pinelands management plan by August 1980. The plan will prescribe specific resource and development policies for the Pinelands and will outline the plans for their implementation.

Within one year of the plan's adoption, every county and municipality located in whole or in part in the pinelands area must submit to the Commission a master plan and/or zoning ordinance which complies with the pineland policies. Also following adoption, state regulatory and capital spending decisions in the area must comply with the policies.

The Act continues and extends to county and municipal approvals the moratorium on decision-making in the Pinelands area. The construction of single family dwellings is exempted from the moratorium in the protection area if the building lot was owned by January 7, 1979 by the person who is to occupy the dwelling, has access to a sewer system or, where no sewer is available, is greater than one acre in area.

The Commission may grant exceptions from the moratorium when necessary to alleviate extraordinary hardship or to satisfy a compelling public need, or where it has been determined that the project is consistent with the Act's purposes and would not result in substantial impairment of the Pinelands area's resources. The Commission has not yet adopted regulations governing this process.

In areas where the Pinelands overlaps the area of CAFRA jurisdiction (see Figure 19), the Act requires that DEP review its policies in order to insure that they comply with the goals of the Pinelands Act. DEP will report to the Commission that the Rules on Coastal Resource and Development Policies, which are highly specific and detailed, with respect to the soils and vegetation of the Pinelands, are consistent with the purposes of the Act.

Regulation of State Owned Land

The Natural Areas System Act (N.J.S.A. 13:1B-15.12a et seq.) calls for the Department to designate and regulate State-owned lands for the purpose of protecting and enchancing their natural values. The natural area regulations govern state agencies administering lands designated as part of the system, and ensure that any critical areas purchased by the State for preservation or conservation purposes are adequately protected. The Natural Areas System Act is a regulatory adjunct to those coastal policies encouraging the preservation of open space and the protection of critical environmental areas.

There are ten designated Natural Areas in the proposed coastal zone. These are described in Chapter Five under Geographic Areas of Particular Concern.

Parts of Rancocas State Park in Burlington County and the Delaware and Raritan State park in Middlesex and Mercer Counties are also in the proposed coastal zone. These parks and any other State-owned lands managed by DEP within the coastal zone, including forests and fish and wildlife management areas, will be managed consistent with the Coastal Policies. Development proposed on DEP managed lands is reviewed by the Division of Coastal Resources to assure consistency, if it requires one or more coastal permits.

Harbor Clean-Up

The "New York Harbor Collection and Removal of Drift Project" is a joint State/Federal undertaking, supervised by the U.S. Army Corps of Engineers and administered at the state level by the Bureau of Capital Improvements in DEP's Division of Fiscal and Support Services. The plan calls for the Corps to remove all abandoned sources of drift from both public and private property, from mean high water seaward to a depth of 20 feet. Disposal methods include burning at sea, landfill, and land incineration, with burning at sea found preferable. Some dredging may be required to reach structures scheduled for removal. Local governments are to be responsible for subsequent maintenance of facilities, and no funds are provided for the revitalization of cleared areas.

New Jersey's share of the project's cost, $10 million, was authorized by the voters of the State as part of the $30 million Beaches and Harbors Bonds Act of 1977. The Act states in part that "the state's growing population, expanding commercial development, and tourist industry all require and should have a clean, adequate, and accessible shoreline" (Section 2b).

The program, which has to date been planned only in the Northern Waterfront area, has been administered with the removal of navigation hazards as the sole criteria for distribution of funds, but once the Coastal Resource and Development Policies are adopted throughout the coast, municipal consistency with them will be one condition for the award of Harbor Clean-Up funds.

OTHER STATE AGENCIES

A number of state agencies, in addition to DEP, make decisions affecting land and water uses in coastal areas.

Unlike the operating divisions of DEP, these agencies are bound by the Rules on Coastal Resource and Development Policies only when their activities require a DEP permit. Only the Department of Energy (DOE) is specifically obligated to follow the adopted Coastal Resource and Development Policies, pursuant to a Memorandum of Understanding with DEP.

The sections which follow describe those activities of other state agencies which affect coastal land or water uses and which could, if conducted consistently with the Coastal Policies, enhance the program's effectiveness.

All major State public construction projects will be consistent with the coastal policies by virtue of the Governor's Executive Order 53 of 1973, which requires that any State project costing $1.0 million or more, or State projects costing less than $1.0 million which by reason of their nature or location have the potential for substantial adverse environmental impacts, be first reviewed by DEP for environmental impacts.

Department of Agriculture - The Department of Agriculture shares with DEP the regulatory responsibility of the Soil Erosion and Sediment Control Act (N.J.S.A. 4:24-39 *et seq.*). The Act is administered by the State Soil Conservation Committee, which includes the Commissioners of the two Departments, and local Soil Conservation Districts. The Act controls erosion and sediment during the construction phase of development.

It mandates site plan review of proposed sediment control practices for all construction, excluding individually developed single family homes, resulting in a soil disturbance of at least 5,000 square feet and requiring a municipal building permit. Reviews are conducted according to regulations (N.J.A.C. 2:90-13) describing standards for techniques to establish ground protection and control of runoff, such as diversions, sediment basins, slope protection structures and channel stabilization. The Coastal Resource and Development Policies pertaining to soil are based on the Act, thereby assuring conformity between the two.

Department of Community Affairs - The Department of Community Affairs (DCA) is responsible for the administration of a broad range of social programs, including those affecting housing. The Department does not, however, play a significant role in the formal management system of the Coastal Program, with the possible exception of the activities of its Housing Finance Agency.

Under Section 701 of the Federal Housing and Community Development Act and the State law which established the Division of State and Regional Planning (N.J.S.A. 13:1B-15.50), DCA has prepared a State Development Guide Plan (Preliminary Draft - September 1977). The major policies of the Guide Plan are: Maintain the quality of the environment, preserve the open space necessary for an expanding population, provide space and services to support continued economic expansion, and enhance the quality of life in urban areas. These policies, and the regulatory and funding decisions made under them, are consistent with the proposed coastal policies.

DCA's Housing Finance Agency (HFA) provides financing for private housing, and makes its decision on the basis of the Guide Plan and other State policies. Because all HFA proposals involve projects with costs exceeding $1.0 million, DEP is able to use Executive Order 53 to insure that they are designed consistently with the Coastal Resource and Development Policies. In addition, HFA-financed projects with 25 units or more require a CAFRA Permit, and all HFA-financed projects in the coastal zone outside the CAFRA area will require either a Waterfront Development or Wetlands permit.

Department of Labor and Industry - The Department of Labor and Industry's (DLI) regulatory programs are, for the most part, not land-use related. However, the Department, through its Office of Business Advocacy, plays an important role in siting and financing business and industry in the State. As part of this effort, DLI assists industrial developers in obtaining the State permits necessary for siting and operating plants, and will therefore work with DEP on industrial siting decisions. In addition, the Department can speed the development review process by steering potential developers towards sites on which development would be consistent with the Coastal Policies.

Economic Development Authority - The Economic Development Authority (EDA), arranges low-interest, long-term financing for projects (including commercial fisheries), and is authorized to enter into contracts and buy and sell land and buildings. It is governed by a seven member board which includes the Commissioner of DEP. The Authority works closely with the Division of Economic Development within the Department of Labor and Industry. In 1977, it provided $265 million for low interest loans throughout the State. DEP is working with EDA to explore the opportunity for consistency between EDA funding criteria and the proposed Coastal Policies. This could lead to coordinated planning for industrial development.

Department of Transportation - The Department of Transportation (DOT) is responsible for the planning, construction, and maintenance of state highways, the review and funding of local highway projects, the planning of state and regional transportation strategies, and the regulation of some transportation facilities. DOT construction projects affecting DEP-regulated lands or resources are subject to DEP regulatory authority, insuring their conformity with the coastal policies. As part of their planning responsibilities, DOT and DEP have a working relationship for planning in coastal areas.

COUNTY LAND USE AUTHORITY

The major role played by counties in the coastal program management system is that of planners. County land use authority is limited to the review and approval of subdivision and site plans for traffic impacts on county roads, and for drainage impacts on county facilities (see N.J.S.A. 40:27-1 et seq.). Most counties have prepared master plans or studies analyzing county issues and concerns to guide their decision making. The Municipal Land Use Act (N.J.S.A. 40:55D-1 et seq.) mandates coordination between county and municipal authorities by requiring that municipal master plans include a statement concerning the relationship between the municipal plan and the county master plan.

Other county functions which could help to carry out a coastal program include the 208 water quality planning responsibility some counties have undertaken and the counties' responsibility to prepare Solid Waste Management plans. Under the County Environmental Health Act of 1978, each county can formulate and enforce environmental health ordinances to control air pollution, solid waste, noise and water pollution. These ordinance must be consistent with applicable state laws, rules and regulations. The Act gives the Commissioner of DEP authority to delegate administration of the environmental health laws it administers to the counties. To date, this authority has not been exercised, nor have the Act's programs been funded.

Most coastal counties have been actively involved in the planning and development of the New Jersey's coastal program. For two years, DEP sponsored a state-county coastal coordination project with every county in the Bay and Ocean Shore Segment and Salem, Camden, Gloucester, Burlington (one year), Middlesex, Hudson and Union (one year) counties. Using funds made available under the federal Coastal Zone Management Act, DEP contracted with the counties for the provision of information and analysis which is being used in the development of the Coastal Program. The counties have generated ideas, and in some cases, suggested a boundary and policies for their section of the coastal zone.

MUNICIPAL LAND USE AUTHORITY

New Jersey's municipalities derive their power to enact and enforce zoning ordinances from the State, and possess extensive regulatory authority over land uses. The Municipal Land Use Law, (NJSA 40:55D-1 et seq.), requires municipal planning boards to prepare master plans to guide municipal land use. It requires that all municipal zoning ordinances be consistent with or designed to carry out the land use element of the master plan.

The State and municipality act as a check on each other in areas subject to State land use regulatory authority. A locally approved proposal cannot be constructed without receipt of relevant state approvals, and a State-approved project, with certain exceptions in which the State has eminent domain authority, must receive appropriate local approvals.

The Division of Coastal Resources has been soliciting municipal participation in the development of the coastal program for years by sharing draft documents with municipal officials and holding public meetings throughout the state. In addition, the Division will continue to encourage municipalities to review and comment on State coastal permit applications. Active involvement of the municipalities and consistency between local plans, ordinances and policies and state Coastal Policies is important for the successful development and full implementation of the Coastal Program.

REGIONAL LAND USE AUTHORITY

Delaware River Area

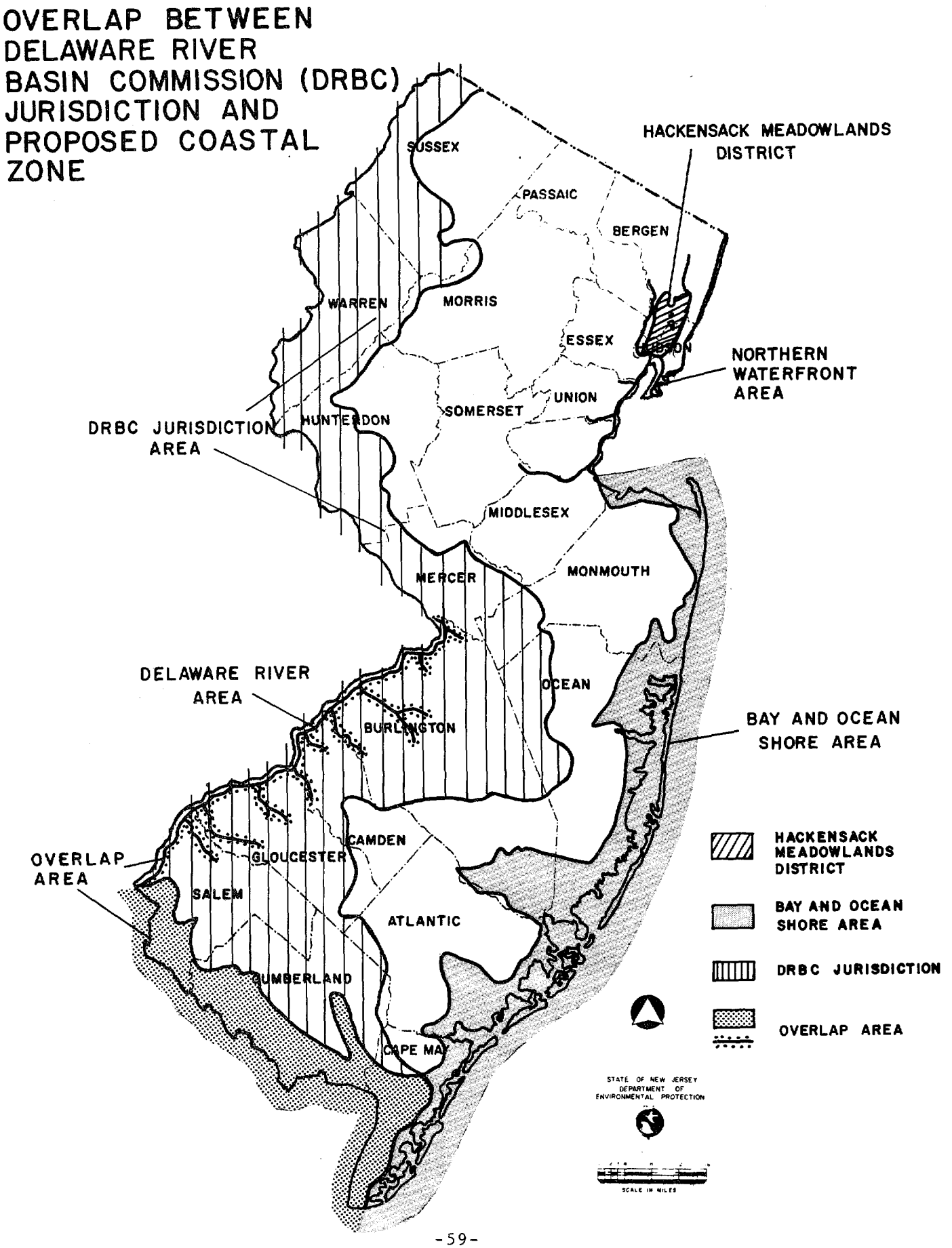
In the Delaware River area, authority to implement the Coastal Policies is complemented and enhanced by the Delaware River Basin Commission (DRBC). The DRBC was created in November 1961 upon enactment of concurrent legislation by the Congress of the United States and by the respective legislatures of the States of Delaware, New Jersey, and New York, and the Commonwealth of Pennsylvania. It is charged with the responsibility for development and effectuation of plans, policies and projects relating to the water resources of the multi-state Delaware River Basin. The members of the DRBC are the Governors of the signatory States and one commissioner appointed by the President of United States. The Governors appoint alternates to the act as their representatives. The Commission exercises its powers and duties within the limits of the Delaware River Basin, defined in the Delaware River Basin Compact as the area of drainage into the Delaware River and its tributaries, including Delaware Bay (see Figure 12).

Under the provisions of the Compact, DRBC has broad powers in relation to management of water supplies, water quality, pollution control, flood protection, watershed management, recreation, fish and wildlife, hydro-electric power, and regulation of water withdrawals and diversions. Under Section 3.8 of the Compact, no project having a substantial effect on the water resources of the basin may be undertaken without the Commission's approval. Under Article 11, all public projects affecting the water resources of the Delaware Basin must be planned in consultation with the Commission.

The Delaware River Basin Compact requires that the DRBC develop and adopt a comprehensive plan for the water resources of the Basin. The Comprehensive Plan differs from the usual "master plan" in that it serves not only as a guide for development of the water resources, but also as a management and regulatory mechanism. It sets water quality standards for the basin, which together with state standards are the criteria for water quality certification of NPDES permits. It also establishes an interstate waste load allocation program for the Delaware River Estuary. In October, 1979, the DRBC produced a report titled The Delaware River Basin containing generalized recommendations and strategy for updating the Comprehensive Plan. The report was the produce of a comprehensive basinwide (Level B) study of the basins's water resources.

The Comprehensive Plan includes Commission administrative actions and determinations, and the Plan continues to grow in scope as the Commission regularly adds new policies, criteria, standards and projects. For example, in 1978 the Commission adopted a wetlands policy similar in substance to the State's proposed Wetlands Special Area Policy, as part of the Comprehensive Plan. The plan, therefore, goes beyond the presentation of programs and facilities for meeting various needs; it includes a codification of administrative decisions governing water resources use, development and conservation.

Figure 12


OVERLAP BETWEEN DELAWARE RIVER BASIN COMMISSION (DRBC) JURISDICTION AND PROPOSED COASTAL ZONE
HACKENSACK MEADOWLANDS DISTRICT
NORTHERN WATERFRONT AREA
DRBC JURISDICTION AREA
DELAWARE RIVER AREA
BAY AND OCEAN SHORE AREA
OVERLAP AREA
SUSSEX
PASSAIC
BERGEN
WARREN
MORRIS
ESSEX
UNION
SOMERSET
HUNTERDON
MIDDLESEX
MERCER
MONMOUTH
OCEAN
BURLINGTON
CAMDEN
GLOUCESTER
SALEM
ATLANTIC
CUMBERLAND
CAPE MAY
HACKENSACK MEADOWLANDS DISTRICT
BAY AND OCEAN SHORE AREA
DRBC JURISDICTION
OVERLAP AREA
STATE OF NEW JERSEY
DEPARTMENT OF
ENVIRONMENTAL PROTECTION
SCALE IN MILES

DEP hopes to modify an existing administrative agreement between DRBC and DEP for the purpose of coordinating DEP coastal permit programs with DRBC project review in the Coastal Zone. Although such an agreement is not essential for federal approval of the New Jersey Coastal Management Program, it would supplement the coastal permit programs by ensuring that DRBC, upon the request of DEP, will use its authority under Section 3.8 of its Compact to review proposed projects significantly affecting the water resources of the Delaware River Basin. A recently completed coordination project between DRBC and DEP-DCR provided input to the Department in drafting the proposed Coastal Resource and Development Policies and concluded that the policies are not in conflict with the DRBC Comprehensive Plan. The administrative agreement would ensure that DRBC will consider adopted Coastal Resource and Development Policies to the maximum extent feasible as criteria in its project review decisions. The Department will also work with DRBC and the Delaware and Pennsylvania coastal management programs to develop a unified set of coastal policies for consideration for future incorporation into the DRBC Comprehensive Plan.

Another regional agency in the Delaware River Area is the Delaware River Port Authority (DRPA). The DRPA is a self-sustaining bi-state public agency of Pennsylvania and New Jersey. It owns and operates four bridges which span the Delaware River connecting Southeastern Pennsylvania and Southern New Jersey, and through its subsidiary PATCO operates the Lindenwold High Speed Line. Although the Delaware River Port Authority does not own or operate any port facilities along the Delaware, it promotes trade and commerce for the ports of the Delaware River, collectively known as Ameriport.

As part of its efforts to plan for and promote the Delaware River Port area, the Delaware River Port Authority is currently working with the cities of Camden, Philadelphia, and Wilmington to develop a Delaware River Regional Port Planning Study which will be funded by the federal Maritime Administration.

Although the DRPA is specifically exempted from State regulation (N.J.S.A. 32:3-6), it must obtain permission for the acquisition or use of State-owned tidelands from the Tidelands Resource Council.

Northern Waterfront Area

In most of the northern waterfront, the Coastal Policies are enforceable only through the Waterfront Development and Tidelands Management programs. Near the Raritan Bay, DEP also has regulatory authority over development in mapped coastal wetlands. In addition, DEP will fund capital spending projects only when they are consistent with the Coastal Policies.

The Coastal Policies can be further implemented, however, through coordination with several interstate and regional agencies having jurisdiction in the area. One of these agencies, the Port Authority of New York and New Jersey, is a self-supporting corporate agency formed in 1921 by the States of New York and New Jersey "to deal with the planning and development of terminal and transportation facilities, and to improve and protect the commerce of the Port District". The Port District encompasses a large area surrounding New York harbor and includes all of the Northern Waterfront coastal zone.

The Authority's operations are not exempt from DEP's regulatory and tidelands authority (see N.J.S.A. 32:1-35.11 and 32:1-32.35).

Because of the Port Authority's active involvement in the development and management of port, transportation and industrial facilities, the Division of Coastal Resources is working closely with the Authority in policy development. The planning and development of large northern waterfront sites by this interstate agency could be an important step toward revitalization of urban waterfront areas.

In 1978, legislation was enacted in New Jersey and New York enabling the Port Authority to undertake an industrial park development program intended to revitalize the inner cities of the Port District and to create an estimated 30,000 jobs over the next ten years. The Port Authority program to develop sites for manufacturing plants in the hard-pressed central cities would require an investment of more than $1 billion in public and private funds over the next ten years, of which the Port Authority would invest up to $400 million on a self-supporting basis.

The Interstate Sanitation Commission was formed in 1936 by the states of New Jersey, New York and Connecticut to control pollution in the tidal waters of the New York metropolitan area. More recently the Commission has become concerned with air pollution as well, and monitors and conducts research concerning both air and water quality. Under its compact (Article 17 as revised October 1970), the Commission may "develop and, after public hearing place in force ... classifications of waters and effluent standards within the District". A NPDES permit may not be issued for any discharge which would violate the Commission's standards.

Waterfront planning and management in the Northern Waterfront Area may also benefit from the Hudson River Waterfront Study, Planning, and Development Commission. This Commission, established by Governor Byrne in Executive Order No. 69 on January 11, 1979, is to "conduct a thorough study and investigation of the various alternatives for the planning and redevelopment of the Hudson River Waterfront South of the George Washington Bridge". The Commission is composed of State legislators, representatives of Hudson and Bergen Counties, the mayors of 15 waterfront municipalities in those counties and other citizens appointed by the Governor. The Commission has released a Working Draft Report (March 1980) and is expected to present its recommendations to the Governor later in 1980. DEP's Bureau of Coastal Planning and Development serves as staff to the Commission.

Federal Agency Authority

Section 307 of the FCZMA allows states with approved coastal management programs to object to direct federal activities, federal permits or funding activities in or affecting the coastal zone which would violate elements of the Coastal Program. Also covered by Section 307 are federally licensed and permitted activities described in Outer Continental Shelf (OCS) exploration plans.

The meaning of "Federal Consistency" has been subject to much debate since it was first included in the Coastal Zone Management Act in 1972. At a minimum, it leads to increased coordination between DEP and federal agencies near the coast. It increases opportunities for more efficient and effective review of coastal projects which require both state and federal approvals and it establishes a formal process for resolution of differences.

Once the State has an approved coastal management program, any OCS plan for exploration, development or production from any tract affecting New Jersey's coast would have to be certified as consistent with the State Coastal Management Program. This is now in effect as a consequence of federal approval for the Bay and Ocean Shore Segment. As opposed to past procedures which only allowed the State to exercise review and comment on OCS plans, the consistency provisions go one step further by allowing the State to enforce its coastal policies through a consistency certification process.

Federal consistency applies only after a State's coastal program is approved and cannot be used by a state to help demonstrate that it has sufficient authority to meet the standards of the federal Coastal Zone Management Act. Federal Consistency is discussed in detail in Chapter Five.

Public Participation

Public participation is an essential element in the development of a viable coastal management program. The New Jersey program offers opportunities for participation not only in program development, but also in regulatory decision-making and continued planning.

The three coastal permit programs (CAFRA, Wetlands, and Waterfront Development) all have public notice and hearing requirements, providing the opportunity for public participation in the implementation of the coastal policies. DEP will ensure public notice of pending applications through notification of the appropriate county planning board, county environmental commission, municipal planning board, county environmental commission, soil conservation district, and the Delaware Valley Regional Planning Commission and Tri-State Regional Planning Commission for proposals in Burlington or Monmouth and Middlesex Counties respectively. In addition, owners of land adjacent to the site proposed for development will be informed of the application. All pending applications are listed in the DEP Bulletin which is distributed free and has a current circulation of 1,600. The Department is also cooperating with the "coast watch" program, sponsored by the American Littoral Society, to inform more people about pending coastal decisions and other events.

DEP holds a public hearing near the site of a proposal for every CAFRA permit application, and for major Wetlands and Waterfront Development permit applications. In addition, any interested person can review DEP's file on a pending application and submit written comments. Decisions to lease or sell tidelands are made by the Tidelands Resource Council at meetings which are open to the public.

DEP will continue to involve coastal residents, workers and visitors in planning for the future of the coastal zone. This involvement takes several forms, and the Department will remain open to additional public participation techniques which may be suggested. Substantive changes in the Coastal Management Program and its policies will be subject to the notice and hearing requirement of both the federal regulations and the New Jersey rule-making process.

The Division of Coastal Resources will continue to publish The Jersey Coast several times each year to inform interested people of future public meetings, available reports, and coastal planning and regulatory activities. Division staff will continue to make themselves available to meet with interested groups and the

Division will continue to convene a series of public meetings throughout the coastal zone at least twice a year. In addition, Division staff will continue to meet periodically with the leaders of statewide environmental groups, builders groups, and other groups which express interest.

Part of public participation is public education, and DEP will continue to prepare and to assist others in preparing informative, understandable publications about the coast and the coastal zone management program. The Department will supplement governmental publications with the use of newspapers, magazines, radio and displays in public places such as libraries, shopping areas and conventions.

Conflict Resolution - Appeals

The permit decisions made under the New Jersey Coastal Management Program, as described in this Chapter, can be appealed administratively. A CAFRA permit decision can be appealed by any interested person within 21 days of the final DEP action, to the DEP Commissioner or to a Coastal Area Review Board composed of the Commissioners of Environmental Protection, Community Affairs, and Labor and Industry. The decision of the Commissioner or of the Review Board can be further appealed through the courts. A Wetlands permit decision may be appealed to the DEP Commissioner and then to the courts. A Waterfront Development permit decision may be appealed to the Tidelands Resource Council (DEP has proposed to change the procedure so appeals will be to the Commissioner), and then to the courts.

There is no administrative process for appealing the decision of a State agency to adopt a rule, but the adoption of any rules, including the Rules on Coastal Resource and Development Policies, may be challenged by bringing an action in the Appellate Division of the New Jersey Superior Court.

The Department of Energy (DOE) may appeal decisions affecting the construction or location of an energy facility to the Energy Facility Review Board. Under the Department of Energy Act, the Board will be called into existence by the Department of Energy if it disagrees with the decision of any state agency to grant or deny a permit for an energy facility. The Memorandum of Understanding in Appendix C explains this process. It is important to note, however, that between July 1977 and the present, the DEP/DOE conflict resolution process has not been necessary.

The Management System for the Coastal Program does not appear likely to generate other conflicts which will require a resolution mechanism. If a proposal requires approval under several laws with different sets of criteria, the applicant will have to meet them all. A project subject to the Coastal Management Program and encouraged by the plans or actions of another agency could not be constructed unless it received the required coastal permits. At the same time, a project which conforms with all the Coastal Resource and Development Policies could not be constructed until the applicant received all other required state, federal, and municipal approvals.

Chapter 4: Coastal Resource and Development Policies

CHAPTER FOUR - COASTAL RESOURCE AND DEVELOPMENT POLICIES

Note to Reader

This chapter defines substantive coastal policies to guide public decisions about significant proposed development and management of resources of New Jersey's coastal zone. A three step decision-making process is used in order to increase predictability and add more specificity to the coastal decision-making process.

Coastal policies for the Bay and Ocean Shore Segment were adopted as administrative rules (N.J.A.C. 7:7E-1.1 et seq., effective September 28, 1978), and appeared on pages 27-163 of the New Jersey Coastal Management Program - Bay and Ocean Shore Segment and Final Environmental Impact Statement (August 1978). As adopted, the policies apply only to the Bay and Ocean Shore Segment.

The Department of Environmental Protection (DEP) is considering amendments to the Rules on Coastal Resource and Development Policies for two reasons. First, DEP proposes to change the geographic scope of the Rules from the Bay and Ocean Shore Segment to the coastal zone for the entire state. This requires some policy revisions and additions in order to accommodate regional differences in the environment and economy. Second, in adopting the rules in 1978, DEP pledged to make an annual review of the rules and make appropriate amendments based on that review.

DEP, therefore, is circulating these Proposed Amendments to the Rules on Coastal Resource and Development Policies for review and comment, as parts of both the completion of the State's coastal management program and the annual review of the Coastal Policies.

This Chapter proposes one set of policies for New Jersey's entire proposed coastal zone, to include both the Bay and Ocean Shore Segment and the other parts of the coastal zone. The framework of the Chapter is the policies adopted effective September 28, 1978 for the Bay and Ocean Shore Segment. DEP has chosen this format so that the coastal program can be combined into one unified document with the program for the Bay and Ocean Shore Segment.

Many of the proposed amendments are changes in format only, and are intended to make the policies clearer, and their presentation more rational. Other changes have been made because the Bay and Ocean Shore Segment policies were not appropriate for statewide application and had to be altered to also apply to more developed areas. Finally, a number of proposed changes are in response to comments by project review officers in the Division of Coastal Resources, developers, environmentalists, and other interested parties who have had the experience of working with these policies. The major substantive changes are summarized below:

1. There is now a proposed Special Urban Area Policy for Special Urban Areas (7:7E-3.38). This policy would encourage development which would lead to the revitalization of a Special Urban Area, and would allow certain mixed use development adjacent to the water's edge in Special Urban Areas.

2. There is a proposed Special Area Policy for the Hackensack Meadowlands District. The policy proposes that the master plan of the Hackensack Meadowlands Development Commission be adopted as coastal policies for District.

3. The Northern Waterfront Area and the Delaware River Area are both to be defined as High Growth Regions, with the exception of two small portions of the Delaware River Area, which are not designated as a Growth Area by the State Development Guide Plan prepared by the New Jersey Department of Community Affairs.

4. The coastal objective of a waterfront park in each waterfront municipality is now proposed in the rules (7:7E-7.3(i)).

5. The proposed Use Policy on Energy Uses differentiates the acceptability of oil refineries and tank farms by coastal region. Both are conditionally acceptable in the developed coast, while oil refineries remain prohibited in the Bay and Ocean Shore Segment (BOSS), and tank farms remain prohibited on Barrier Islands and discouraged elsewhere in the BOSS segment (7:7E-7.4(i) and (k)). The energy conservation policy is made more specific. The energy policies are otherwise unchanged and are acceptable to N.J. DOE.

6. The Port Use Policy (7:7E-7.9) is proposed to be relaxed to allow the development of new port areas if expansion of existing ports is not feasible.

7. New Resource Policies are proposed for Shellfisheries (7:7E-8.3) to protect potentially productive shellfishing areas; for the Decommissioning of Projects (7:7E-8.24) to encourage developers to take long term responsibility for their projects; for Noise Abatement (7:7E-8.25) to ensure that new development conforms with the standards of the Office of Noise Control; and for Barrier Free Design (7:7E-8.26) requirements to be applied to all public space and all mutli-family residential developments of 250 or more units.

Below is a summary of format and minor substantive changes:

8. The proposed policies are now presented as rules, with a tentative N.J.A.C. numbering system. In the final Coastal Management Program for the Bay and Ocean Shore Segment of the State (August 1978), a different numbering system was used.

9. There is no longer a separate section of Location Policies for the Water's Edge (formerly Subchapter 5). It is proposed that the Water's Edge be divided into eleven Special Water's Edge Areas (see Section 7:7E-3.1). These areas are the Filled Water's Edge, Existing Lagoon Edges, Beach and Dune Systems, Wetlands, Floodplains, Central Barrier Island Corridor, Cranberry Bogs, Coastal Bluffs, Wet Borrow Pit Margin, Alluvial Flood Margins, and Coastal Bluffs.

10. The following seven area types are proposed to be classified as Special Areas with rules designed specifically for each of them. The first four were formerly classified as Water Area Types: Canals, Inlets, Marine Moorings, Ports, Submerged Infrastructure Routes, Intertidal Flats, and Hackensack Meadowlands District.

11. Policies on Beaches, High Risk Beach Erosion Areas, Accretion Areas, Overwash Areas, and Dunes are proposed to be combined into a single Special Area Policy called Beach and Dune Systems (7:7E-3.19). The policy discourages activities that adversely affect the natural functioning of the Beach and Dune System.

12. Policies on Bogs and Freshwater Wetlands, White Cedar Stands, and Coastal Wetlands are proposed to be combined into a single Special Area Policy for Wetlands (7:7E-3.20). This policy applies the same conditions to development in any wetland that was formerly applied to coastal wetlands. Development that would adversely affect White Cedar Stands remains prohibited.

13. The Borrow Pits Special Area is proposed to be divided into separate Special Area Policies for Wet Borrow Pits (7:7E-3.15), Dry Borrow Pits (7:7E-3.30), and Wet Borrow Pit Margins (7:7E-3.24).

14. The Water Acceptability Table is to be called a Water Area Policy Summary Table (7:7E-4.2). The table is shorter than the present table, because it is proposed to redesignate certain water area types as Special Area Types. Also, there are some changes in the proposed acceptability conditions.

15. There is now a proposed Location Policy on Transferred Impacts (7:7E-6.4). Transferred Impacts are the effects of new development which are transferred to another location through a direct chain of cause and effect. Development which would cause transferred impacts which would significantly degrade or reduce a Special Area would be prohibited.

16. The proposed policy on Planned Residential Developments has been made more specific. The policy is now called a policy on a Large-Scale and Multi-Use Developments (7:7E-7.2(i)). The policy discourages such developments in Low Growth Regions, and in Moderate Growth Regions, unless adjacent to an existing developed area. It finds them conditionally acceptable in High Growth Regions.

17. There are now proposed Use Policies for Transportation Uses (7:7E-7.5), Land Disposal of Dredge Spoil (7:7E-7.13). The Use Policy on Industry and Commerce is broken down into two separate Use Policies.

18. The Runoff Policy (7:7E-8.7) is clarified to state that the runoff standards are goals, not requirements, and that development which uses best available technology in an attempt to attain these goals is acceptable.

19. The Use Policy on Structural Shore Protection (7:7E-7.11(e)) is clarified to permit maintenance or reconstruction of existing retaining structures, provided they are not extended by more than 18 inches.

The entire text of the existing Rules and Proposed Amendments follows, with proposed additions <u>underlined</u> and proposed deletions in [brackets]. Where a policy has been moved without addition or deletion, it will not be underlined, but a note will explain the change in location.

The numbering system is that used in the New Jersey Administrative Code, (Title 7, Volume A, Subtitle C, Chapter 7E, published January 18, 1979). These numbers are different from those used in the Coastal Management Program - Bay and Ocean Shore Segment, although the wording and order of the entire chapter is the same under both systems. Use of the Administrative Code system is this DEIS and in the anticipated FEIS will result in a uniform reference system for the Coastal Resource and Development Policies.

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CHAPTER TABLE OF CONTENTS

		Page
SUBCHAPTER 1 -	INTRODUCTION [GENERAL PROVISIONS]	73
7:7E-1.1	Purpose	73
7:7E-1.2	Authority	73
7:7E-1.3	Jurisdiction	74
7:7E-1.4	Severability	77
7:7E-1.5	Review, Revision, and Expiration	77
7:7E-1.6	Coastal Decision-Making Process [Location Policies]	77
SUBCHAPTER 2 -	LOCATION POLICIES [COASTAL DECISION-MAKING PROCESS]	81
7:7E-2.1	Introduction [General Provisions]	81
7:7E-2.2	Classification of Land and Water Types [Principles]	81
7:7E-2.3	Mapping and Acceptability Determination [Definitions]	81
[7:7E-2.4	Pre-application Phase]	
[7:7E-2.5	Application or Project Review Phase]	
[7:7E-2.6	Information Required]	
SUBCHAPTER 3 -	SPECIAL AREAS [LOCATION POLICIES FOR SPECIAL AREAS]	84
7:7E-3.1	Introduction [General Provisions]	84
7:7E-3.2	Shellfish Beds	84
7:7E-3.3	Surf Clam Areas	86
7:7E-3.4	Prime Fishing Areas	87
7:7E-3.5	Finfish Migratory Pathways	87
7:7E-3.6	Submerged Vegetation	89
7:7E-3.7	Navigation Channels	89
7:7E-3.8	Canals [Shipwrecks and Artificial Reefs]	90
7:7E-3.9	Inlets [Marine Sanctuary]	91
7:7E-3.10	Marina Moorings [Beaches]	92
7:7E-3.11	Ports [Coastal Wetlands]	93
7:7E-3.12	Submerged Infrastructure Routes [High Risk Beach Erosion Areas]	93
7:7E-3.13	Shipwrecks and Artificial Reefs [Dunes]	94
7:7E-3.14	Estuarine or Marine Sanctuary [Central Barrier Island Corridor]	95
7:7E-3.15	Wet Borrow Pits [Historic Resources]	96
7:7E-3.16	Intertidal Flats [Specimen Trees]	98
7:7E-3.17	Filled Water's Edge [White Cedar Stands]	98
7:7E-3.18	Existing Lagoon Edge [Endangered or Threatened Wildlife and Vegetation Species Habitats]	101
7:7E-3.19	Beach and Dune Systems [Critical Wildlife Habitats]	103
7:7E-3.20	Wetlands [Public Open Space]	108
7:7E-3.21	Floodplains [Steep Slopes]	112
7:7E-3.22	Central Barrier Island Corridor [Farmland Conservation Areas]	113
7:7E-3.23	Cranberry Bogs [Bogs and Freshwater Wetlands]	114
7:7E-3.24	Wet Borrow Pit Margins [Ephemeral Stream Corridor]	115
7:7E-3.25	Alluvial Flood Margins [Special Hazard Areas]	116
7:7E-3.26	Coastal Bluffs [Excluded Federal Lands]	117
7:7E-3.27	Intermittent Stream Corridors [Borrow Pits]	119
7:7E-3.28	Farmland Conservation Areas	119
7:7E-3.29	Steep Slopes	121
7:7E-3.30	Dry Borrow Pits	122

CHAPTER TABLE OF CONTENTS - Continued

		Page
SUBCHAPTER 3 - Continued		
7:7E-3.31	Historic and Archaeological Resources	124
7:7E-3.32	Specimen Trees	125
7:7E-3.33	Endangered or Threatened Wildlife or Vegetation Species Habitat	125
7:7E-3.34	Critical Wildlife Habitats	126
7:7E-3.35	Public Open Space	127
7:7E-3.36	Special Hazards Areas	128
7:7E-3.37	Excluded Federal Lands	128
7:7E-3.38	Special Urban Areas	129
7:7E-3.39	Pinelands National Reserve and Pinelands Protection Area	130
7:7E-3.40	Hackensack Meadowlands District	133
SUBCHAPTER 4 - GENERAL WATER AREAS		135
7:7E-4.1	[General] Definition[s of Water Areas]	135
7:7E-4.2	Policy Summary Table [General Policy on Uses of Water Areas]	136
7:7E-4.3	Ocean [General Rationale for Water Areas Policy]	135
7:7E-4.4	Open Bay [Water Acceptability Table]	142
7:7E-4.5	Semi-enclosed and Back Bay [General Definitions]	143
7:7E-4.6	Tidal Guts [Rationale for Policies by Water Body Type]	144
7:7E-4.7	Large Rivers [Definitions of Water Uses]	144
7:7E-4.8	Medium Rivers, Streams and Creeks [Water Acceptability Conditions]	145
7:7E-4.9	Lakes, Ponds and Reservoirs	145
7:7E-4.10	Acceptability Conditions for Uses	146
[SUBCHAPTER 5 - WATER'S EDGE AREAS]		
[7:7E-5.1	Definition]	
[7:7E-5.2	Natural Water's Edge Area]	
[7:7E-5.3	Retained Water's Edge]	
[7:7E-5.4	Filled Water's Edge]	
SUBCHAPTER 5 [6] - GENERAL LAND AREAS		157
7:7E-5[6].1	Definition	157
7:7E-5[6].2	Acceptability of Development in General [Policy for] Land Areas	157
7:7E-5[6].3	Coastal [Regions] Growth Rating	157
7:7E-5[6].4	Environmental Sensitivity Rating	161
7:7E-5[6].5	Development Potential	163
7:7E-5[6].6	Definition of Acceptable Intensity of Development	167
7:7E-5[6].7	Land Acceptability Tables	172-174
SUBCHAPTER 6 [7] - GENERAL LOCATION POLICIES [POLICIES ON LOCATION OF LINEAR DEVELOPMENT]		181
7:7E-6[7].1	Policy on Location [Conditional Acceptability] of Linear Development	181
7:7E-6[7].2	Basic [General] Location Policy	181
7:7E-6.3	Secondary Impacts	181
7:7E-6.4	Transferred Impacts	182

CHAPTER TABLE OF CONTENTS - Continued

		Page
SUBCHAPTER 7 [8] -	USE POLICIES	184
7:7E-7[8].1	Purpose	184
7:7E-7[8].2	Housing Use Policies	184
7:7E-7[8].3	Resort/Residential Use Policies [Water's Edge Housing]	190
7:7E-7[8].4	Energy Use Policies [Cluster Development]	193
7:7E-7[8].5	Transportation Use Policies [Residential Mix]	207
7:7E-7[8].6	Public Facility Use Policies [Fair Share Housing]	209
7:7E-7[8].7	Industry Use Policies [Barrier Free Design]	211
7:7E-7[8].8	Mining Use Policies [Housing and Public Transportation]	212
7:7E-7[8].9	Port Use Policies [Housing Rehabilitation]	
7:7E-7[8].10	Commercial Use Policies [High Rise Housing]	215
7:7E-7[8].11	Coastal Engineering [Large Scale Planned Residential Development]	218
7:7E-7[8].12	Dredge Spoil Disposal [Resort/Recreational Use Policies]	221
7:7E-7[8].13	National Defense Facilities Use Policy [Recreation Priority]	222
[7:7E-8.14	New Recreation Areas]	
[7:7E-8.15	Public Access]	
[7:7E-8.16	Hotel-motel Development]	
[7:7E-8.17	Hotel-casino Development]	
[7:7E-8.18	Marinas]	
[7:7E-8.19	Amusement Piers, Parks and Boardwalks]	
[7:7E-8.20	Energy Use policies]	
[7:7E-8.21	General Energy Facility Siting Procedure]	
[7:7E-8.22	Outer Continental Shelf (OCS) Oil and Gas Exploration and Development]	
[7:7E-8.23	Onshore Support Bases]	
[7:7E-8.24	Platform Fabrication Yards and Module Construction]	
[7:7E-8.25	Repair and Maintenance Facilities]	
[7:7E-8.26	Pipe Coating Yards]	
[7:7E-8.27	Pipelines and Associated Facilities]	
[7:7E-8.28	Oil Refineries and Petrochemical Facilities]	
[7:7E-8.29	Gas Processing Plants]	
[7:7E-8.30	Storage of Crude Oil, Gases and other Potentially Hazardous Liquid Substances]	
[7:7E-8.31	Tanker Terminals]	
[7:7E-8.32	Electric Generating Stations]	
[7:7E-8.33	Liquefied Natural Gas (LNG) Facilities]	
[7:7E-8.34	Public Facility Use Policies]	
[7:7E-8.35	General Public Facilities]	
[7:7E-8.36	Roads]	
[7:7E-8.37	Public Transportation]	
[7:7E-8.38	Bicycle and Footpaths and Fishing Platforms]	
[7:7E-8.39	Solid Waste]	
[7:7E-8.40	Wastewater Treatment]	
[7:7E-8.41	Industry-Commerce Uses Policies]	
[7:7E-8.42	General Industry-Commerce]	
[7:7E-8.43	Mining]	
[7:7E-8.44	Parking Facilities]	
[7:7E-8.45	Ports Uses]	
[7:7E-8.46	Coastal Engineering Use Policies]	
[7:7E-8.47	Shore Protection Priorities]	
[7:7E-8.48	Dune Management]	
[7:7E-8.49	Beach Nourishment]	
[7:7E-8.50	Structural Shore Protection]	
[7:7E-8.51	Dredged Spoil Disposal]	

CHAPTER TABLE OF CONTENTS - Continued

		Page
SUBCHAPTER 8 [9]- RESOURCE POLICIES		223
7:7E-8[9].1	Purpose	223
7:7E-8[9].2	Marine Fish and Fisheries	223
7:7E-8.3	Shellfisheries	223
7:7E-8.4[9.3]	Water Quality	224
7:7E-8.5[9.4]	Surface Water Use	225
7:7E-8.6[9.5]	Groundwater Use	226
7:7E-8.7[9.6]	Runoff	226
7:7E-8.8[9.7]	Soil Erosion and Sedimentation	228
7:7E-8.9[9.10]	Vegetation	229
7:7E-8.10[9.11]	Important Wildlife Habitat	230
7:7E-8.11[9.12]	Air Quality	231
7:7E-8.12[9.13]	Public Services	233
7:7E-8.13[9.14]	Public Access to the Shorefront	233
[7:7E-9.14	Secondary Impacts]	
7:7E-8.14	Scenic Resources and Design	234
7:7E-8.15	Buffers and Compatibility of Uses	235
7:7E-8.16	Solid Waste	236
7:7E-8[9].17	Energy Conservation	236
7:7E-8[9].18	Neighborhoods and Special Communities	237
7:7E-8[9].19	Traffic	237
7:7E-8[9].20	High Permeability Moist [Percolation Wet] Soils	238
7:7E-8[9].21	Wet Soils	238
7:7E-8[9].22	Fertile Soils	239
7:7E-8[9].23	Flood Hazard Areas	240
7:7E-8.24	Decommissioning of Projects	243
7:7E-8.25	Noise Abatement	244
7:7E-8.26	Barrier Free Design	244
7:7E-8.27	Aquifer Recharge Areas	245

SUBCHAPTER 1 - INTRODUCTION

7:7E-1.1 Purpose

This chapter presents the substantive policies of the Department of Environmental Protection regarding the use and development of coastal resources, to be used primarily by the Division of [Marine Services] Coastal Resources in the Department [primarily] in reviewing permit applications under the Coastal Area Facility Review Act (CAFRA), N.J.S.A. 13:19-1 et seq., Wetlands Act, N.J.S.A. 13:9A-1 et seq., and Waterfront Development Permit Program, N.J.S.A. 12:5-3. The rules also provide a basis for recommendations by the Department to the [Natural] Tidelands Resource Council on applications for riparian grants, leases, or licenses. In 1977, the Commissioner of DEP submitted to the Governor and Legislature the Coastal Management Strategy for New Jersey-CAFRA Area (September 1977), prepared by the Department as required by CAFRA, N.J.S.A. 13:19-16, and submitted for public scrutiny in late 1977. The Department revised the Coastal Management Strategy based on extensive public comments and in May 1978 submitted the revised Strategy for public review as the New Jersey Coastal Management Program - Bay and Ocean Shore Segment and Draft EIS. In August 1978 the Governor submitted the revised New Jersey Coastal Management Program - Bay and Ocean Shore Segment and Final EIS for federal approval, which was received in September 1978.

By adopting these policies as administrative rules, according to the Administrative Procedures Act, the Department aims to increase the predictability of the Department's coastal decision-making by limiting administrative discretion, as well as to ensure the enforceability of the Coastal Resource and Development Policies of the coastal management program of the State of New Jersey prepared under the federal Coastal Zone Management Act. Further, the Department interprets the "public health, safety, and welfare" clause in CAFRA (N.J.S.A. 13:19-10f) and the Wetlands Act (N.J.S.A. 13:9A-4d) to include a full consideration of the national interests in the wise use of coastal resources.

7:7E-1.2 Authority

Thgse rules are adopted under the general powers of the Department, N.J.S.A. 13:1D-9, as well as the Department's specific rule-making and coastal management powers under the Coastal Area Facility Review Act, N.J.S.A. 13:19-17, the Wetlands Act, N.J.S.A. 13:9A-1 et seq., the Waterfront Development Permit Program [riparian statutes], N.J.S.A. 12:5-1 et seq., and the riparian lands statutes (generally N.J.S.A. 12:3-1 et seq.). These rules are consistent with the purpose and intent of the 90 Day Construction Permit Law and regulations, P.L. 1975, c. 232, and N.J.A.C. 7:1C-1 et seq. These rules complement the adopted rules that implement the Wetlands Act, N.J.A.C. 7:7A-1.0 et seq., and the rules that define the permit application procedures under CAFRA, N.J.A.C. 7:7D-2.0 et seq. The Coastal Resource and Development Policies are derived from the legislative intent of the CAFRA, Wetlands, Waterfront Development, and riparian statutes, and, in the case of the Coastal Area Facility Review Act, the rules define the standards for approval, conditional approval, or denial of permit applications more precisely than the findings required by N.J.S.A. 13:19-10 and 11.

7:7E-1.3 Jurisdiction

(a) General

These rules shall apply to five categories, as defined in Section 7:7E-1.3(c) to (g), of actions or decisions by the Department on uses of coastal resources within or significantly affecting [the Bay and Ocean Shore Region of] the coastal zone: (1) coastal permits, (2) consistency determinations, (3) financial assistance, (4) DEP management actions affecting the coastal zone, and (5) DEP planning actions affecting the coastal zone.

(b) Geographic Scope of [Bay and Ocean Shore Region] the Coastal Zone

These rules shall apply geographically to the New Jersey Coastal Zone [Bay and Ocean Shore Region] which is defined as the Coastal Area [(CAFRA) defined by] under the jurisdiction of the Coastal Area Facility Review Act (N.J.S.A. 13:19-4), all other areas now or formerly flowed by the tide, shorelands subject to the Waterfront Development Law, regulated Wetlands listed at N.J.A.C. 7A-1.13, [that are landward of] and the Hackensack Meadowlands Development Commission District as defined by N.J.S.A. 13:17-4. [the inland CAFRA boundary along a tidal watercourse that flows through the Coastal Area. The Region is a segment of New Jersey's coastal zone under the federal Coastal Zone Management Act.]

(c) Coastal Permits

These rules shall apply to all waterfront development permits (N.J.S.A. 12:5-3), Wetlands permits (N.J.S.A. 13:9A-1 et seq.) and CAFRA permits N.J.S.A. 13:19-1 et seq.). [within the Bay and Ocean Shore Region.]

(d) Consistency Determinations

These rules shall apply to decisions on the consistency or compatibility of proposed actions by federal, state, and local agencies with the Coastal Resources and Development Policies, inlcuding but not limited to determinations of federal consistency under Section 307 of the federal Coastal Zone Management Act, determinations of consistency or compatibility under the Coastal Zone Management Act, comments on Draft and Final Environmental Impact Statements prepared under the National Environmental Policy Act, and comments on other public and private plans, programs, projects and policies.

(e) Financial Assistance Decisions

These rules shall apply to state aid financial assistance decisions by DEP under the Shore Protection Program and Green Acres Program within the Coastal Zone, [Bay and Ocean Shore Region] to the extent permissible under existing statutes and regulations.

(f) DEP Management Actions

These rules shall apply, to the extent statutorily permissible, to the following DEP management actions in or affecting the coastal zone [by various divisions of the Department,] in addition to those noted above: [coastal permits, including regulatory actions by the Division of Water Resources, the Division of Environmental Quality, and the Solid Waste Administration.]

TIDELANDS RESOURCE COUNCIL

(1) Conveyances of State owned tidelands (N.J.S.A. 12:3-1 et seq).

DIVISION OF WATER RESOURCES

(1) Permits for use of a floodway (N.J.S.A. 58:16A-50)

(2) Promulgation of regulations concerning land use in delineated flood hazard areas (N.J.S.A. 58:16A-50)

(3) Permits for point source discharges under the National Pollution Discharge Elimination System (N.J.S.A. 58:10-1 et seq.) presently issued by EPA under Section 402 of the Federal Clean Water Act.

(4) Certification under Section 401 of the Federal Clean Water Act (water quality certificates)

(5) Approval of wastewater treatment works, sewage collection systems, and outfall sewers (N.J.S.A. 5:10A-6)

(6) Wastewater Treatment Construction Grants (N.J.S.A. 26:2E-1 et seq.)

(7) Sewerage connection ban exemptions (N.J.S.A. 58:10A-4)

(8) Designation of Critical Sewerage areas (N.J.S.A. 58:11-44)

(9) Permits for 50 or more sewerage (septic) facilities (N.J.S.A. 58:11-23)

(10) Approval of Sewerage facilities in Critical Areas (N.J.S.A. 58:11-45)

(11) Permit to divert surface and/or subsurface or percolating waters for public water supply (N.J.S.A. 58:1-37, 58:4A-2)

(12) Approval of diversions for water supply (N.J.S.A. 58:1-17)

(13) Permit to drill wells (N.J.S.A. 58:4A-14)

(14) Permits to construct new or modified public water supply sources, treatment plants, and distribution systems (N.J.S.A. 58:11-2,3, 10)

(15) Permits to install or maintain a physical connection between an approved public potable water supply and an unapproved supply (N.J.S.A. 58:11-9 to 9.11)

(16) Dam Permits (N.J.S.A. 58:4-1)

DIVISION OF ENVIRONMENTAL QUALITY

(1) Permit to construct, install, or alter control apparatus or equipment (N.J.S.A. 26:2C-9.2)

(2) Certificate to operate control appartus or equipment (N.J.S.A. 26:2C-9.2)

(3) The Approval of a variance to exceed an air quality standard (N.J.S.A. 26:2C-9.2)

SOLID WASTE ADMINISTRATION

(1) Approval of sanitary landfill sites (N.J.S.A. 13:1E-1 et seq.)

GREEN ACRES AND RECREATION

(1) Adoption of regulations concerning use of state owned lands (N.J.S.A. 13:8-20 et seq.)

(2) Designation of state owned lands for inclusion in the Natural Area system (N.J.S.A. 13:1B-15.12a et seq.)

(3) Allocations of Green Acres Grants (N.J.S.A. 13:8A-19 et seq.)

(4) Inclusion of and adoption of regulations concerning river areas in the Wild and Scenic Rivers System (N.J.S.A. 13:8-45 et seq.)

DIVISION OF FISH, GAME AND WILDLIFE

(1) Adoption of regulations concerning use of land and water areas under the control of the Division (N.J.S.A. 13:1B-30 et seq., 23:1-1 et seq., 23:4-28)

ALL DIVISIONS

(1) Management of state-owned lands by DEP.

(g) DEP Planning Actions

These rules shall provide the basic policy direction for [DEP's future] the following planning actions [in the Bay and Ocean Shore Region] undertaken by DEP in the Coastal Zone as the lead state agency for coastal management [agency] under Section 306 of the federal Coastal Zone Management Act.

DIVISION OF COASTAL RESOURCES

Coastal Zone Management
Shore Protection

DIVISION OF WATER RESOURCES

Areawide water quality management ("208")

DIVISION OF ENVIRONMENTAL QUALITY

Air quality planning
Solid Waste management

GREEN ACRES AND RECREATION

Planning for public acquisition of coastal lands

7:7E-1.4 Severability

If any provision of these rules or the application of these rules to any person or circumstances is held invalid, the remainder of the rules and the application of such provision to persons or circumstances other than those to which it is held invalid, shall not be affected thereby.

7:7E-1.5 Review, Revision, and Expiration

The Department shall periodically review these rules, consider the various national, state, and local interests in coastal resources and developments seeking coastal locations, and propose and adopt appropriate revisions to these rules. [The Department expects to propose revisions to the rules in 1979 in the course of completing the management program for the State's coastal zone and integrating the revision with the present rules for the Bay and Ocean Shore Region.] Under the requirements of the federal Coastal Zone Management Act, the Department expects to conduct an annual review of the rules and expects to revise, amend or readopt the rules before the five year deadline under Executive Order No. 66 of 1979 for periodic review of administrative rules.

7:7E-1.6 Coastal Decision-Making Process

(a) General

Decisions on uses of coastal resources shall be made using the three step process comprising the Location Policies (Subchapters 2 through 6), the Use Policies (Subchapter 7), and the Resource[s] Policies (Subchapter 8) of these rules. Depending upon the proposed use, project design, location, and surrounding region, different specific policies in each of the three steps may be applicable in the coastal decision-making process. The Coastal Resource and Development Policies address a wide range of land and water types (locations), present and potential land and water uses, and natural, cultural, social and economic resources in the coastal zone. DEP does not, however, expect each proposed use of coastal resources to address all Location Policies, Use Policies, and Resource Policies. Rather, the applicable policies are expected to vary from proposal to proposal. Decisions on the use of coastal resources in the Hackensack Meadowlands District will be made by the Hackensack Meadowlands Development Commission, as lead agency, and by the Department, consistent with the Hackensack Meadowlands District Master Plan, its adopted components and management programs.

(b) Principles

The Coastal Resource and Development Policies represent the consideration of various conflicting, competing, and contradictory local, state, and national interests in diverse coastal resources and in diverse uses of coastal locations. Numerous balances have been struck among these interests in defining these policies, which reduce but do not presume to eliminate all conflicts among competing interests. One reason for this intentional balancing and conflict reducing approach is that coastal management involves explicit consideration of a broad range of concerns, in contrast to other resource management programs which have a more limited scope of concern. Decision-making on individual proposed actions using the Coastal Resource and Development Policies must therefore consider all three steps in the process, and weigh, evaluate, and interpret inevitably complex interests, using the framework established by the policies. In this process, interpretations of terms, such as "prudent", "feasible", "minimal", "practicable", and "maximum extent", as used in a specific policy or combinations of the policies, may vary, depending upon the context of the proposed use, location, and design. Finally, these principles should not be understood as authorizing arbitrary decision-making or unrestrained administrative discretion. Rather, the limited flexibility intentionally built into the Coastal Resource and Development Policies provides a mechanism for incorporating professional judgment by DEP officials, as well as recommendations and comments by applicants, public agencies, specific interest groups, corporations, and citizens into the coastal decision-making process.

(c) Definitions

The Coastal Resource and Development Policies are stated in terms of actions that are encouraged, required, acceptable, conditionally acceptable, discouraged, or prohibited. Some policies include specific conditions that must be met in order for an action to be deemed acceptable. Within the context of the Coastal Resource and Development Policies and the principles defined above in Subsection (b), the following words have the following meanings.

(1) "action", "activity", "development", "project", "proposal", or "use" are used interchangably to describe the proposed use of coastal resources that is under scrutiny using the Coastal Resource and Development Policies.

(2) "site", "location", "area", or "surrounding region" means the geographic scope of the proposed use of coastal resources that is under scrutiny using the Coastal Resource and Development Policies. This shall include the [primary, or direct] site of a proposed use as well as the surrounding area or region that may be affected by or affects the proposed use and is therefore appropriate for evaluation [that must be evaluated] as part of the coastal decision-making process, as well as alternative sites.

(3) "prohibited" means that a proposed use of coastal resources is unacceptable and [will be rejected or denied.] that DEP will use its legal authority to reject or deny the proposal.

(4) "discouraged" means that a proposed use of coastal resources is likely to be rejected or denied as DEP has determined that such uses of coastal resources should be deterred and developers should be dissuaded from proposing such uses. In cases where DEP considers the proposed use to be in the public interest despite its discouraged status, DEP may permit the use provided that specified mitigating measures are taken, or that other resources are enhanced to compensate for resources lost.

(5) "conditionally acceptable" means that a proposed use of coastal resources is likely to be acceptable provided that conditions specified in the policy are satisfied.

(6) "acceptable" means that a proposed use of coastal resources is likely to be approved.

(7) "encouraged" means that a proposed use of coastal resources is acceptable and [further] is a use, by its purpose, location, design, or effect, that DEP has determined should be fostered and supported in the coastal zone, through favorable consideration of other aspects of the location, design, or effect of the use in terms of the weighing process of the Coastal Resource and Development Policies.

(8) "water dependent" means development that must have direct access to the body of water along which it is proposed in order to function. Maritime activity, commercial fishing, public waterfront recreation and marinas are examples of water dependent uses, but only the portion of a development requiring direct access to the water is water dependent. The test for water dependency shall assess both the need of the proposed use for access to the water and the capacity of the proposed water body to satisfy the requirements and absorb the impacts of the proposed use. A proposed use will not be considered water dependent if either the use can function away from the water or if the water body proposed is unsuitable for the use. For example, in a maritime operation a dock or quay and associated unloading area would be water dependent, but an associated warehouse would not be water dependent. Housing is not water dependent.

(9) "water related" means development that benefits economically from direct access to the water body along which it is proposed. A hotel or restaurant, since it is public-oriented, could be water related if it takes full advantage of a waterfront location. An automobile assembly plant could be water related if it receives its raw materials and sends out its finished products by ship. Housing is not water related.

(10) "navigable" means navigable in fact, including by recreational boats, e.g. canoes.

(d) Pre-Application Phase

At an optional pre-application conference with a prospective applicant, DEP shall employ the Coastal Resources and Development Policies as a basis for a candid, informal and non-binding evaluation of the merits of a proposed use, location and design.

(e) Application or Project Review Phase

DEP shall employ the Coastal Resource and Development Policies as the standards for issuing actual decisions, making determinations, and carrying out management and planning actions that affect the coastal zone. Decisions may be issued with conditions or pre-conditions as permitted by the procedural rules of the Department and as reasonably necessary to carry out the spirit and intent of the Coastal Resource and Development Policies.

(f) Information Requirements

Applicants for coastal permits shall comply with the adopted procedural rules and regulations that define the information to be submitted as part of applications for Waterfront Development, Wetlands, and CAFRA Permits. Applicants shall submit information to DEP indicating and documenting how the proposed use complies with the applicable Coastal Resource and Development Policies. This information shall be submitted [at least] in a discrete section of the application, or its accompanying environmental impact statement (EIS) if applicable, that is identified by the heading "Compliance with Coastal Resource and Development Policies". At the pre-application phase, mapped information for a site and its surrounding region shall be submitted at least at a scale of 1:24,000 (1 inch = 2,000 feet). At the application phase, mapped information shall be submitted at least at a scale of 1:24,000 and at larger scale(s), such as 1:2,400 (1 inch = 200 feet), appropriate for the size and complexity of the site and its surrounding region. Information describing the site and surrounding region, including alternatives, in terms of the Coastal Resource and Development Policies, shall be mapped to the maximum extent practicable. Approximate data sources referred to in the Coastal Resource and Development Policies, such as soil surveys, [may] shall be required to be supplemented as necessary by site-specific data presented by an applicant in the environmental impact statement.

SUBCHAPTER 2 - LOCATION POLICIES

7:7E-2.1 Introduction

The coastal land and water areas of New Jersey are diverse. The same development placed in different locations will have different impacts on the coastal ecosystem and built environment as well as different social and economic implications. Different policies are therefore required for different locations. This section defines the Location Policies of the Coastal Program. These policies are also known as the Coastal Location Acceptability Method or CLAM. This presentation of the policies is lengthy and detailed because the coast is large, varied, and complex. The method of applying the policies is, however, relatively simple.

7:7E-2.2 Classification of Land and Water Types

The Location Policies classify all land and water locations into a General Area and some into one or more Special Areas.

Special Areas are so naturally valuable, or so important for human use, or so hazardous, or so sensitive to impact, or so particular in their planning requirements, as to merit focused attention. Special Areas are defined and given special policies in Subchapter 3. Special Area types are grouped under four broad headings: Special Water Areas; Special Water's Edge Areas; Special Land Areas; and Special Coast Wide Areas.

General Areas are general types of locations which classify the whole coastal zone with the exception of the Water's Edge, which is entirely a Special Area. Parts of General Areas may also be classified as one or more Special Areas. General Areas are defined and given general policies in Subchapters 4 and 5. General Area types are grouped under two broad headings: General Water Areas (Subchapter 4) and General Land Areas (Subchapter 5).

[The Location Policies classify all land and water features of the coastal zone into a least one category and assign a policy on the use of each type of location in each category. The Location Policies contain four broad categories: (a) Special area, (b) Water Areas, (c) Water's Edge Areas, and (d) Land Areas. Special Areas are Water, Water's Edge, or Land Areas that merit more focused attention as they constitute a highly valued natural resource, serve important purposes of human use, or form a significant natural hazard. The policies in the Special Areas supplement the more general Location Policies, and take precedence in case of policy conflict.]

7:7E-2.3 Mapping and Acceptability Determination

The Coastal Location Acceptability Method (CLAM) is a nine step process which determines DEP policy for any proposed coastal use in any coastal location. The first six steps are the mapping and policy determination process to assess Location Acceptability, which is the subject of this section. Steps 7 and 8 refine the Location Acceptability Determinations by reviewing the proposed use in terms of Uses and Resources Policies. Step 9 is the synthesis of Location, Use and Resource Policies.

CLAM Location Policy Analysis:

Step 1 - Identify and map site and surrounding region

Step 2 - Identify and map Special Areas

Step 3 - Determine and map Special Area Policies

Step 4 - Identify and map General Areas

Step 5 - Determine and map General Areas Policies

Step 6 - Map Final Location Acceptability and list Location Policy conditions

CLAM Use Policy Analysis:

Step 7 - Identify applicable Use Policies, evaluate the proposed use, and, if necessary, modify the Location Acceptabitlity Determination and list Use Policy conditions

CLAM Resource Analysis:

Step 8 - Identify applicable Resource Policies, evaluate the proposed use, and, if necessary, modify the Location Acceptability Determination and list Resource Policy conditions

CLAM Synthesis:

Step 9 - Determine final acceptability of proposed use

Summarize and synthesize the final acceptability of a proposed use at a proposed location in terms of the applicable Location, Use and Resource Policies. Approval will only be given if a proposal satisfies all three sets of policies. In particular, applicants should note that applications that do not satisfy Location Policies will not be approved even if the Use and Resource Policies are satisfied.

[The Location Policies provide a logical series of six steps for determining the acceptability for use of a coastal location. At each step the locations shall be mapped, to the maximum extent practicable, by an applicant, at least at a scale of 1:24,000 (1 inch = 2,000 feet) at the pre-application phase.

Step 1 - Identify and map site and surrounding region (the same step should be carried out for the evaluation of alternative sites)

Step 2 - Identify and Map Special Areas

Step 3 - Identify and Map Water Areas

Step 4 - Identify and Map Water's Edge Areas

Step 5 - Identify and Map Land Areas

Step 6 - Determine Location Acceptability

Mapping at each step serves to identify geographically the extent of a policy's applicability to a specific site and surrounding region. The acceptability of a location is then determined by synthesizing and evaluating the applicable policies, before evaluating and proposed use in terms of the Use Policies (Step 7) and Resource Policies (Step 8). The final DEP decision is Step 9.]

SUBCHAPTER 3 - SPECIAL AREAS

7:7E-3.1 Introduction [General Provisions]

Special Areas are those 39 types of coastal areas which merit focused attention and special management policies. This subchapter divides Special Areas into Special Water Areas (Section 7:7E-3.2 through 7:7E-3.16), Special Water's Edge Areas (7:7E-3.17 through 7:7E-3.27), Special Land Areas (7:7E-3.28 through 7:7E-3.30), and Coastwide Special Areas (7:7E-3.31 through 7:7E-3.40). Special Water Areas extend landward to the mean high water line. Special Water's Edge Areas extend from the mean high water line (or the level of normal flow in non-tidal streams) to one of the following: the inland limit of alluvial soils with a seasonal high water table equal to or less than one foot; the one hundred year flood hazard line, whether tidal or fluvial; the inland limit of water's edge fill; or the inland limit of coastal bluffs, whichever is the most extensive. Special Land Areas are landward of the Water's Edge. Coastwide Special Areas may include Water, Water's Edge or Land Areas.

All land or water locations, except Special Water's Edge Areas, are subject to either the Land Area or Water Area General Policies. In addition, certain locations are subject to one or more Special Area policies. All Special Water's Edge Areas are subject to one or more Special Area Policies. In addition, most Special Water's Edge Areas are subject to a General Water Dependency Rule. Where the applicable General and Special Area policies differ, the Special Area Policies shall be applied.

[Certain Specific Water, Water's Edge and Land Areas merit focused attention and special management policies. This section defines a broad range of Special Areas and indicates the applicable Location Policies.]

7:7E-3.2 Shellfish Beds

(a) Definition

Shellfish Beds are defined as estuarine bay or river bottoms (tidelands) presently productive for hard clams (Mercenaria mercenaria), soft clams (Mya arenaria), eastern oysters (Crassostrea virginica), bay scallops (Argopecten irradiaus), or blue mussels (Mytilus edulis). A productive bed is one which can be shown to have a history of natural recruitment for one or more of these species, or is leased by the State of New Jersey for shellfish culture, or is a State Shellfish Management Area. [supporting commercial or recreational quantities of hard clams, soft clams, oyster or bay scallops. This category includes: open, seasonally open, and specially restricted water quality classes as shown in NJDEP Condemned Area Charts 1 through 10, prepared by and available from DEP. Source areas for transplanting (relays) programs and depuration processing are included, as well as natural or artificial oyster seed (spat) setting beds. Maps of shellfish beds can be found in H. Haskin (1963) "Distribution of Shellfish Resources in Relation to New Jersey Intracoastal Waterway". Shellfish beds presently closed due to water pollution are considered within this definition once the beds are reopened to shellfishing. Natural blue mussel beds on open bay and inlet bottoms are also included in the definition of Shellfish Beds.]

(b) Policy

(1) Any development which would result in the destruction of presently productive Shellfish Beds is prohibited. The term destruction includes actions of filling to create fast land, overboard dumping of solids which would smother present shellfish populations or create unsuitable conditions for shellfish colonization, or the creation of bottom depressions with anoxic water conditions.

(2) Any coastal development which would result in contamination or condemnation of Shellfish Beds is prohibited. Development which would significantly alter the salinity regime, substrate characteristics (as through runoff and sedimentation), natural water circulation pattern, or natural functioning of the Shellfish Beds, during the construction or operation of the development is prohibited.

(3) Water dependent development which requires dredging adjacent to shellfish beds is discouraged and must be managed so as not to cause significant mortality of the shellfish resulting from increase in turbidity and sedimentation, resuspension of toxic cxemicals, or to otherwise interfere with the natural functioning of the shellfish bed. New dredging within shellfish beds is prohibited. Maintenance dredging of existing navigation channels is conditionally acceptable with state managed relay programs encouraged prior to dredging.

(4) If there is a delay of more than one year between completion of permit application review and initiation of approved activity, the site may be required to be resurveyed as the shellfish resource value may have changed during the interim.

[Coastal development which would directly discharge untreated domestic sewage, or industrial wastes, toxic or carcinogenic agents or significantly alter salinity regime, or natural water flow patterns during the construction or operation of development is prohibited. Water dependent development which requires dredging adjacent to shellfish beds is discouraged unless the activity is managed so as not to cause significant mortality of the shellfish resulting from increase in turbidity and sedimentation, resuspension of toxic chemicals, or to otherwise interfere with the natural functioning of the shellfish beds. Dredging within shellfish beds is prohibited. Maintenance dredging of existing navigation channels is conditionally acceptable in these areas provided that oyster and clam transplant and relay programs, and/or depuration facilities are used.]

(c) Rationale

Estuarine shellfish are harvested by both commercial and recreational fishermen, with the sport group concentrating on hard clams. Oysters, bay scallops and soft and hard clams are predominantly commercial species. Commercial dockside landing values in New Jersey for 197[6]8 were [$3.17] $3.43 million for estuarine mollusks, with an estimated retail industry value of [$7.94] $8.6 million. The commercial harvest is

estimated to support employment of 1,500 persons in fishing, distribution, processing, and retail. Sport clammers numbered [17,000] 21,200 in 197[6]8. In addition to direct human consumption, shellfish play an important role in the overall ecology of the estuary. Young clams are important forage foods for a variety of finfish such as winter flounder, crabs and migratory waterfowl especially the diving species.

7:7E-3.3 Surf Clam Areas

(a) Definition

Waters within the territorial sea of the State of New Jersey [three nautical mile territorial sea] which can be demonstrated to support significant commercially harvestable [exploitable] quantities of surf clams (Spisula solidissima), or areas [beds] important for recruitment [reproductivity replacement] of surf clam stocks. This includes areas where fishing is prohibited for research sanctuary or conservation purposes by N.J.A.C. 7:25-12.1(d)4. [Sea Clam Research Sanctuaries established by the N.J. Bureau of Shellfisheries, under the authority of N.J.S.A. 50:1-5 and adopted as N.J.A.C. 7:26-7.6, June, 1974. Waters open for harvesting or condemned for harvesting are delineated on NJDEP Condemned Area Charts 1 through 10.]

(b) Policy

Development which would result in the destruction, condemnation, or contamination of Surf Clam Areas [stocks] is prohibited. [Development that would lead to closing productive surf clam areas to commercial surf clamming or result in significant mortality of concentrations of surf clams is acceptable only at less productive surf clam areas.] Development within Surf Clam Areas is conditionally acceptable only if the development is of national interest and no prudent and feasible alternative sites exist.

(c) Rationale

The surf clam fishery accounted for [is New Jersey's single most important fishery with] dock-side landing values (wholesale) of [$10.8] $7.5 million during [1976] 1978 and estimated retail value of [$27] $18.9 million. The industry annually generates monies in excess of the retail value, supports employment of over 300 full and part time people in fishing and 1,000 - 1,500 in canning, processing, distribution and industry services. Significant areas of productive water are presently closed due to water pollution. In addition, the massive marine fish kill during the summer of 1976 was estimated to have resulted in the loss of $65 million in sea clam stocks over a seven year period. Surf clam harvesting within New Jersey's territorial sea is regulated by NJDEP. The Mid-Atlantic Regional Fisheries Management Council regulates sea clamming within the Fishery Conservation Zone (200 mile limit). Harvesting is required to be compatible with these agencies, as appropriate. Harvest quotas and other management measures have been adopted for sea clamming (surf clams and ocean quahogs) within the Fishery Conservation Zone.

7:7E-3.4 Prime Fishing Areas

(a) Definition

Prime Fishing Areas include tidal water areas and water's edge areas which have a demonstrable history of supporting a significant local quantity of recreational or commercial fishing activity. The area includes all coastal jetties and groins and public fishing piers or docks. Prime Fishing Areas also include all red line delineated features within the State of New Jersey's three mile territorial sea illustrated in: B.L. Freeman and L.A. Walford (1974) Angler's Guide to the United States Atlantic Coast Fish, Fishing Grounds and Fishing Facilities, Section III and IV. While this information source applies only to the Delaware Bay and Atlantic Ocean shorefronts, prime fishing areas do occur throughout the coastal zone.

(b) Policy

Permissible uses of Prime Fishing Areas include recreational and commercial finfishing and shellfishing, as presently regulated by NJDEP Division of Fish, Game, and Wildlife [Shellfisheries], scuba diving and other water related recreational activities.

Prohibited uses include sand or gravel submarine mining which would alter existing bathymetry to a significant degree so as to reduce the high fishery productivity of these areas. Disposal of domestic or industrial wastes must meet applicable State and federal effluent limitations and water quality standards. [Development which would preclude existing public access to the shoreline is prohibited.]

(c) Rationale

Natural bathymetric features, such as the Shrewsbury Rocks and important sand ridges, and artificial structures act as congregation areas for many species of finfish, shellfish, and a diversity of invertebrate species which are essential to marine ecosystem functioning. These areas are heavily utilized by recreational and commercial fishermen. Commercial fishing occurs primarily along the Delaware Bay and Atlantic Ocean. Over 2.7 million people annually participate in marine sport fishing and shellfishing in New Jersey. This represents the highest number of participants in any state, from Maine to Maryland. Of that total, 1.6 million reside in New Jersey, with the remaining number coming mostly from Pennsylvania and New York (792,000 and 300,000 respectively.) The Mid-Atlantic Regional Fisheries Management Council manages fishing activities seaward of the State's coastal zone.

7:7E-3.5 Finfish Migratory Pathways

(a) Definition

Waterways (rivers, streams, creeks, bays inlets) which can be demonstrated to serve as passageways for anadromous fish to or from seasonal spawning areas, including juvenile anadromous fish which migrate in autumn and those listed by H. E. Zich (1977) "New Jersey Anadromous Fish

Inventory" NJDEP Miscellaneous Report No. 41, and including those portions of the Hudson and Delaware Rivers within the coastal zone boundary are defined as Finfish Migratory Pathways. Species of concern include: alewife (river herring) (Alosa pseudoharengus), blueback herring (Alosa aestivalis), American shad (Alosa sapidissima), and striped bass (Morone saxatilis).

(b) Policy

Development, such as dams, dikes, spillways and intake pipes, which creates a physical barrier to the movement of fish along finfish migratory pathways is prohibited, unless acceptable mitigating measures such as fish ladders, erosion control, or oxygenization are used. Development which lowers water quality to such an extent as to interfere with the movement of fish along finfish migratory pathways or to violate State and Delaware River Basin Commission water quality standards is prohibited.

[Development, such as dams, dikes and spillways, or chemical water quality barriers, that block movement of anadromous species is discouraged, unless acceptable mitigation measures, such as fish ladders, erosion control, and oxygenation are used.]

Mitigating measures are required for any development which would result in: lowering dissolved oxygen levels, releasing toxic chemicals, raising ambient water temperature, impinging or suffocating [species] fish, causing siltation, or raising turbidity levels during spring migration periods.

Water's edge development which incorporates migration access structures, such as functioning fish ladders, will be encouraged, provided that the NJDEP, Division of Fish, Game, and Wildlife [Shellfisheries] approves the design of the access structure.

(c) Rationale

Striped bass are one of New Jersey's most prized sport fish and are actively sought wherever they occur in New Jersey. This species spawns in the Delaware, Hudson and Maurice Rivers. American Shad, once much more numerous and formerly an important commercial species, continue to make an annual spawning run in the Delaware and Hudson Rivers, where there is an active sport fishery. A much reduced commercial fishery exists in the Delaware Bay and River. Herrings are important forage species and spawn annually in many of New Jersey's tidal tributaries including the Raritan and Hackensack Rivers. Herrings are fished during spring runs, for direct human consumption, garden fertilizer and for use as bait.

7:7E-3.6 Submerged Vegetation

(a) Definition

This special area [includes] consists of estuarine water areas supporting rooted vascular seagrasses such as widgeon grass (Ruppia maritima) and eelgrass (Zostera marina). Eelgrass beds are limited to shallow portions of Sandy Hook Bay, Shrewsbury River, Lower Barnegat Bay and Little Egg Harbor. Widgeon grass is for the most part limited to shallow areas of upper Barnegat Bay. Generalized maps of the distribution of the above species for [Little Egg Harbor] New Jersey, and a method for delineation, are available from DEP in the DEP-DCR [OCZM] sponsored study, Earth Satellite Corporation, The New Jersey Submerged Aquatic Vegetation Distribution Atlas (Final Report) February, 1980. [, in R.E. Good. et al. Analysis and Delineation of the Submerged Vegetation: A Case History of Little Egg Harbor (1978). In areas outside of Little Egg Harbor, a developer will be required to survey this resource until DEP completes additional surveys.]

(b) Policy

Destruction of submerged vegetation beds is prohibited. Mitigation measures are required for all upland developments which would result in erosion or increased turbidity that would adversely affect this special area. Trenching for energy pipelines and submarine cables of national significance will be conditionally acceptable, provided there is no prudent or feasible alternative site, and if the site is restored to original bathymetry and replanted with pre-development vegetation species, if these species have not colonized the site after three years.

(c) Rationale

New Jersey's estuarine waters are relatively shallow, rich in nutrients and highly productive. The submerged vegetation of these shallow waters serve important functions, as suspended sediment traps, important winter forage for migratory waterfowl, nursery areas for juvenile finfish, bay scallops and blue-claw crabs, and by nourishing fishery resources through primary biological productivity (synthesis of basic organic material) through detrital food webs in a similar manner to salt marsh emergent Spartina cord grasses. In addition, seagrasses absorb wave energy and the root networks help stabilize silty bay bottoms. The value of seagrasses was dramatically illustrated during the 1930's when a disease epidemic virtually eliminated eelgrass from the eastern U.S. Atlantic ocean coastline. The number of finfish, shellfish, and waterfowl drastically decreased, threatening their survival. The oyster industry of the Atlantic coast was ruined. Bays became choked with silt and [sewage, as] new mud flats were formed.

7:7E-3.7 Navigation Channels

(a) Definition

Navigation channels include water areas in tidal rivers and bays pre sently maintained and marked by U.S. Coast Guard with buoys or stakes, as shown on NOAA/National Ocean Survey Charts: 12214, 12304, 12311, 12312, 12313, 12314, 12316, 12317, 12318, 12323, 12324, 12326, 12327, 12328,

12330, 12331, 12332, 12333, 12334, 12335, 12337, 12341, 12343, 12345, 12346, and 12363. Navigation channels also include channels marked with buoys, dolphins, and stakes, and maintained by the State of New Jersey, and access channels and anchorages. Navigation channels are approximately parallel to the river bed. Access channels are spurs that connect a main navigation channel to a terminal. Anchorages are locations where vessels dock within water at or near the water's edge for the purpose of transferring cargo.

(b) Policy

Maintenance dredging of existing navigation channels, is [encouraged.] conditionally acceptable providing that the condition under the maintenance dredging policy is met (see Section 7:7E-4.11). Development which would cause terrestrial soil and shoreline erosion and siltation in navigation channels shall utilize appropriate mitigation measures. Development which would result in loss of navigability is prohibited.

(c) Rationale

Navigation channels are essential for commercial and recreational surface water transportation, especially in New Jersey's back bays where water depths are very shallow. Channels play an important ecological role in providing estuarine circulation and flushing routes, and migration pathways and wintering and feeding habitat for a wide diversity of finfish, shellfish, and waterfowl.

Navigational channels, access channels and anchorages form a network of areas that have a depth sufficient to enable marine trade to operate at the limiting depth of the channel. If one part of the system is not maintained, the entire system might be unable to function.

7:7E-3.8 Canals

NOTE: Canals were previously classified as a General Water Area (7:7E-4.1).

(a) Definition

Canals are navigation channels for boat traffic through land areas which are created by cutting and dredging or other human construction technique sometimes enlarging existing natural surface water channels. The Cape May, Bay Head-Manasquan, and Delaware and Raritan Canals are the principal examples in the New Jersey Coastal Zone.

(b) Policy

The Cape May and Bay Head-Manasquan Canals are man-made tidal guts. Development in these canals must be consistent with the General Water Area policies for Tidal Guts (7:7E-4.7) as well as with the following policies:

1. In canals presently used for navigation, such as the Cape May and Bay Head-Manasquan canals, the following policies shall apply:

   (i) Aquaculture, filling, dams and impoundments, and any other use which would interfere with existing or proposed canal boat traffic is prohibited.

   (ii) Maintenance dredging is encouraged as needed provided that an acceptable spoil disposal site is available and turbidity is controlled.

2. In the Delaware and Raritan Canal, and in the surrounding Review Zone established by the Delaware and Raritan Canal Commission, development must be consistent with the Rules and Regulations of the Review Zone of the Delaware and Raritan Canal State Park (N.J.A.C. 7:45-1.1).

(c) Rationale

Canals represent a large capital investment to create boat traffic routes. Of the coastal canals, the Cape May and Manasquan-Bay Head canal are still used extensively for their original purpose. Maintenance of this original function is encouraged.

Abandoned canals offer recreational opportunities. The Delaware and Raritan Canal is being redeveloped as a State park with recreational boating and continued use as a water supply facility. This re-use is encouraged.

7:7E-3.9 Inlets

NOTE: Inlets were previously classified as a General Water Area (7:7E-4.1).

(a) Definition

Inlets are natural channels through barrier islands allowing movement of fresh and salt water between the ocean and the backbay system.

Inlets naturally have delta fans of sediment seaward and landward deposited by the ebb and flow of the tide.

The seaward limit of an inlet is defined as the seaward extent of the ebb delta fan. The landward limit is defined as the inland extent of the flood delta fan.

If there is doubt about the extent of these fans, the applicant shall submit up-to-date bathymetric surveys and DEP staff will determine the boundary on a case-by-case basis.

(b) Policy

Inlets consists of an Ocean portion and a Semi-enclosed or Back Bay portion. Development in Inlets must be consistent with the General Water Area Policy for one of these water area types, and with the following policies.

1. Filling is prohibited.

2. Submerged Infrastructure is discouraged.

(c) Rationale

Inlets play a vital role in the estuarine ecosystem. They control patterns of backbay currents, salinity and nutrient distribution and provide migratory pathways between the ocean and the back bays for marine and estuarine species.

Submerged infrastructure is a hazard in inlets since the strong currents may expose and break the pipes or cables. There is also a possibility of anchors snagging and breaking the infrastructure.

7:7E-3.10 Marina Moorings

NOTE: Marina Moorings and Ports (7:7E-3.11) were previously classified as Man-made harbors, a General Water Area (7:7E-4.1).

(a) Definition

Marina moorings are areas of water that provide mooring and boat maneuvering room as well as access to land and navigational channels for recreational boats. Typically maintenance dredging is required to preserve water depth.

(b) Policy

1. Any use that would detract from existing or proposed recreational boating use in marina mooring areas is discouraged.

2. Maintenance dredging in the marina mooring and access channel is encouraged provided that turbidity is controlled and that there is an acceptable dredge spoil disposal site.

(c) Rationale

Marinas are a key element in New Jersey's coastal resort economy. The maintenance of existing marina areas and the protection of these areas from competing uses which would detract from the recreational service they provide is, therefore, a high priority.

7:7E-3.11 Ports

NOTE: Marina Moorings (7:7E-3.11) and Ports were previously classified as Man-Made Harbors, a General Water Area (7:7E-4.1).

(a) Definition

Ports are water areas having, or lying immediately adjacent to, concentrations of publicly utilized shoreside marine terminals and transfer facilities for the movement of waterborne cargo (including fluids), and including facilities for loading, unloading and temporary storage. Ports are found in Newark, Elizabeth, Jersey City, Weehawken, Hoboken and Camden.

NOTE: Policies for a docking facility or concentration of docks for a single industrial or manufacturing facility may be found under the General Water Area Policy for Docks and Piers (Section 7:7E-4.11).

(b) Policy

1. Any use which would preempt or interfere with port uses of this water area is prohibited.

2. Aquaculture, dumping of solid or semi-solid waste, and boat ramps for recreational boating are prohibited.

3. Docks and piers for cargo movement are an encouraged use.

4. Filling to create docks or quays is conditionally acceptable if docks and piers built on pilings are not feasible.

(c) Rationale

The ports of New Jersey are components of two of the nation's three largest port districts -- the New York-New Jersey Port District and the Delaware River Port District. The Port of Newark-Elizabeth is the nation's largest containerport. Shipping is a major industry in the state as well as an important contributer to the well-being of other state industries. A set of policies aimed at encouraging the use and expansion of existing ports, while preventing the sprawl of port uses into undeveloped areas will, therefore, be an element of coastal policy.

7:7E-3.12 Submerged Infrastructure Routes

(a) Definition

A submerged infrastructure route is the corridor in which a pipe or cable runs on or below a submerged land surface.

(b) Policy

Any activity which would increase the likelihood of infrastructure damage or breakage, or interfere with maintenance operations is prohibited.

(c) Rationale

Submerged infrastructure routes are a large capital investment and much depends on the safe functioning of the infrastructure. Both human and natural systems suffer from accidental breakage, especially of large oil or gas pipelines. Activities which increase hazard for submerged infrastructure must therefore be excluded.

7:7E-3.13 Shipwrecks and Artificial Reefs

(a) Definition

This Special Area includes all permanently submerged or abandoned remains of vessels [lying] which serve as a special marine habitat and are within the ocean waters of the State of New Jersey three mile territorial sea, but outside of Navigation Channels. [whether sunk intentionally or unintentionally.] Known sites include those shown either on National Ocean Survey (N.O.S.) Charts listed in the definition above of the Navigation Channel Special Area, or listed in: W. Krotee and R. Krotee Shipwrecks Off the New Jersey Coast (1966) and B.L. Freeman and L.A. Walford Angler's Guide to the United States Atlantic Coast Fish, Fishing Grounds, and Fishing Facilities (1974). Also included in this category are artificial fishing reefs which serve the same natural function as a habitat for living marine resources.

(b) Policy

Acceptable uses include recreational and commercial finfishing and shellfishing, scuba diving, research and expansion of artificial reefs by the deposition of additional weighed non-toxic material, provided it can be demonstrated that additional material will not wash ashore, or interfere with either navigation as regulated by U.S. Coast Guard or commercial fishing operations.

Prohibited uses include commercial salvage of wrecks, submarine sand or gravel mining which would destroy ecological or physical stability, and sewage or industrial waste disposal.

(c) Rationale

Shipwrecks and other natural or artificial materials can serve as critical habitat for benthic finfish and lobsters, and other invertebrates which prefer shelter in hard substrates otherwise uncommon in New Jersey's marine waters. These areas function as congregation areas for migratory species and support extensive recreational fishing by private boats, commercial party boats, and commercial lobstering. Shipwrecks are also fragile historic and cultural resources. Scuba diving club members from New Jersey and other states visit these resources. This policy applies only to ocean areas and does not conflict with waterfront clean-up efforts.

7:7E-3.14 Estuarine or Marine Sanctuary

(a) Definition

An Estuarine or Marine sanctuary is a specific geographic area located within ocean waters, from the highest extent of tidal action seaward to the outer edge of the Continental Shelf, which has been designated by the Secretary of Commerce after approval by the President of the United States. Any sanctuary within New Jersey's coastal zone would not become effective if within 60 days of designation the Governor disapproved. Under Title III of the Marine Protection, Research and Sanctuaries Act of 1972 (P.L. 92-532), a marine sanctuary can be established for the purpose of preserving or restoring marine areas for various values. To date, there are no designated marine sanctuaries within New Jersey. The Office of [Ocean Management] Coastal Zone Management within NOAA is presently reviewing all recommendations, including those within the Mid-Atlantic states. DEP[-OCZM] submitted six recommendations to NOAA in 1977, including the Hudson Canyon, Shrewsbury Rocks, Great Bay estuary, shipwrecks, inlets, and offshore sand ridges. Designation of one or more of these areas as Estuarine or Marine sanctuaries in New Jersey's nearshore and offshore areas requires joint actions by the Governor of New Jersey and the U.S. Secretary of Commerce, and could take place during 1981 [1979].

(b) Policy

Management principles in the selected areas will serve to preserve and protect the areas, as well as indicate what actions are not permissible in the area. Non-permissible uses will be dependent on the five basic purposes for designation, which include: habitat areas, species areas, research areas, recreational and esthetic areas, and unique or exceptional areas. After designation, activities not compatible with the basic purposes will be prohibited or restricted, but in general all other uses are allowed. Final policy in marine sanctuaries must be approved jointly by the Governor of New Jersey and the U.S. Secretary of Commerce.

(c) Rationale

Certain portions of the Atlantic Ocean and adjacent estuaries are of special national and regional value which could be adversely impacted by development likely to take place in the future, especially activities related to offshore oil and gas development. It is in the long-term interest of the people of the Nation to identify, protect, and manage these special areas.

7:7E-3.15 Wet Borrow Pits

NOTE: The Special Area Policy on Borrow Pits (7:7E-3.27) has been replaced by this policy on Wet Borrow Pits and a new Special Area Policy on Dry Borrow Pits (7:7E-3.31).

(a) Definition

Wet borrow pits are scattered perennial man-made lakes that are the results of surface mining for coastal minerals extending below groundwater level to create a flooded depression. This includes but is not limited to, flooded sand, gravel and clay pits, and stone quarries.

(b) Policy

1. Proposed uses which would promote the wildlife habitat and scenic amenity values of wet borrow pits are encouraged.

2. Sand and Gravel Extraction is conditionally acceptable provided the Use Policies for Mining are complied with.

3. Disposal of dredge spoil is conditionally acceptable provided that:

   (i) the spoil is clean and non-toxic, of an appropriate particle size for the site, and will not disturb groundwater flow or quality.

   (ii) half the original lake area remains as surface water in patterns designed to maximize wildlife habitat value and create wetland areas , except that the entire lake may be filled if necessary to prevent the lake from acting as a channel for salt water intrusion into aquifers.

4. Filling of wet borrow pits for residential construction is conditionally acceptable provided that:

   (i) the fill is clean and will not degrade groundwater quality,

   (ii) at least half of the original water area is left as open water,

   (iii) land-water edges are maximized and vegetated to promote native wildlife,

   (iv) there is designation of a water quality buffer zone around water areas of at least fifty feet. Structures and paving, except at limited water access points, are prohibited in the water quality buffer. In general, the water quality buffer area shall be allowed to succeed naturally to water's edge wetland and forest with minimum disturbance and runoff,

   (v) a program for water quality monitoring and maintenance is included with the application, and

   (vi) that recreational uses in water and water quality buffer areas minimize wildlife disturbance.

5. Discharge of liquid or solid waste, other than clean dredge fill of acceptable particle size, is prohibited.

(c) Rationale

Wet Borrow Pits are a special category of the General Water Area type Lakes, Ponds and Reservoirs. The Special Area Policies for Wet Borrow Pits are less restrictive than the policies for other Lakes, Ponds and Reservoirs in that they allow Sand and Grave Extraction, Dredge Spoil Disposal and Filling, under specified conditions. This is because they are already disturbed sites. Also, they are of relatively recent origin and, typically, vegetative succession is not as far advanced as along natural lakes. Wet Borrow Pits, therefore, tend to be less important as wildlife habitats then natural lakes. Finally, they are not connected to the wider estuarine system by streams.

On the other hand, their separation from streams means that they are most susceptible to water quality impacts caused by runoff. The water is still, and the only water loss is through groundwater seepage and evaporation. Sediment collects quickly, enlarging marsh areas, and the eutrophic conditions that lead to sudden oxygen loss are concentrated by evaporation. Low levels of toxicity are quickly bio-magnified to fatal levels. In general, these still waters are much more sensitive to impacts of all kinds than flowing water.

Undisturbed wet borrow pits can become wildlife habitats for aquatic, amphibian and terrestrial species, offering productive edges, shallow waters, wetland areas and important breeding and migratory habitats. Proposals that include borrow pits as wildlife preserves are, therefore, encouraged. Low intensity recreation which takes advantage of the scenic amenities of these lakes is also desirable if wildlife disturbance is minimized.

Wet borrow pits were created by mining operations. Continued mining of sand and gravel at these sites would be less environmentally disruptive than mining operations at new sites.

There is a severe shortage of dredge spoil disposal sites in New Jersey. The filling of wet borrow pits is essentially a reverse of the mining operation which created them, and is less impactive than filling natural depressions, provided that the spoil is clean and non-toxic and the particle size matches the neighboring natural substrates closely enough as not to disturb groundwater movement. If the filling of wet borrow pits is designed to retain some surface water area, and to maximize land-water edges, much of the wildlife value can be preserved while providing needed spoil disposal sites.

The value of Wet Borrow Pits as wildlife habitat may be enhanced by limited fingers of fill to enlarge the land-water interface. Filling can also create sites for waterfront housing. Since residential construction sites near surface water are much in demand, it is desirable to allow some residential and related uses, provided that housing is consistent with Location and Use Policies, water quality is maintained, and a water quality buffer is preserved along the water's edge. The buffer would not block visual or physical access to the water, but would preserve water quality and provide wildlife habitat. Medford Lakes provides an example of an attractive residential community built around Wet Borrow Pits, but siltation and eutrophication provide evidence for the need for a water quality buffer area.

7:7E-3.16 Intertidal Flats

(a) Definition

Intertidal Flats are extensive areas between the mean high water line and mean low water line along tidal bayshores. Intertidal flats are found along Delaware Bay in Cape May County and in other tidal bayshores.

(b) Policies

1. Development, filling, new dredging or other disturbance of intertidal flats is discouraged.

2. Submerged infrastructure is conditionally acceptable, provided that (i) there is no feasible alternative route that would not disturb intertidal flats, (ii) the infrastructure is buried deeply enough to avoid exposure or hazard, and (iii) all trenches are backfilled with naturally occuring sediment.

(c) Rationale

Intertidal flats play a critical role in estuarine ecosystems. They are a land-water ecotone, or ecological edge where many material and energy exchanges between land and water take place. They are critical habitats for many benthic organisms and are critical forage areas for many migrant waterfowl. The sediments laid down in intertidal flats contain much organic detritus from decaying land and water's edge vegetation, and the food webs in these areas are an important link in the maintenance of estuarine productivity. Preservation is, therefore, the intent of these policies, with limited exceptions to allow for needed water-dependent uses and submerged infrastructure.

7:7E-3.17 Filled Water's Edge

Note: This policy combines the former Retained Water's Edge Policy (7:7E-5.3) and Filled Water's Edge Policy (7:7E-5.4). This is the first of the Special Water's Edge types. They are depicted in Figures 13 and 14.

(a) Definition

Filled Water's Edge areas are existing filled areas lying between Wetlands or Water Areas, and either: (1) the upland limit of fill, or (2) the first public road or railroad landward of the adjacent Water Area, whichever is closer to the water. Some existing or former dredge spoil and excavation fill areas are Filled Water's Edge Area.

(b) Policies

1. Development is prohibited in the Filled Water's Edge within 100 feet of a navigable water body, unless the use is water related or water dependent (See Section 7:7E-1.6(c) for definitions of water related, or water dependent and navigable).

2. Development elsewhere in the Filled Water's Edge is conditionally acceptable provided it would not preempt use of the waterfront portion of the Filled Water's Edge for potential water dependent or water related uses.

SPECIAL WATER'S EDGE TYPES – MAINLAND

(Schematic of Typical Stream Corridor Outside Bay and Ocean Shore Area)

Figure 13

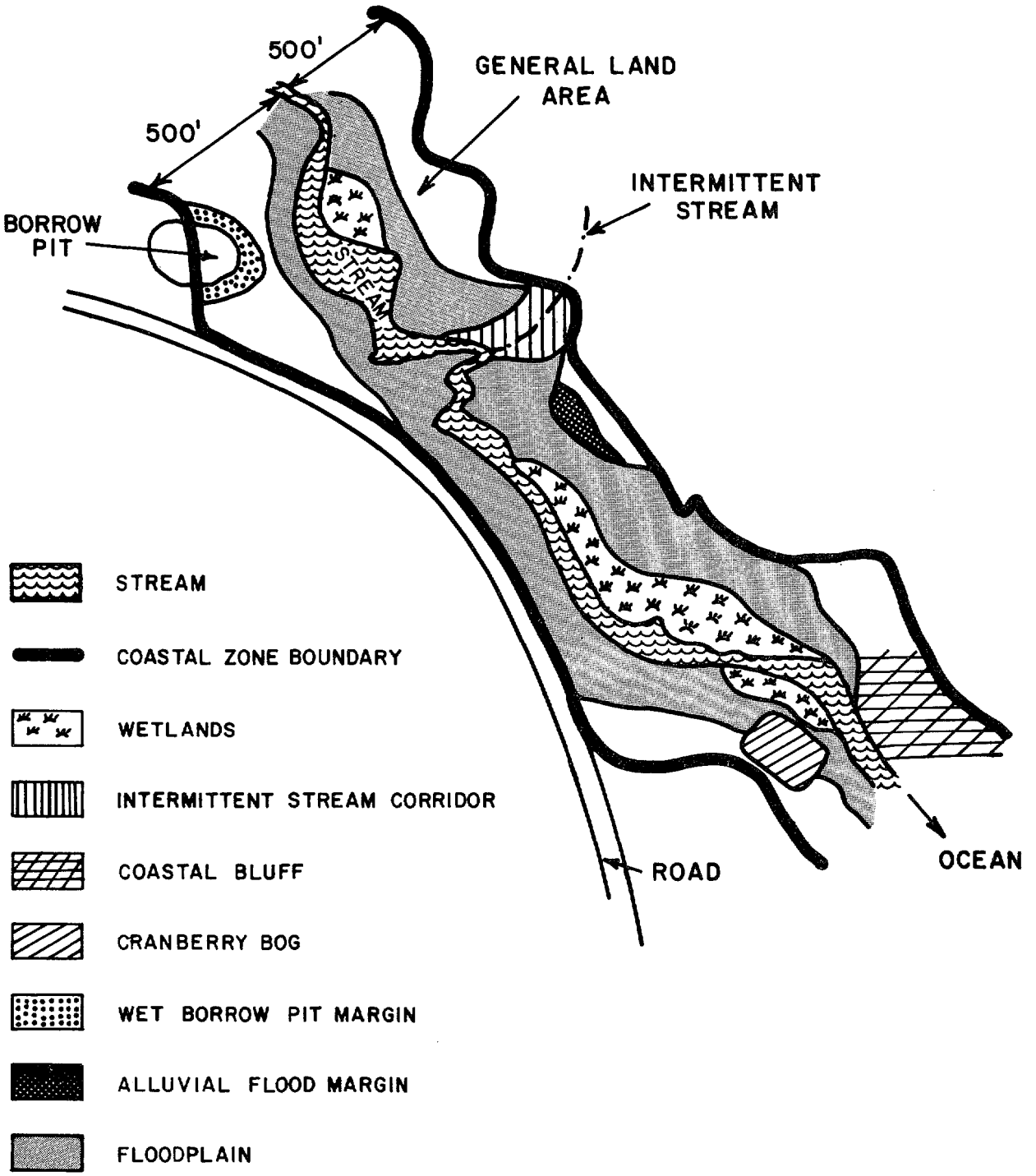
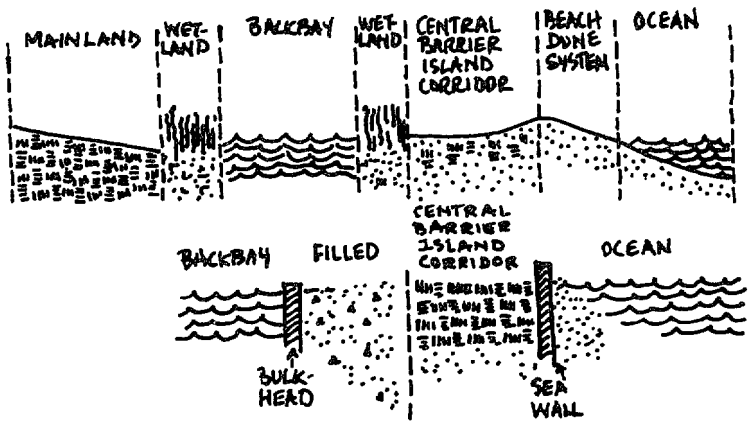
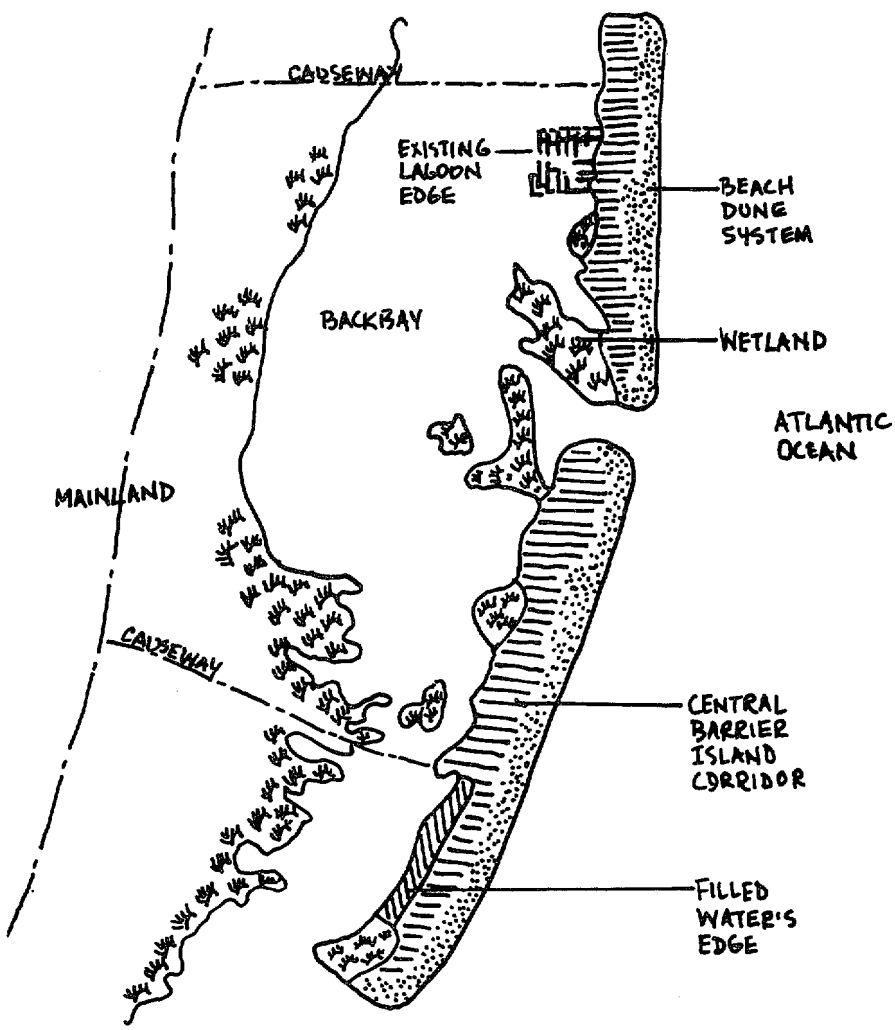


FIGURE 14: SPECIAL WATER'S EDGE TYPES - BARRIER ISLAND

1. CROSS SECTION CENTRAL BARRIER ISLAND CORRIDOR - NATURAL

2. CROSS SECTION - CBIC - FILLED-RETAINED





(c) Rationale

[Retained] Filled Water's Edge areas are of less environmental concern than undisturbed water's edge areas. The buffering functions of the water's edge have already been largely lost through excavation, filling and the construction of retaining structures. It is acceptable to allow certain kinds of development up to the limit of fill [line of the existing retaining structure]. Because the waterfront is a scarce resource, it is desirable to limit waterfront development in these areas to uses that are either water dependent or water related. [on direct water access or uses that are related to shoreland recreation and benefit the most number of people.] The construction of new [private] housing [along built up open water bodies] in the Filled Water's Edge would be an inefficient use of this scarce resource, unless the housing was in a Special Urban Area and part of a mixed use development incorporating water's edge recreation areas. [but] S[s]uch uses as public waterfront parks, hotels and restaurants would be acceptable, if water-related.

7:7E-3.18 Existing Lagoon [Areas] Edge

(a) Definition

Existing Lagoon [Areas] Edges are defined as existing, undeveloped, man-made land areas resulting from the dredging and filling of wetlands, bay bottom and other estuarine areas for the purpose of creating waterfront lots along lagoons for residential and commercial development. The land area may be stabilized by a retaining structure. Existing Lagoon Edges extend upland to the limit of fill, or the first public road or railroad generally parallel to the Water Area, whichever is less (Figure 15).

(b) Policy

Development of Existing Lagoon Areas is acceptable provided that:

1. reclamation of the site to its natural state is infeasible,

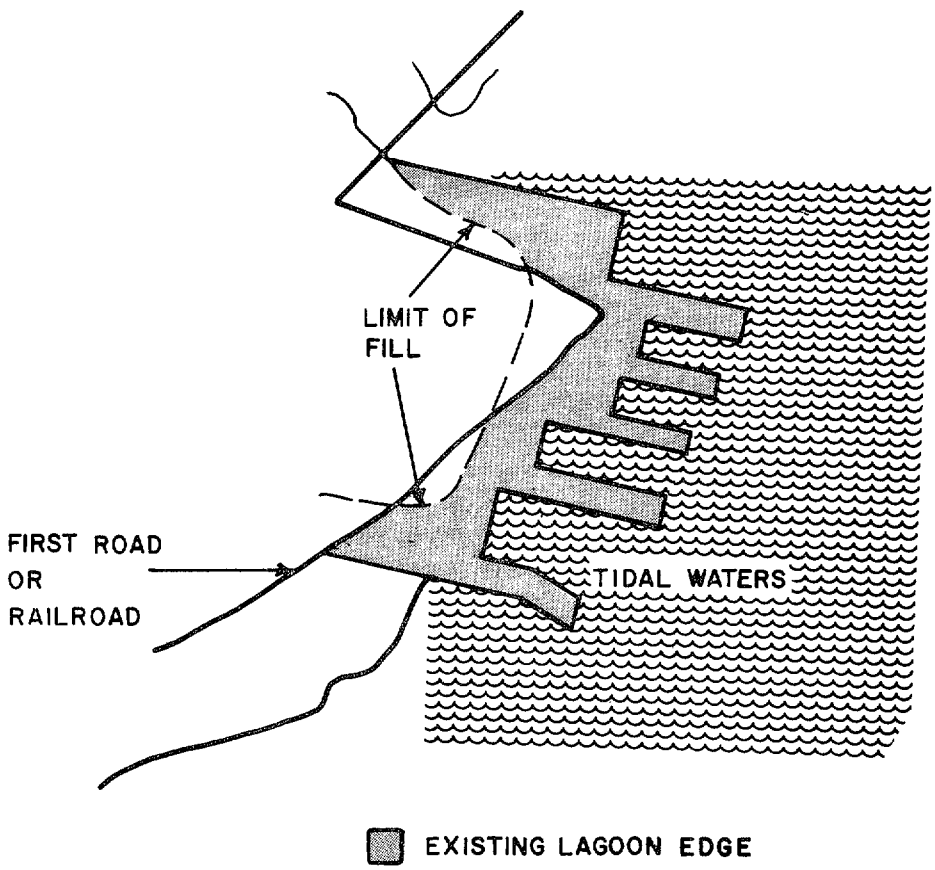
2. the proposed development is compatible with adjacent land and water uses,

3. existing unstabilized slopes are stabilized using vegetation, to the maximum extent practicable, and

4. existing retaining structures are adequate to protect the proposed development, or appropriate improvements are proposed for the retaining structure.

Figure 15

EXISTING LAGOON EDGE



(c) Rationale

This policy is designed to promote the reclamation of as much filled land as possible. Filled lands adjacent to water areas, especially existing, undeveloped lagoons, represent potential problems for water quality. The slope must be stabilized in order to prevent erosion, turbidity and loss of estuarine productivity. These problems have been well documented in Grant F. Walton, et al., Evaluation of Estuarine Site Development Lagoons (New Brunswick, N.J.: Rutgers-Water Resources Research Institute, 1976). Thousands of undeveloped building lots exist [in the Bay and Ocean Shore Region] along stabilized and unstabilized lagoons created by destroying wetlands in the 1950's and 1960's. Development of these residential lots is acceptable provided that water quality standards are met and the banks of the filled areas are revegetated, or retained, since the fundamental and near irretrievable damage to the natural environment of these areas took place a decade or more ago. State coastal policy now precludes the development of new lagoons for residential development.

7:7E-3.19 Beach and Dune Systems

Note: This policy combines the Special Area Policies for Beaches (7:7E-3.10), High Risk Beach Erosion Areas (7:7E-3.12) and Dunes (7:7E-3.13).

(a) Definition

Beach and Dune Systems include five components: Beaches, Dunes, High Risk Beach Erosion Areas, Sand Accretion Areas, and Overwash Areas (See Figure 16). These components are defined as follows:

1. Beaches are gently sloping areas of unconsolidated material, typically sand, that extend landward from the water to the area where a definite change takes place either in material or physiographic form, or to the line of vegetation. The upland limit of beaches is typically defined by the vegetation line or the first cultural feature, such as a road, seawall, or boardwalk. Beaches are divided into the "wet beach", the area at and below the mean high water line, and the "dry beach", the area above the mean high water line. The wet beach area is impressed with the Public Trust Doctrine. While New Jersey Beaches are located primarily along the Delaware and Raritan Bays and the Atlantic Ocean, a few beach areas also exist elsewhere -- in Perth Amboy and along the Delaware River, for example.

2. A dune is a ridge or mound of loose wind-blown material, usually sand, sometimes vegetated, roughly parallel and upland from a beach. Its inland limit is the landward extent of the deposited material.

   Dunes include the following subcategories:

   (i) foredunes or primary dunes. These are the front dunes immediately behind the backshore of the beach,

   (ii) primary backdunes and secondary and tertiary dunes. These are backslope of the foredune and extend from the dune ridges immediately landward of the foredune to the inland toe of the most inland slope,

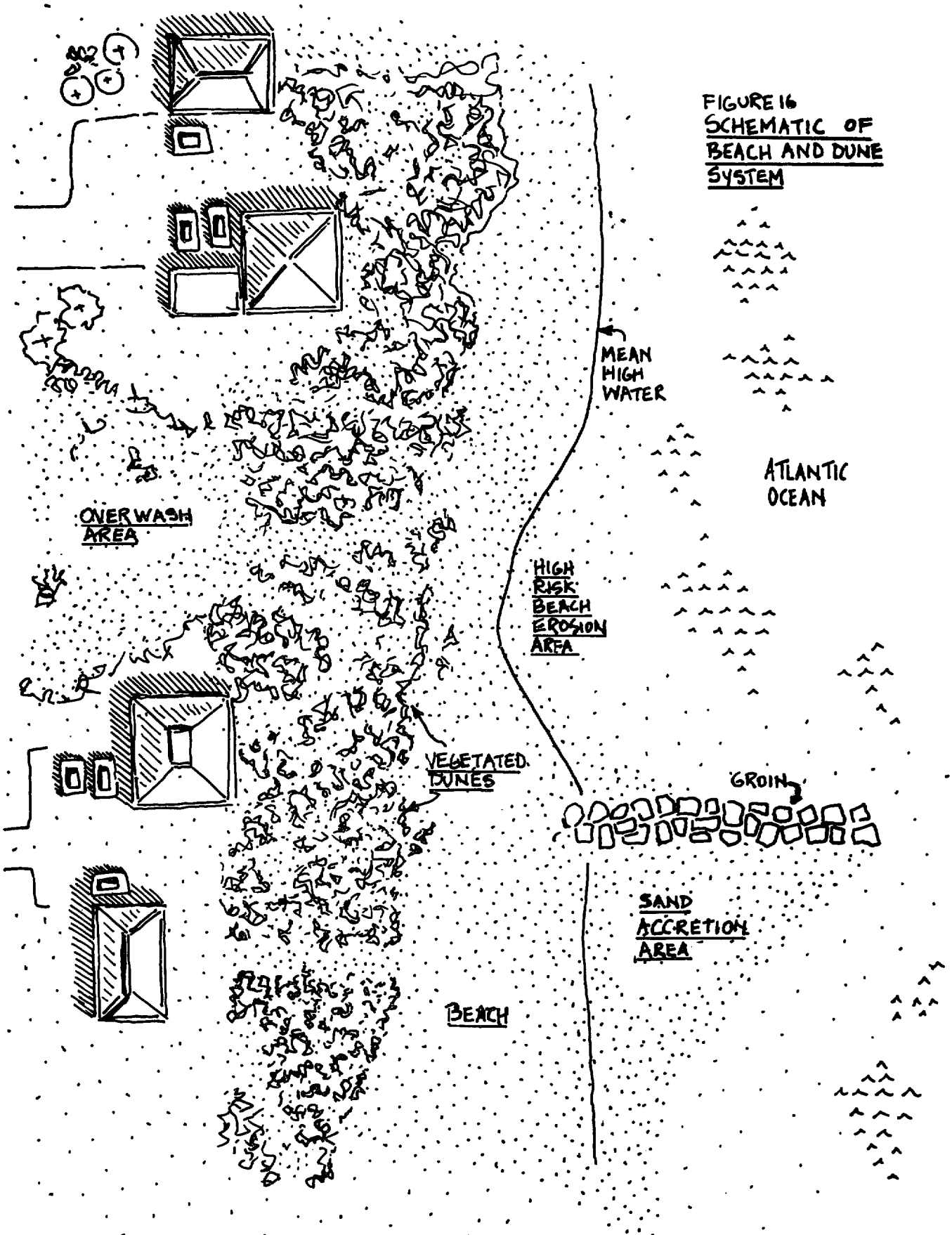


FIGURE 16
SCHEMATIC OF
BEACH AND DUNE
SYSTEM

(iii) migrating dunes. These are dunes which have changed location through time. Coastal dunes generally migrate inland,

(iv) artificial dunes. These are accumulation of sediment in dune form which have been built by any non-natural process such as bulldozing or sand fencing,

(v) stabilized dunes. These are dunes maintained in a fixed location by artificial means,

(vi) dune fields. These include but are not limited to any combination of the dune types defined in this section.

3. High Risk Beach Erosion Areas are ocean shorelines that are eroding and/or have a history of erosion, causing them to be highly susceptible to [for] further erosion and damage from storms. High Risk Beach Erosion Areas may be identified by any one of the following characteristics:

(1) Lack of beaches
(2) Lack of beaches at high tide
(3) Narrow beaches
(4) High beach mobility
(5) Foreshore extended under a boardwalk
(6) Low dunes or no dunes
(7) Escarped foredune
(8) Gaps in dune fields
(9) Steep beach slopes
(10) Cliffed bluffs adjacent to beach
(11) Insufficient dune or bluff vegetation
(12) Exposed, damaged or breached jetties, groins or seawalls
(13) High long-term erosion rates
(14) Pronounced downdrift effects of groins (jetties)

High Risk Beach Erosion Areas extend inland to the limit [first cultural feature, established dune field, or] of the area likely to be eroded in less than 50 years or to the first cultural feature, whichever is less [the shortest distance, and include overwash areas where sand is carried over and through dunes during storm surges]. The illustrative High Risk Beach Erosion Areas identified by DEP in 1977 may become Overwash Areas, Guts, Ocean or some other land or water type after a storm.

4. Sand Accretion Areas are areas where littoral offshore or other natural currents or storms have deposited sufficient sand that new land is forming. In some cases dune grasses and other water's edge vegetation may be starting to grow.

5. Overwash Areas consist of an overwash fan and throat. An overwash fan is a gently sloping, conical accumulation of sediment deposited landward of the beach by the overwash processes that result from storm wave activity. An overwash throat is a low narrow area through the foredune where water passes during storms and carries sediment to the overwash fan. The seaward limit of overwash sediment is the throat. The landward limit of overwash is the inland limit of sediment transport.

(b) Policies

1. Activities that adversely affect the natural functioning of the Beach and Dune System are discouraged unless, specifically permitted by policies 2, 3, 4, or 5.

2. The following activities are conditionally acceptable in the Beach and Dune System.

   (i) Demolition and removal of paving and structures,

   (ii) Sediment deposition to create new dunes,

   (iii) Planting of adapted vegetation,

   (iv) Development of limited unpaved pedestrian walkways through dunes and overwash areas to the beach,

   (v) Shore Protection Structures which meet the Use conditions of Section 7:7E-7.11(e).

3. Public access to beaches is encouraged. Coastal development that unreasonably restricts public access to beaches is prohibited.

4. If a Sand Accretion Area obstructs a navigation channel, maintenance dredging is conditionally acceptable provided that:

   (i) turbidity is controlled, and

   (ii) an acceptable dredge spoil disposal site is used (See Sections 7:7E-4.10(g) and 7:7E-7.12).

5. Development in or adjacent to High Risk Beach Erosion Areas that would contribute to significant adverse erosion or accretion downdrift or updrift is discouraged.

(c) Rationale

1. Beaches

Undeveloped beaches are vital to the New Jersey resort economy. Unrestricted access for recreational purposes is desirable so that the beaches can be enjoyed by all residents and visitors of the state. Public access will be required for any beaches obtaining state funds for shore protection purposes. Beaches are subject to coastal storms and erosion from offshore currents. Public health and safety considerations require that structures be excluded from beaches to prevent or minimize loss of life or property from storms and floods, except for some shore protection structures and linear facilities, such as pipelines, when nonbeach locations are not prudent or feasible. Wet sand beaches have been designated a Geographic Area of Particular Concern (GAPC) by DEP under the federal Coastal Zone Management Act.

2. Dunes

Ocean and bayfront dunes are an irreplaceable physical feature of the natural environment possessing outstanding geological, recreational, scenic and protective value. Protection and preservation in a natural state is vital to this and succeeding generations of citizens of the State and the Nation. The dunes are a dynamic migrating natural phenomenon that helps protect lives and property in adjacent landward areas, and buffers barrier islands and barrier beach spits from the effects of major natural coastal hazards such as hurricanes, storms, flooding and erosion. Natural dune systems also help promote wide sandy beaches and provide important habitat for wildlife species.

Extensive destruction of dunes has taken place in this century along most of the coast. This disruption of the natural processes of the beach dune system has led to severe erosion of some beach areas, jeopardized the safety of existing structures on and behind the remaining dunes and upland of the beaches; increased the need to manage development in shorefront areas no longer protected by dunes; interfered with the sand balance that is so essential for recreational beaches and the coastal resort economy; necessitated increased public expenditures by citizens of the entire State for shore protection structures and programs; and increased the likelihood of major losses of life and property from flooding and storm surges.

The policy encourages the natural functioning of the dune system and encourages restoration of destroyed dunes, to protect and enhance the coastal beach dune areas, and to devote these precious areas to only those limited land uses which preserve, protect and enhance the natural environment of the dynamic dune system.

3. High Risk Beach Erosion Areas

As a result of continuing rising sea levels and active storm-induced sand movement and offshore currents (littoral drift), the Atlantic coastline of New Jersey is a retreating shore. Coastal erosion also affects the bayshores of New Jersey. The rate of retreat, or erosion, is not uniform, and varies locally depending upon the nature and magnitude of coastal processes operating within individual parts of the shoreline. Certain parts of the shoreline have a higher risk for further erosion. Development other than restoration measures should be sharply restricted in these areas in order to protect public safety and prevent loss of life and property.

In 1977, The Center for Coastal and Environmental Studies at Rutgers University completed a study commissioned by DEP[-OCZM], entitled[,] Coastal Geomorphology of New Jersey, which analyzed the problems of shoreline erosion, classified the shoreline and identified fourteen [thirteen] specific examples of high risk erosion areas:

1. Cumberland County - Delaware Bay Shore (developed portions along bayshore)
2. Middle Township (developed portions of bayshore), Cape May County

3. Cape May City
4. Northern Wildwood (where Hereford Inlet fronts beach)
5. Strathmere (Putnam Avenue to end of developed island)
6. Ocean City (3rd St. to 18th St.)
7. Ocean City (E. Atlantic Blvd. to Newcastle Rd.)
8. Atlantic City (where Absecon Inlet fronts beach, Oriental Ave. to Parkside)
9. Barnegat Light (8th to 4th St.)
10. Loch Arbour to Elberon
11. Long Branch
12. Sea Bright and Monmouth Beach
13. Raritan Bay (developed portions along bayshore)
14. Sea Isle City (southern half)

[In addition, the southern half of Sea Isle City can be considered a High Risk Beach Erosion Area after the winter storms of 1978.]

4. Sand Accretion Areas

Natural shoreline processes transport sand eroding in one place and deposit it in another. The sand accretes in deposition areas to form new beaches and dunes. This process is an important part of the natural shore protection against storms and should not be hindered. The practice of bulldozing these accretion areas for beach nourishment or other purposes is specifically against the intent of this policy.

5. Overwash Areas

Overwash Areas indicate weaknesses in natural and built shore protection. Hazard has been demonstrated, often with extensive property damage. This is a natural shoreline movement process associated with storms and rising sea level and is the principal technique by which barrier islands migrate inland. Overwash Areas are unsuitable locations for further development, and public funds should not be used to rebuild damaged shore protection structures. The return of these areas to a natural state, particularly if new dune formation is promoted is, therefore, desirable.

7:7E-3.20 [Coastal] Wetlands

Note: This Section now combines Special Area Policies 7:7E-3.11 on Coastal Wetlands, Special Area 7:7E-3.17 on White Cedar Stands and Special Area 7:7E-3.23 on Bogs and Freshwater Wetlands.

(a) Definition

Wetlands are areas where the substrate is inundated or saturated by surface or groundwater 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 which are subject to the Wetlands Act, or the Coastal Area Facility Review Act (CAFRA) or the Waterfront Development Law.

Wetlands regulated under the Wetlands Act of 1970 are delineated at a scale of 1:2,400 on official maps as listed at N.J.A.C. 7:7A-1.13. All coastal wetlands situated in the Raritan Basin, south along the Atlantic Ocean and north along Delaware Bay and River are subject to the Wetlands Act.

Under CAFRA, DEP regulates freshwater wetlands and forested wetlands such as white cedars on sites proposed for the major developments requiring a CAFRA permit.

Generalized location maps of White Cedar Stands and other woody wetlands can be found in J. McCormick and L. Jones, The Pine Barrens Vegetation (1973), and forest type maps within DEP's Bureau of Forestry.

The Waterfront Development Law under the proposed rules will regulate all wetlands north of the Raritan Basin, except for some areas within the Hackensack Meadowlands District, and all coastal wetlands along the Delaware River not regulated under the Wetlands Act.

Generalized locations of all wetland types can be found in county soil surveys prepared by the U.S. Department of Agriculture, Soil Conservation Service.

NOTE: The State is not aware of any wetlands, outside of the Hackensack Meadowlands District, not subject to one of these three laws. Commentators to the proposed Program are invited to bring to the attention of DEP any information to the contrary.

[Coastal Wetlands are low-lying marsh, swamp, meadow and flat land areas subject to tidal action as delineated by DEP on official maps at a scale of 1:2,400 (1 inch = 200 feet) listed at N.J.A.C. 7:7A-1.13. Coastal Wetlands extend beyond the Bay and Ocean Shore Segment along the Delaware River and its tributaries and along the Raritan Bay, but do not extend north of the Raritan Bay.

Bogs and freshwater wetlands are local, natural or man-made, vegetated undrained topographic depressions with the seasonal high water table at surface, fed by groundwater, usually underlain with peat and other organic material. Water in bogs is acidic, nearly free of dissolved nutrients.]

[Low lying areas supporting Atlantic White Cedars (Chamaecyparis thyoides), where white cedars compose a significant percentage of stems within a given area.]

(b) Policy

1. In general, development of all kinds is prohibited [discouraged] in wetlands, unless DEP can find that the proposed development meets the following four [standards] conditions (see also N.J.A.C. 7:7A-1.5 and 1.7):

(i) Requires water access or is water oriented as a central purpose of the basic function of the activity (this policy applies only to development proposed on or adjacent to waterways),

NOTE: This means that the use must be water dependent as defined in Section 7:7E-1.6(c)8.

(ii) Has no prudent or feasible alternative on a non-wetland site,

(iii) Will result in minimum feasible alteration or impairment of natural tidal circulation (or natural circulation in the case of non-tidal wetlands), and

(iv) Will result in minimum feasible alteration or impairment of natural contour or the natural vegetation of the wetlands.

2. In particular, dumping solid or liquid wastes and applying or storing certain pesticides on mapped coastal wetlands are prohibited (see N.J.A.C. 7:7A-1.2)[.], and are discouraged on other coastal wetlands.

3. [DEP encourages] Both the restoration of degraded wetlands as a mitigation measure for certain types of approved wetlands development and the creation of new wetlands in non-sensitive areas are encouraged. The Division of Coastal Resources [has] previously has required restoration of temporarily disturbed wetlands and will continue to do so [in] on a case-by-case basis. [The construction of new vegetated wetlands is a highly technical activity requiring a great degree of precision and understanding of the estuarine system.]

4. Under [State law,] the Wetlands Act, the activities of DEP, the Tidelands Resource Council, the State Mosquito Control Commission and county mosquito control commissions are exempted from the coastal wetlands policies[y (a) above] within mapped coastal wetlands. Voluntary administrative compliance with the regulations adopted by DEP under to the Act is not, however, precluded.

5. Development that adversely affects white cedar stands is prohibited.

(c) Rationale

The environmental values, and fragility of coastal wetlands have been officially recognized in New Jersey since the passage of the Wetlands Act of 1970 (N.J.S.A. 13:9A-1 et seq.) Coastal wetlands are [undoubtedly] the most environmentally valuable land areas within the coastal zone.

Coastal wetlands contribute to the physical stability of the coastal zone by serving as: (i) a transitional area between the forces of the open sea and upland areas [by] that absorb[tion] and dissipate[sion of] wind-driven storm waves and storm surges, (ii) a flood water storage area[s], [thus reducing inland damage,] and, (iii) a sediment and pollution trap[s].

Also, wetlands naturally perform [naturally] the wastewater treatment process of removing phosphorous and nitrogenous water pollutants, unless the wetlands are stressed.

The biological productivity of New Jersey's coastal wetlands is enormous and critical to the function of estuarine and marine ecosystems. The emergent cord grasses and associated algal[e] mats convert inorganic nutrients into organic [vegetative] plant material through the process of photosynthesis. [which is the critical basis] In this way, the primary base for estuarine and marine food webs is provided. [The primary biological productivity of New Jersey's coastal wetlands is greater than that of terrestrial corn and wheat fields on a per acre basis. However, this value was not widely known and was formerly overlooked.] The principal direct dietary beneficiaries of organic wetland detritus are bacteria and protozo[ni]an, which are in turn fed upon by larger invertebrates. Important finfish, shellfish, [and] waterfowl, and other resources feed upon these invertebrates. New Jersey's Coastal Wetlands are prime wintering habitat annually for hundreds of thousands of migratory waterfowl. Approximately two-thirds of marine finfish and shellfish are known to be estuarine, and, therefore, wetlands-dependent.

Inland herbaceous wetlands, such as bogs, play an important role in regulating the quality of water in streams that flow to the estuaries. They retard runoff and store storm waters. They are important areas of primary productivity for estuarine systems. They are critical habitats for several species of plants and animals that are endangered or threatened. They are productive habitats for other game and non-game animals, such as deer. These wetlands also serve as fire breaks, and may limit the spread of forest, brush, or grass fires. They are inappropriate development sites due to poor drainage and load bearing capacity of the underlying soils.

Forested Wetlands play a critical role in coastal ecosystems. Roots and trunks stabilize shorelines and trap sediment. They are physical and biochemical water filter areas maintaining tidal stream water quality. They provide primary protection to estuarine areas from decaying plant material flushed down by streams. They are critical habitats, breeding areas and movement corridors for many coastal species including rare and endangered species. High productivity, high water availability and high edge to area ratio make these areas especially productive wildlife areas.

White cedar stands, as well as other lowland swamp forests, play an important role in purifying water in coastal streams, retarding runoff, providing scenic value, and serving as a rich habitat for many and endangered plant and animal species, as well as game species, such as deer. White cedars also act as forest fire breaks. White cedar stands most commonly occur in flood plains and in the fringe areas of drainage ways and bogs, which are frequently underlain with saturated organic peat deposits. This material is particularly unsuited for development unless highly altered. Many of these locations are Natural Water's Edge Areas.

White cedar is New Jersey's most valuable timber species and grows in discrete stands. The wood has a long tradition of maritime and local craft uses. Unfortunately, white cedars have been eliminated from much of their previous range in New Jersey.

7:7E-3.21 Floodplains

(a) Definition

Floodplains are the Flood Hazard Areas around rivers, creeks and streams as delineated by DEP under the Flood Hazard Area Control Act (N.J.S.A. 58:16A-50), or by the Federal Emergency Management Agency (FEMA); or the Flood Hazard Area around other coastal water bodies as defined by FEMA. Floodplains include the areas subject to both tidal and fluvial flooding. Where Flood Hazard Areas have been delineated by both DEP and FEMA, the DEP delineations shall be used. Where Flood Hazard Areas have been delineated by neither DEP nor FEMA, the 10-foot contour line shall be used as the inland boundary of the Floodplain. The seaward boundary shall be the mean high water line.

The Floodplain policy shall not apply on Barrier Islands, Spits or Headlands nor in portions of a Floodplain which meet the definition of another Special Water's Edge type.

A complete list of streams where DEP has delineated the Flood Hazard Area can be found at N.J.A.C. 7:13-1.11 et seq.

The U.S. Army Corps of Engineers has delineated the tidal Floodplain for FEMA in most Coastal Zone municipalities. The geographic extent of the tidal flood hazard areas are indicated on USGS topographic maps at a scale of 1:24,000 as "flood prone" areas.

(b) Policies

1. Development is prohibited in Floodplains within 100 feet of a navigable water body, unless the use is water dependent.

2. Development elsewhere in Floodplains is discouraged unless:

   (i) it has no feasible alternate site,

   (ii) it would not preempt use of the waterfront portion of the Floodplain for potential water dependent use, and

   (iii) it is designed to ensure minimum feasible disturbance of vegetation.

3. Development must be consistent with all other coastal policies, in particular the performance standards found in the Flood Hazard Area Resource Policy (7:7E-8.23).

5. Detention basins are prohibited in river floodplains.

(c) Rationale

The goal of this policy is to reduce losses of life and property resulting from unwise development of floodplains, but to allow uses compatible with periodic flooding -- agriculture and forestry, recreation, and fish and wildlife habitat -- and uses which require a Water's Edge location. This policy is consistent with national objectives as expressed in the

President's Executive Order 11988 on Floodplain Management. It is also consistent with the State Waterfront Development Law's objective of safeguarding port facilities and waterfront resources for the public's overall economic advantage. The policy will ensure that the State's waterfront is not pre-empted by uses which could function equally well at inland locations.

River Floodplains are subject to flooding in severe fluvial storms. They are also critical elements of the coastal ecosystem, providing flood storage capacity, physical and biochemical water filtration, primary productivity and wildlife habitats.

For these reasons, the preferred policy is to preserve these corridors in their natural state with native adapted forest vegetation, allowing limited exceptions for water dependent uses and uses for which there is no feasible alternate location.

This policy applies only to Floodplains which have not been disturbed by filling. Sites subject to this policy, therefore, tend to be in a more natural state than sites subject to the Filled Water's Edge Policy. Accordingly, this policy is more restrictive, discouraging development which has an alternate feasible location or which would unnecessarily disturb vegetation, and requiring water dependency rather than only water relatedness within 100 feet of a navigable water body.

By discouraging development which has a feasible alternate location, this policy will tend to be most restrictive in undeveloped parts of the state, where there will tend to be more alternate locations for proposed development. An alternate location will not be considered feasible if it conflicts with adopted State policy. For example, if a commercial development is proposed in an urban downtown, which happens to be a Floodplain, a suburban location would not be considered a satisfcatory feasible alternative. Development found acceptable in Floodplains would, of course, have to be found consistent with public safety objectives and would have to meet the floodproofing requirement of the Flood Hazard Area Resource Policy.

7:7E-3.22 Central Barrier Island Corridor

(a) Definition

The Central Barrier Island corridor is that portion of barrier islands and spits or peninsulas (narrow land areas surrounded by both bay and ocean waters and connected to the mainland) that lies upland [and between] of [the Coastal] Wetlands, Beach[es] and Dune Systems, [Retained Water's Edge and] Filled Water's Edges, and Existing Lagoon [areas] Edges that line the ocean and bay sides of a barrier island or spit. [The Central Barrier Island Corridor excludes Dunes Special Area and begins at the foot of the most inland slope of Dunes. The Central Barrier Island Corridor also excludes washover areas.] Central Barrier Island Corridor does not apply to the headlands of northern Ocean County, Monmouth County, and the tip of Cape May County, which are part of the mainland [See Figure 6].

(b) Policies

1. New or expanded development within the Central Barrier Island Corridor is conditionally acceptable provided that the criteria for High Development Potential are met, as defined in the policy for Land Areas (see Section 7:7E-5.5).

2. The acceptable density of new development shall be determined using the high-rise policy for residential structures.

(c) Rationale

All of New Jersey's barrier islands and spits, except for Pullen Island in the Brigantine National Wildlife Refuge, are developed to varying degrees, largely as a result of incremental decisions made beginning more than one hundred years ago. Because the public facilities (roads and utilities) necessary to support urban and resort development already exist, and should be protected on New Jersey's barrier islands, and because development pressure is intense on barrier islands, the acceptability for development is to be determined by the Location Policy's criteria for residential development on Land Areas. Use of the high development potential criterion will generally accept infill projects and discourage extensions of development on barrier islands and spits. The high-rise policies will limit sharp increases in density on the presently developed islands.

The policy recognizes the diversity of New Jersey's barrier islands, from Absecon Island with the resort city and urban center of Atlantic City to Long Beach Island with largely single-family seasonal homes. Implementation of the policy is expected to reinforce the existing character of New Jersey's developed barrier islands and not add appreciably to the public service costs and emergency evacuation (in times of hurricanes) problems of these islands.

7:7E-3.23 Cranberry Bogs

(a) Definition

Cranberry Bogs are areas around streams which have been impounded and are now, or have formerly been, used for cranberry farming. These areas are intermittently flooded in the process of cranberry growing.

(b) Policy

1. Cranberry farming is encouraged provided that water quality and diversion standards are satisfied.

2. Wildlife refuges in former Cranberry Bogs are encouraged.

3. Other uses of former Cranberry Bogs are discouraged unless the impoundments have been removed sufficiently to return the stream to normal flow, and acceptability conditions for the Coastal Flood Hazard Area have been met.

(c) Rationale

Cranberry farming is a small but locally significant part of the coastal economy and should be protected and promoted. Growing cranberries requires plentiful supplies of high quality ground and surface water. Care must be taken, therefore, so that cranberry growing does not unacceptably impact local hydrology or water quality.

Abandoned Cranberry Bogs are ideal wildlife refuges if properly managed since habitat quality can be improved by intermittent flooding and the mechanisms to do this exist. Proposals that include wildlife management programs within Cranberry Bogs will therefore be favored. Other uses of abandoned Cranberry Bogs are possible, particularly low intensity recreation.

7:7E-3.24 Wet Borrow Pit Margins

(a) Definition

Wet Borrow Pit Margins are areas surrounding Wet Borrow Pits (see definition 7:7E-3.15(a)). They extend from normal water level in the borrow pit below to the inland limit of a Water Quality Buffer. The width of this buffer will vary by substrate texture. Where soils are coarse, i.e. sands or gravels, the width will be 100 feet; elsewhere, it will be 50 feet.

(b) Policy

1. Surface mining is conditionally acceptable provided that other coastal policies, particularly the Use Policies on Mining, are satisfied.

2. Wildlife habitat uses are encouraged.

3. Non water dependent uses are prohibited unless acceptable filling in the Wet Borrow Pit removes these areas from the Water's Edge and reclassifies them.

4. If residential development takes place landward of the Wet Borrow Pit Margin, use of the margin must be consistent with the requirements for a water quality buffer around Wet Borrow Pits (see Section 7:7E-3.15(b) 4(v)).

5. All proposed uses shall grade all banks at the immediate water's edge, except those in acceptable water access areas, to a slope not greater than 33 percent, and shall stabilize the surface and initiate succession of native vegetation adapted to water's edge conditions.

(c) Rationale

Wet Borrow Pit Margins are the water quality buffer areas of Wet Borrow Pits. The still water in the lakes is very susceptible to all types of impacts. A Water Quality Buffer provides a biophysical filter and bank stabilization. Preserving this area also maximizes the important wildlife habitat value of the land-water interface.

The policy on Wet Borrow Pits allows limited filling of the lakes and this may remove Wet Borrow Pit Margins from the water's edge. The former margin areas shall then be reclassified as appropriate, and policy analysis shall proceed on the new classes.

Mixed use projects that include wildlife habitats, and low and high intensity waterfront recreation are an acceptable use of some former borrow pits, since they realize the scenic and recreational value of the lakes and waterfront while preserving wildlife value. Care should be taken in the layout and design of the site to provide adequate separation and barriers to protect wildlife areas from human disturbance.

Recreational use of Wet Borrow Pit Margins is possible without losing the wildlife value, provided that intensive disturbance is limited to occasional concentrated water access points, and elsewhere banks are stabilized, native habitats promoted and human access controlled.

7:7E-3.25 Alluvial Flood Margins

(a) Definition

Alluvial Flood Margins are mainland areas adjacent to, and upland from, Floodplains. They extend inland to the limit of alluvial soils with a seasonal high water table equal to, or less than, one foot. Alluvial soils are soils transported from parent bedrock and deposited by surface water.

NOTE: Where an Alluvial Flood Margin is also an Intermittent Stream Corridor, only the Intermittent Stream Corridor Policies (Section 7:7E-3.27) shall apply.

(b) Policy

1. Wildlife refuge and low intensity recreational use is encouraged.

2. Development is discouraged in Alluvial Flood Margins unless no feasible alternative site exists, or it is a landward extension of a water dependent or water related use.

(c) Rationale

Alluvial flood margins are parts of floodplains. Although above the 100 year flood level, they have been deposited by flood waters and do provide flood storage capability in the severest storms. If left undisturbed they contribute to the critical water quality buffering and wildlife habitat functions of floodplains and provide some primary productivity to estuaries through nutrients flushed to adjacent bays, rivers or streams. The high water table and compressiblility of these areas make them costly for development. Conservation is the preferred use.

7:7E-3.26 Coastal Bluffs

(a) Definition

A bluff is a steep slope of consolidated (rock) or unconsolidated (sand, gravel) sediment that is formed by wind and water erosion forces, and which is adjacent to the shoreline or demonstrably associated with shoreline processes. A bluff is composed of three main features (see Figure 17): (1) the toe or the interface of the beach or other bottom area (water, wetlands, etc.), (2) the face of the slope, and (3) the crest of the top of the slope where the bluff becomes the flat tableland. The waterward limit of the bluff is the toe buffer, which extends 25' waterward of the toe of the bluff face. The inland limit is the first cultural feature, such as a road or structure. The term "cliff" will be used as a synonym for bluff, and the same policies will apply, although the cliff face is typically steeper than the bluff face, presenting an almost vertical surface. Steep slopes (Section 7:7E-3.29) are isolated inland areas with slopes greater than 15 percent. All steep slopes associated with shoreline processes, i.e. adjacent to the shoreline or contributing sediment to the system, will be considered bluff-cliffs.

(b) Policy

1. All development on bluffs, from the waterward limit of the toe buffer to the first cultural feature, that will endanger the health, safety and welfare of people and property, is prohibited.

2. All development is prohibited on the bluff face and within the crest and toe buffer areas. The stabilization of the face and buffer areas through vegetation is encouraged for the protection of the health, safety and welfare of people and property.

3. Structural mitigation measures designed for the purpose of slowing bluff erosion are conditionally accepted, provided that they do not interfere with natural shoreline sediment supply.

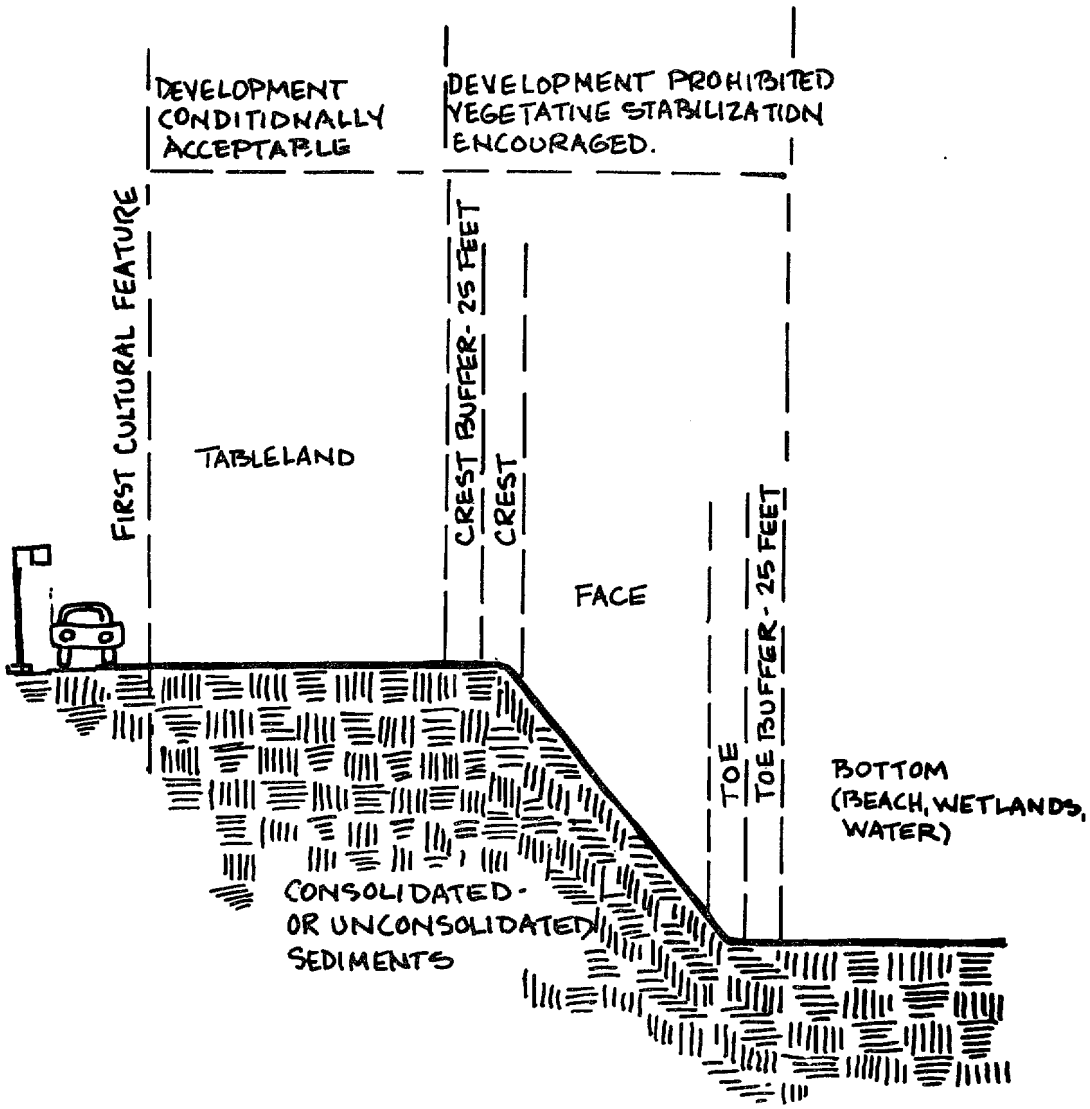
4. All development on the tableland is conditionally acceptable, based on the rate of bluff erosion. In general, structures are prohibited in areas which will be eroded during the life of the structure. If a bluff has an erosion history of five feet a year and the projected life of the structure is fifty (50) years, then the structure is prohibited within 250 feet (50 x 5) of the crest buffer. Applicants shall submit historical evidence recording bluff movement and submit a realistic estimate of the life of the structure, noting that most structures are used well beyond their nominal lifetimes.

(c) Rationale

Coastal bluffs are most prominent in New Jersey along the Delaware River at Roebling and Florence and along the Raritan Bay at Aberdeen Township and Atlantic Highlands. They have a significant function in storm damage prevention and flood control, by eroding in response to wave action and resisting erosion caused by wind and rain runoff. Bluff erosion is also an important source of beach sediment where the coastal bluff faces an open water body. Disturbance of coastal bluffs which undermine their

Figure 17

COASTAL BLUFFS



"BLUFF PROFILE"

natural resistance to wind and rain erosion increase the risk of their collapse and cause cuts in the bluff. This increases danger to structures at the top of the bluff and reduces the bluff's ability to buffer upland areas from coastal storms. Vegetation helps stabilize bluffs and can reduce the rate of erosion caused by wind and rain runoff.

7:7E-3.27 Intermittent Stream Corridors

Note: This policy replaces the Special Area policy for Ephemeral Stream Corridors 7:7E-3.24 and the Water Area policy for Intermittent Streams 7:7E-4.5.

(a) Definition

Intermittent Stream Corridors are areas including and surrounding surface water drainage channels in which there is not a permanent flow of water. They are also called swales and ephemeral stream corridors. The inland extent of these corridors is either the inland limit of soils with a seasonal high water table equal to, or less than one foot, or a distance of 25 feet on either side of the channel, whichever is greater (see Figure 18).

(b) Policy

1. Uses that promote undisturbed growth of native vegetation and wildlife habitat value are encouraged.

2. Cutting, filling, damming, detention basins for runoff recharge paving, structures or any other activities that would directly degrade the function of Intermittent Stream Corridors, except for linear infrastructure for which there is no feasible alternate route, is prohibited.

(c) Rationale

Intermittent Stream Corridors are the spring areas for coastal streams. They are very susceptible to surface and subsurface disturbance. The water quality of coastal streams and estuaries depends in part on undisturbed spring areas. They are productive areas since water is at or near the surface, and are important wildlife habitats. For these reasons the intention of the policies is preservation.

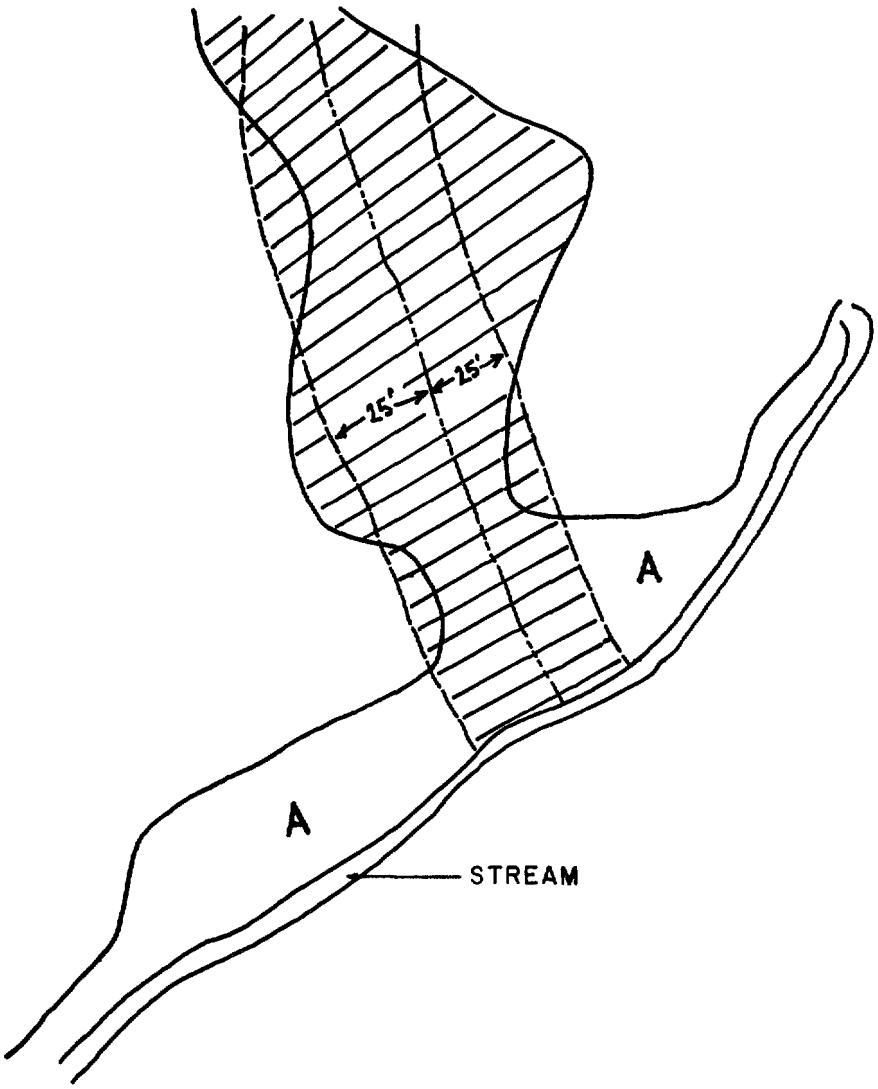
7:7E-3.28 Farmland Conservation Areas

(a) Definition

Large, contiguous areas of 20 acres or more (in single or multiple tracts) with soils of classifications in the Capability Classes I, II and III as mapped by the U.S. Department of Agriculture, Soil Conservation Service, in National Cooperative Soil Surveys,and Special Soils for Blueberries and Cranberries which are actively farmed, suitable for farming, or forested, and located in Atlantic, Cape May, Cumberland or Salem Counties are defined as Farmland Conservation Areas. [The Farmland Conservation Areas should not be confused with the Farmland Preservation Demonstration Project in Burlington County.]

Figure 18

INTERMITTENT STREAM CORRIDOR



Intermittent Stream
25 foot margin on each side of corridor
Limit of soils with seasonal high water table equal to, or less than, one foot
Intermittent Stream Corridor

Note: Although Area A has a high water table, that high water table is associated with the stream rather than with the intermittent stream. Area A, therefore, would be some Special Water Edge type other than Intermittent Stream Corridor

(b) Policy

1. Farmland Conservation Areas shall be maintained and protected for open space or farming purposes to the maximum extent practicable.

2. Continued, renewed, or new farming is encouraged in Farmland Conservation Areas.

3. Conversion of Farmland Conservation Areas to development is acceptable only when the predominant surrounding pattern of development is urban or suburban and continued, renewed, or new farming is likely to produce unacceptable urban-agricultural conflict.

(c) Rationale

Farmland Conservation Areas are an irreplaceable natural resource essential to the production of food and fiber, particularly in the "Garden State." Conservation of large, contiguous areas of these lands for farming serves both private and public interests, particularly in terms of ready access to locally-grown food, jobs and open space preservation. At the same time, the policy here recognizes the desirability of minimizing conflicts between farm and urban areas.

In the coastal zone, only [the three southern counties within the Bay and Ocean Shore Region] Atlantic, Cape May, Cumberland and Salem Counties, have significant [Farmland Conservation Areas] acreage of agricultural soils located in a manner generally compatible with present or future farming. In Cape May County, approximately [39.8%] 40 percent of the county's soils qualify as Capability Classes I and II (including areas outside of the coastal zone boundary). Some of these irreplaceable soil resources have already been converted to urban uses. Other areas which are of a sufficiently large scale to make farming feasible should be reserved for farming purposes, provided that rural-urban conflicts are minimized.

7:7E-3.29 Steep Slopes

(a) Definition

Steep slopes are areas with slopes greater than [10%] 15 percent, which are not coastal bluffs (7:7E-3.26).

(b) Policy

[(a)] Development on steep slopes greater than 15% is prohibited, unless the regrading of a very small part of a site is essential to the overall landscaping plan for the site, in which case the grading shall be done to less than a 10% slope.

NOTE: Policy (b) of this section has been moved to the Resource Policy on Soil Erosion and Sedimentation (7:7E-8.8).

[(b) Development on steep slopes between 10-15% is discouraged, unless:

(i) limited stabilization structures and measures, such as terracing and paving, are consistent with the natural character of the site, to the maximum extent practicable,

(ii) The design of the development is compatible with the slope characteristics of the site in visual, physical, and engineering terms,

(iii) minimal feasible site disturbance and maximum practicable revegetation take place.]

(c) Rationale

Only a few Steep Slopes Areas exist in the relatively flat Coastal Plain of New Jersey. [Steep slopes occur in the Bay and Ocean Shore Region along certain tributaries of the Delaware River, and the Raritan River, in the northeastern portion of Monmouth County known as the Highlands, which is bounded by Sandy Hook Bay and the Navesink River.] Isolated steep slope areas are [also] found near headwaters of coastal streams.

Preservation of steep slopes controls soil erosion, protects up-slope lands, minimizes pollution of surface waters, and reduces flooding. When vegetation is stripped, rainfall strikes surface soils causing soil particle movement through surface water flow and gravity, which result in increased surface runoff and downstream flooding. When this silty water enters a surface water body, increased turbidity and sedimentation usually follow which can cause reduction of productivity and flood water storage capacity. Aesthetics are also affected when erosion occurs and topsoil is lost.

Slope maps are available from NJDEP-DCR based on U.S.G.S. Topographic Quadrangle sheets (1:24,000 scale). These maps show slopes in the following ranges. 0-2%, 2-5%, 5-10%, 10-15%, and more than 15% in the coastal plain; and 0-3%, 3-8%, 8-15%, and 15-25% in other parts of the State.

7:7E-3.30 Dry Borrow Pits

(a) Definition

Dry Borrow Pits are excavations for the purpose of extracting coastal minerals which have not extended below the ground water level. This includes, but is not limited to, dry sand, gravel and clay pits, and stone quarries.

(b) Policy

1. Channeling clean surface runoff into dry sand and gravel pits for the purposes of aquifer recharge is encouraged.

2. Discharge of clean effluent from liquid waste treatment facilities for aquifer recharge is encouraged (e.g. tertiary sewage effluent) provided ground water quality is monitored and maintained.

3. Storing water in impermeable dry borrow pits is conditionally acceptable.

4. Dredge spoil disposal is conditionally acceptable provided that:

(i) the spoil will not degrade groundwater quality,

(ii) the spoil is of a particle size that will not disturb ground water hydrology, and

(iii) spoil disposal is compatible with neighboring uses.

5. Solid waste disposal other than clean dredge spoil and not including radioactive or carcinogenic waste, is conditionally acceptable on a case by case basis provided that:

(i) waste disposal is compatible with neighboring uses,

(ii) the borrow pit is lined with clay, plastic or other impermeable material; leachate is collected, treated and discharged to the ground through an injection well or other technique; and maintenance will be available for the life of the landfill,

(iii) the solid waste is stacked and interlayered with inert material,

(iv) a reclamation plan is submitted with the application showing naturalistic final grading, surface improvement with topsoil and organic additives and planting to initial native successions with guarantees of survival for the first five years,

(v) Elevations of landfill do not exceed original surface elevations before mining,

(vi) The reclamation proposals are worked towards during dumping and completed at conclusion, and

(vii) The applicant can demonstrate that even during accidental failure of a treatment plant, the leachate cannot degrade ground or surface water.

6. Filling or grading for construction is conditionally acceptable provided that:

(i) Other coastal policies are satisfied, and

(ii) The fill is clean and of a texture not to disturb local ground water flow.

7. All proposed uses must reduce all banks to a slope of less than one in three, stabilize them, prepare them for planting and initiate native successions.

(c) Rationale

Dry borrow pits have been used successfully in Long Island to recharge depleted aquifers by channeling surface runoff and tertiary sewage effluent into them. These uses are encouraged in New Jersey's coastal areas, especially where there is a history of saline intrusion. Water shall be discharged, wherever possible, into the aquifer layer most impacted by saline intrusion. There is a critical shortage in coastal areas of disposal sites for dredge spoil and solid waste. Dry Borrow Pits offer opportunities of low-impact disposal if they are compatible with existing uses, the leachate is carefully controlled and the site reclaimed on conclusion. Dry Borrow Pits have comparatively low environmental value and so are acceptable sites for development if all other policies are satisfied.

7:7E-3.31 Historic and Archeological Resources

NOTE: This Special Area was formerly called Historic Resources, 7:7E-3.15.

(a) Definition

Historic and Archeological Resources include objects, structures, neighborhoods, districts, and man-made or man-modified features of the landscape, including archaeological sites, which either are on or are eligible for inclusion on the State or National Register of Historic Places. The criteria for eligibility are defined at [by the U.S. Department of Interior, Heritage Conservation and Recreation Service.] N.J.A.C. 7:4-4.2.

(b) Policy

1. Development that detracts from, encroaches upon, damages, or destroys the value of Historic and Archeological Resources is discouraged[,]. [unless it causes minimal practicable degradation of the resource.]

2. Development that incorporates Historic and Archeological Resources in adaptive reuse is encouraged.

3. Scientific recording and/or removal of the Historic and Archeological Resources or other mitigation measures must take place, if the proposed development would irreversably and/or adversely affect H[h]istoric and Archeological R[r]esources.

4. New development in undeveloped areas near Historic and Archeological Resources is conditionally acceptable, provided that the design of the proposed development is compatible with the appearance of the Historic or Archeological Resource.

(c) Rationale

The range of Historic and Archeological Resources along the coast is broad and diverse, from the oceanfront Victorian "gingerbread" architecture, to examples of New Jersey's maritime heritage, to colonial homes, to Indian artifacts. The public interest requires the preservation of both representative and unique examples of Historic[al] and

Archaeological (cultural) resources of the coast, in order to provide present and future generations with a sense of the people[,] who lived, worked, and visited the coast in the past. DEP's Office of Historic Preservation maintains an up-to-date list of properties on the New Jersey State Register of Historic Places (N.J.S.A. 13:1B-15.128 et seq.) and the National Register of Historic Places. As the State Historic Preservation Officer, the Commissioner of DEP, and staff of DEP's Office of Historic Preservation and Office of Environmental Review advise DEP's Division of [Marine Services] Coastal Resources on the historic resources aspects of coastal decisions.

7:7E-3.32 Specimen Trees

(a) Definition

Specimen trees are the largest [(diameter at 4.5 feet above ground)] known individual trees of each species in New Jersey. [as listed by] The DEP-Bureau of Forestry maintains a list of these trees (see New Jersey Outdoors, September-October 1977 for a listing of specimen trees). [A specimen tree site is the area directly beneath the crown, also known as the drip line.] In addition, large trees approaching the diameter of the known largest tree shall be considered Specimen Trees.

(b) Policy

Development is prohibited that would significantly reduce the amount of light reaching the crown, alter drainage patterns within the site, adversely affect the quality of water reaching the site, cause erosion or deposition of material in or directly adjacent to the site, or otherwise injure the tree. The site of the tree extends to the outer limit of the buffer area necessary to avoid adverse impacts, or 50 feet from the tree, whichever is less.

(c) Rationale

Many interested citizens have assisted DEP, over decades, in locating specimen trees. This process includes reporting large trees that can be considered specimens even though they may not be the largest in New Jersey of a species. Specimen trees are an irreplaceable scientific and scenic resource. Often these trees have also been associated with historical events.

7:7E-3.33 Endangered or Threatened Wildlife or Vegetation Species Habitats

(a) Definition

Land, Water's Edge, or Water Areas known to be the habitat of any wildlife (fauna) or vegetation (flora) identified as "endangered" or "threatened" species on official federal or state lists of endangered or threatened species, or eligible to be on the lists, are considered [a] special areas. The definition also includes a sufficient buffer area to insure continued survival of the species. DEP intentionally restricts dissemination of data showing the geographic distribution of these species habitats, in order to protect the habitats.

(b) Policy

Development that would adversely affect the habitats of endangered or threatened species is prohibited. DEP will review proposals on a case-by-case basis.

(c) Rationale

Endangered and threatened species are organisms which are facing possible extinction in the immediate future due to loss of suitable habitat, and past overexploitation through human activities or natural causes. Extinction is an irreversible event and represents a loss to both future human use, education research and to the interrelationship of all living creatures with the ecosystem.

At present [(1978)], the official list of endangered wildlife (fauna) species in New Jersey, available from DEP, Division of Fish, Game and Wildlife [Shellfisheries] (see N.J.A.C. 7:25-11.1), includes the following species: Shortnose sturgeon, Blue-spotted salamander, Eastern tiger salamander, Bog turtle, Bald Eagle, Peregrine Falcon, Osprey, Cooper's Hawk, and Indiana Bat, as well as various marine mammals and marine reptiles. Additional species have threatened status. [At present (1978), no] No official state or federal list [exists] of endangered or threatened vegetation (flora) species exists, although the Smithsonian Institution did [in 1975] submit a report to the U.S. Fish and Wildlife Service in 1975 identifying [fifteen] seventeen species of New Jersey plants for consideration for adoption on federal lists (see 40 FR, No. 1217: 27863-27864, July 1, 1975). Habitats of species eligible to be on the list are included in the definition so that the policy will apply to species identified since the last promulgations of the official list.

7:7E-3.34 Critical Wildlife Habitats

(a) Definition

Critical Wildlife Habitats are specific areas known to serve an essential role in maintaining wildlife [(fauna)], particularly in wintering, breeding, and migrating. Rookeries for colonial nesting birds such as herons, egrets, ibis, terns, gulls, and skimmers, stopovers for migratory birds, such as the Cape May Point region, and natural corridors for wildlife movement merit a special management approach through designation as a Special Area. Ecotones, or edges between two types of habitats, are a particularly valuable Critical Wildlife Habitat. Many Critical Wildlife Habitats, such as salt marsh water fowl wintering areas, and muskrat habitats, are singled out as Water or Water's Edge Areas.

Definitions and maps of Critical Wildlife Habitats are currently available only for colonial waterbird habitat in 1979 Aerial Colony Nesting Waterbird Survey for New Jersey (NJDEP, Division of Fish, Game and Wildlife). Until additional maps are available, sites will be considered on a case by case basis by the NJDEP Division of Fish, Game and Wildlife.

(b) Policy

Development that would adversely affect Critical Wildlife Habitats is discouraged, unless: (i) minimal feasible interference with the habitat can be demonstrated, (ii) there is no prudent or feasible alternative location for the development, and (iii) the proposal includes appropriate mitigation measures. DEP will review proposals on a case by case basis.

(c) Rationale

The State of New Jersey, as custodian of a particular portion of the national wildlife heritage, has the obligation of stewardship on behalf of the people of the state and nation to perpetuate wildlife species within its borders for the use, education, research, and enjoyment by future generations.

7:7E-3.35 Public Open Space

(a) Definition

Public Open Space constitutes land areas owned and maintained by state, federal, county and municipal agencies or non-profit private groups (such as conservation organizations and homeowner's associations) and dedicated to conservation of natural resources, public recreation, or wildlife protection or management. Public Open Space also includes State Forests, State Parks, and State Fish and Wildlife Management Areas and designated Natural Areas (N.J.S.A. 13:1B-15.12a et seq.) within DEP-owned and managed lands.

(b) Policy

1. New or expanded public or private open space development is encouraged at locations compatible or supportive of adjacent and surrounding land uses.

2. Development that adversely affects existing public open space is discouraged.

3. Development within existing public open space, such as campgrounds and roads, is conditionally acceptable, provided that the development complies with the Coastal Resource and Development Policies and is consistent with the character and purpose of the public open space, as described by the park master plan when such a plan exists.

(c) Rationale

As the rapid urbanization of New Jersey continues and leisure time increases, open space will play an increasingly important role in maintaining a desirable living environment for the residents of New Jersey. Even though the supply of open space has decreased under the growing pressure for development, the State's expanding population will require more public open space to satisfy its needs.

Not only is open space the basic resource for recreation facility development, it also performs other worthwhile functions. Open space can create public spaces in densely settled areas, shape urban growth, provide buffers for incompatible uses, retain contiguous farmland, insure the preservation of wildlife corridors, increase the economic value of adjacent land, and preserve distinct architectual, historic, and geologic sites.

The distribution of open space should not only be centered around the preservation of unique areas, but must also respond to the needs of people. Where possible, open spaces should be contiguous both visually and physically to promote a sense of continuity and to afford users continued movement through the public open spaces.

7:7E-3.36 Special Hazard Areas

(a) Definition

Special Hazard Areas include areas with a known actual or potential hazard to public health, safety, and welfare, or to public or private property, such as the navigable air space around airports and potential evacuation zones around major industrial and energy facilities.

(b) Policy

Coastal development, especially residential and labor-intensive economic development, within Special Hazard Areas is discouraged. All development within Special Hazard Areas must include appropriate mitigating measures to protect the public health and safety.

[Coastal development that would increase the potential danger of Special Hazard Areas is discouraged, unless appropriate mitigating measures are adopted.]

(c) Rationale

Management of the coastal zone requires a concern for development that would directly or indirectly increase potential danger to life and property. Mitigating measures such as height limits near airports and evacuation plans for industrial and energy facilities may adequately address the concern in this area.

7:7E-3.37 Excluded Federal Lands

(a) Definition

Excluded Federal Lands are those lands that are owned, leased, held in trust or whose use is otherwise by law subject solely to the discretion of the United States of America, its officers or agents, and are excluded from New Jersey's Coastal Zone as required by the federal Coastal Zone Management Act.

(b) Policy

Federal actions on Excluded Federal Lands that significantly affect the coastal zone (spillover impacts) shall be consistent with the Coastal Resource and Development Policies, to the maximum extent practicable.

(c) Rationale

While the federal Coastal Zone Management Act requires that federal lands be excluded from a state's coastal zone, it is important that New Jersey's Coastal Resource and Development Policies explicitly note the location of these special areas in order that the spillover impacts of actions in these areas may be properly evaluated.

7:7E-3.38 Special Urban Areas

(a) Definition

Special urban areas are those areas defined in urban aid legislation (N.J.S.A. 52:27D-178) which designate municipalities qualified to receive State aid to enable them to maintain and upgrade municipal services and offset local property taxes. This Special Area includes the following 21 coastal municipalities:

Asbury Park	Elizabeth	Long Branch	Passaic
Atlantic City	Hoboken	Millville	Perth Amboy
Bayonne	Jersey City	Neptune Twp.	Rahway
Bridgeton	Keansburg	New Brunswick	Trenton
Camden	Lakewood	Newark	West New York
		North Bergen	

(b) Policy

1. Development that will help to restore the economic and social viability of special urban areas is encouraged. Development that would adversely affect the economic well being of these areas is discouraged, when an alternative more beneficial to them is feasible. Development that would be of economic and social benefit and that serves the needs of local residents and neighborhoods is encouraged.

2. Mixed use development which would benefit from a waterfront location and promote the revitalization of the Special Urban Area is conditionally acceptable in Filled Water's Edge Areas, provided it is consistent with all other Coastal Resource and Development Policies.

(c) Rationale

This policy helps link the Coastal Management Program with other State efforts to focus on and restore New Jersey's urban areas. The policy would be applied to State actions on major proposals, such as shopping centers, outside urban areas which could drain resources from nearby urban areas, as well as to projects both in and out of urban areas which could help stimulate social and economic activity in urban areas.

The Filled Water's Edge policy which reserves the waterfront for water related or water dependent uses should not be strictly appied in Special Urban Areas. A mixed use development of housing and/or commerce and recreation, which benefits from a waterfront location and stimulates the revitalization of a Special Urban Area would be consistent with State coastal objectives.

7:7E-3.39 Pinelands National Reserve and Pinelands Protection Area

(a) Definition

The Pinelands National Reserve includes those lands and water areas defined in the National Parks and Recreation act of 1978, Section 502 (P.L. 95-625), an approximately 1,000,000 acre area ranging from Monmouth County in the north, south to Cape May County and from Gloucester and Camden County on the west to the barrier islands of Island Beach State Park and Brigantine Island along the Atlantic Ocean on the east (see Figure 19). The Pinelands Protection Area is a slightly smaller area within the Pinelands National Reserve. It was designated for State regulation by the Pinelands Protection Act of 1979 (N.J.S.A. 13:18-1 et seq). The Pinelands Commission has been mandated by the law to develop a comprehensive management plan for the area by August 8, 1980. Within the Pinelands Protection Area, the law delineates a Preservation Area, where the plan shall "preserve an extensive and contiguous area of land in its natural state, thereby insuring the continuation of a pinelands environment ..." (Section 8c).

Within the Pinelands National Reserve, there is also an area designated a Critical Area under the authority of N.J.S.A. 58:11-43 et seq. DEP has adopted special Central Pine Barrens Ground and Surface Water Quality Standards (N.J.A.C. 7:9-4.6i and j). This Central Pine Barrens Region is also the oil and gas pipeline exclusion area as defined in Use Policy 7:7E-7.4.

The coastal municipalities wholly or partly within the Pinelands National Reserve Area include:

Atlantic County

Brigantine City
Corbin City
Egg Harbor City*
Egg Harbor Township
Estell Manor Township
Galloway Township
Hamilton Township
Mullica Township**
Port Republic*
Somers Point City
Weymouth Township

Burlington County

Bass River Township**
Washington Township**

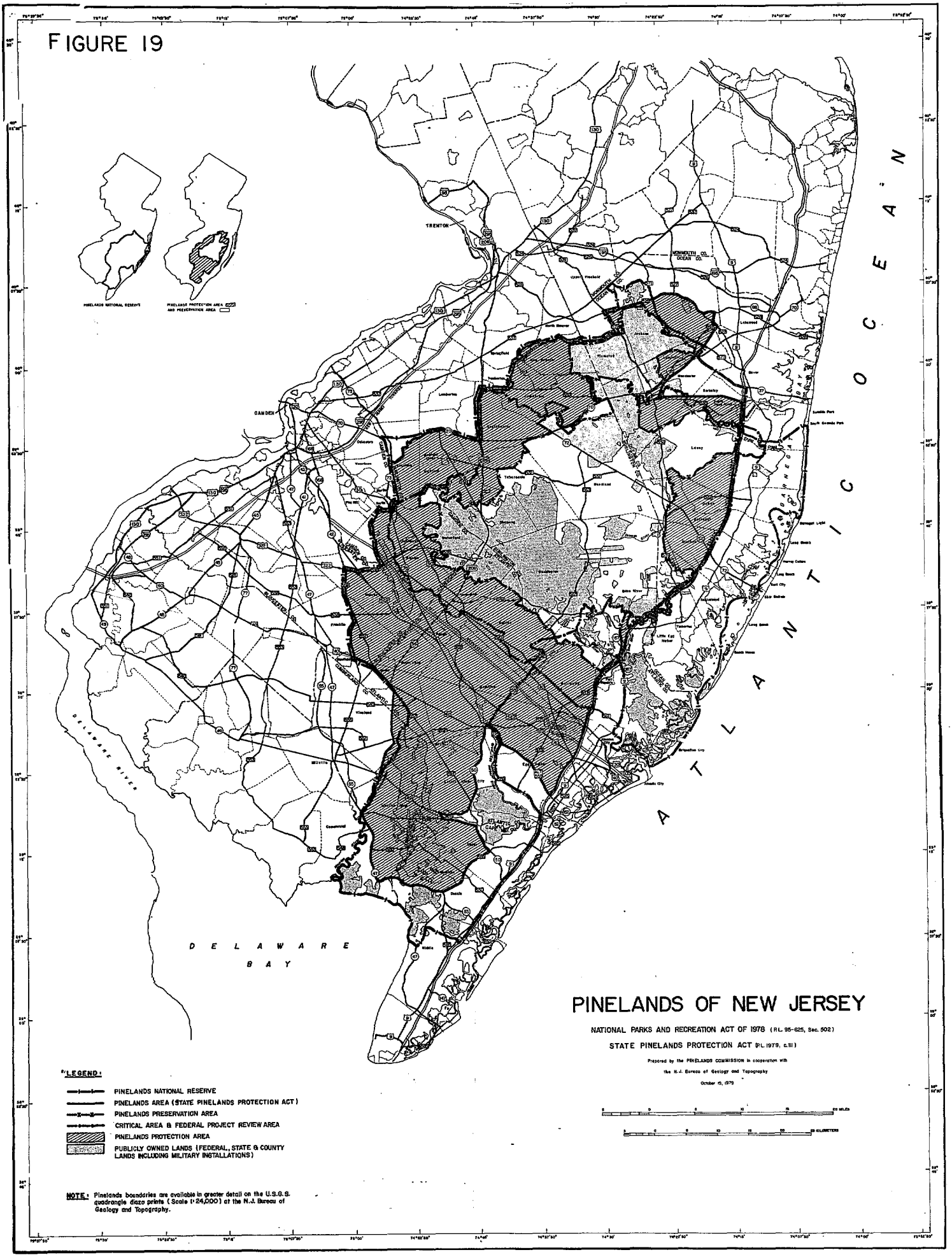
Cape May County

Dennis Township
Middle Township
Upper Township
Woodbine Borough

Cumberland County

Maurice River Township

FIGURE 19


PINELANDS NATIONAL RESERVE
PINELANDS PROTECTION AREA
AND PRESERVATION AREA
TRENTON
CAMDEN
MONMOUTH CO.
OCEAN CO.
ATLANTIC OCEAN
DELAWARE BAY
DELAWARE RIVER
PINELANDS OF NEW JERSEY
NATIONAL PARKS AND RECREATION ACT OF 1978 (P.L. 95-625, Sec. 502)
STATE PINELANDS PROTECTION ACT (P.L. 1979, c.111)
Prepared by the PINELANDS COMMISSION in cooperation with
the N.J. Bureau of Geology and Topography
October 15, 1979
LEGEND:
PINELANDS NATIONAL RESERVE
PINELANDS AREA (STATE PINELANDS PROTECTION ACT)
PINELANDS PRESERVATION AREA
CRITICAL AREA & FEDERAL PROJECT REVIEW AREA
PINELANDS PROTECTION AREA
PUBLICLY OWNED LANDS (FEDERAL, STATE & COUNTY LANDS INCLUDING MILITARY INSTALLATIONS)
NOTE: Pinelands boundaries are available in greater detail on the U.S.G.S. quadrangle diazo prints (Scale 1:24,000) at the N.J. Bureau of Geology and Topography.

Ocean County

Barnegat Township	Lakehurst Borough
Beachwood Borough	Little Egg Harbor Township**
Berkeley Township	Manchester Township
Dover Township	Ocean Township
Eagleswood Township*	South Toms River Borough
Lacey Township	Stafford Township
	Tuckerton Borough

* municipalities with areas in both the Pinelands Protection Area and the Coastal Zone [CAFRA Area]. These areas are all within the Preservation Area of the Pinelands Protection Area (N.J.S.A. 13:18A-1 et seq.).

** municipalities included within the Pinelands Protection Area area, the Central Pine Barrens Region as defined by N.J.A.C. 7:9-4.6i and j and the Coastal Zone [CAFRA area].

(b) Policy

Coastal development shall be consistent with the intent, policies and objectives of the National Parks and Recreation Act of 1978, P.L. 95-625, Section 502, creating the Pinelands National Reserve, and the State Pinelands Protection Act of 1979 (N.J.S.A. 13:18A-1 et seq.).

(c) Rationale

The New Jersey Pinelands contain approximately 1,000,000 acres of high quality surface and groundwater resources. In response to the need to protect, preserve and enhance the unique features of the Pinelands and the significant ecological, natural, cultural, recreational, educational, agricultural and public health resources of the Pinelands area, the federal government passed the National Parks and Recreation Act of 1978, (P.L. 95-625), the Governor issued Executive Order No. 71 in February 1979, and the Legislature passed the Pinelands Protection Act in June, 1979.

Prior to these actions, under Executive Order No. 56, issued on May 28, 1977, the Governor created the Pinelands Review Commiteee to delineate a Pinelands region and develop a plan to guide State actions affecting that Region. The report of the Pinelands Review Committee, completed in February 1979, stressed the need to take strong action to manage development in the Pinelands.

Because the living marine resources in the bays and estuaries of the coastal zone depend on the flow of freshwater from the Pinelands, changes to the quality and quantity of the Pinelands water resource caused by pollution and contamination would have a significant impact on coastal resources.

The Pinelands Protection Act (Section 22) recognized the overlap between Pinelands and coastal management interests and mandated that DEP, in consultation with the Pinelands Commission, review the environmental design for the coastal area prepared as required by CAFRA (see N.J.S.A.

13:19-10) which is also within the boundaries of the Pinelands Area. This overlap area extends from Pleasant Mills to the Garden State Parkway on both sides of the Mullica River.

7:7E-3.40 Hackensack Meadowlands District

(a) Definition

The Hackensack Meadowlands District is a 19,730 acre area of water, coastal wetlands and associated uplands designated for management by a State-level regional agency known as the Hackensack Meadowlands Development Commission (HMDC) by the Hackensack Meadowlands Reclamation and Development Act of 1968 (N.J.S.A. 13:17-1 et seq.) (See Figure 20).

(b) Policy

The HMDC will act as the lead coastal planning and management agency within this Special Area. State coastal management actions within the Hackensack Meadowlands District are governed by the District Master Plan and its adopted components and management plans, and the zoning rules adopted thereunder. The HMDC Master Plan Zoning Rules (N.J.A.C. 19:4-1 et seq.) are adopted as part of the Coastal Management Program (see Appendix I, and the Hackensack Meadowlands District is designated a Geographic Area of Particular Concern (see section on GAPCs in Chapter 4).*

(c) Rationale

The District Master Plan was mandated by the Hackensack Meadowlands Reclamation and Development Act. The Master Plan, together with its components, management plans and zoning regulations, embody adopted State policies for the District. The HMDC has a professional staff of natural scientists, engineers and planners with the experience and expertise to apply State coastal policy to this Special Area.

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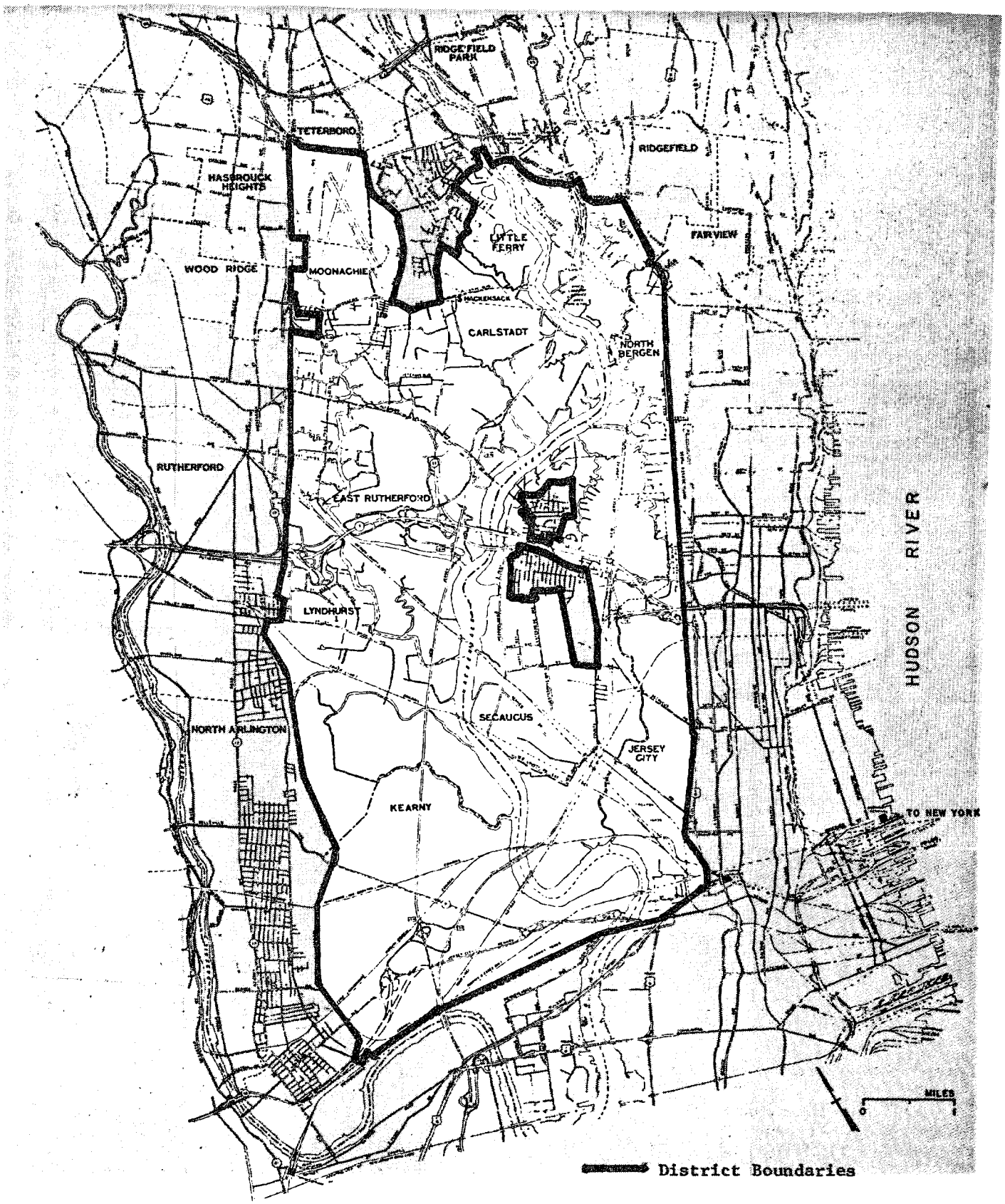
* It should be noted that the Hackensack Meadowlands District designations for wetlands development do not preclude federal agency recommendations and decisions contrary to such development. The Hackensack Meadowlands District Plan does not meet the definition of a "Comprehensive Planning Process" under Section 404(b) (1) of the Clean Water Act and associated regulations. Therefore, federal agencies will evaluate proposed projects in the Hackensack Meadowlands District on a case by case basis. Wetland modification will require proper analysis and documentation under Section 404(b)(1) of the Clean Water Act regardless of adopted plans and ordinances. The 404(b)(1) process currently requires four tests to be met and properly documented through a public process including: 1) acceptance of unavoidable impacts; 2) alternatives analysis; 3) demonstration of water dependency; and 4) demonstration of need.

Figure 20



HACKENSACK MEADOWLANDS DISTRICT

SUBCHAPTER 4 - GENERAL WATER AREAS

7:7E-4.1 [General] Definition[s of Water Areas]

General Areas are first divided into Water and Land by the same definitions used for Special Areas, Section 7:7E-3.1. Water and land are further subdivided into General Area types. The water's edge has no General Area types since all water's edge areas are one or more Special Area types.

This subchapter defines General Water types, assigns General Area policies to each and summarizes the rationale and intent of the policies.

In many cases, an area already identified as a Special Area will also fall within the definition of a General Area. In these cases, both General and Special Area policies will apply. In case of conflict between General and Special Area policies, the more specific Special Area Policy shall apply.

General Water Areas are areas which lie below either the Mean High Water Line or the normal water level of non-tidal waters. Except at times of drought or extreme low tide, these areas are permanently inundated.

General Water Areas are divided by volume and flushing rate into: Oceans; Open Bays; Semi Enclosed and Back Bays; Tidal Guts; Large Rivers; Medium Rivers, Creeks and Streams; and Lakes, Ponds and Reservoirs. Some of these types are further divided for policy purposes into different depths.

[Areas below the mean high water line, including intertidal areas, and nontidal permanent surface water features are classified as "Water Areas". Water Areas include various specific types of basins and channels.]

7:7E-4.2 Policy Summary Table

NOTE: Section 7:7E-4.2 "General Policy" on Uses of Water Areas," 7:7E-4.3 "General Rationale for Water Areas", 7:7E-4.4, "Water Acceptability Table", and the first paragraph of 7:7E-4.5 "General Definitions" have been deleted.

The Policy Summary Table (Figure 21) indicates the Location Policy for the introduction of various uses in each of the General Water Areas. This table is included for quick reference. For further details on conditions for acceptability of uses, see Section 7:7E-4.10.

7:7E-4.3 Ocean

(a) Definition

This basin type has two depth levels (0'-18' and 18'+) and includes all areas of the Atlantic Ocean out to the limit of New Jersey's territorial sea, three nautical miles from the shoreline. The ocean extends from the marine boundary with the State of New York in Raritan Bay and Sandy Hook Bay south to the marine boundary with the State of Delaware in Delaware Bay, near Cape May Point (see Figure 22).

WATER AREA POLICY SUMMARY TABLE

Use \ Water Area Type	Ocean 18'+	Ocean 0-18'	Open Bay 18'+	Open Bay 6-18'	Open Bay 0-6'	Semi Enclosed and Back Bay 6'+	Semi Enclosed and Back Bay 0-6'	Tidal Guts	Large Rivers	Medium Rivers, Creeks & Streams	Lakes, Ponds and Reservoirs
Aquaculture	C	C	C	C	C	C	C	C	C	C	C
Boat Ramps	/	P	/	C	C	C	C	C	C	C	C
Docks (cargo)	C	C	C	C	C	C	C	P*	C	C	/
Docks (recreation)	C	C	C	C	C	C	C	C	C	C	C
Dredging (maintenance)	C	C	C	C	C	C	C	C	C	C	C
Dredging (new)	C	C	D	D	D	D	D	D*	C	C	D
Spoil Disposal	C	C	C	C	D	C	D	P*	C	P	P
Dumping	P	P	P	P	P	P	P	P	P	P	P
Filling	P	D	P	D	D	D	D	D*	D	D	P
Piling	D	C	D	C	C	C	C	C	C	C	D
Mooring	P	P	D	D	C	C	C	C	C	C	C
Sand, Gravel Extraction	C	D	D	D	D	D	D	P	C	C	P
Bridges	/	/	D	D	D	D	D	C	C	C	P
Submerged Infrastructure	C	C	C	C	C	C	C	D*	C	C	C
Overhead Lines	/	/	P	P	P	P	P	C	D	C	P
Dams & Impoundments	/	/	/	/	/	P	D	P	P	D	/
Outfalls & Intakes	C	C	C	C	C	C	C	C	C	C	C
Miscellaneous	C	C	C	C	C	C	C	C	C	C	C

*Conditionally acceptable in the Arthur Kill and Kill Van Kull

Note: Depths are mean depth of water.

P = Prohibited

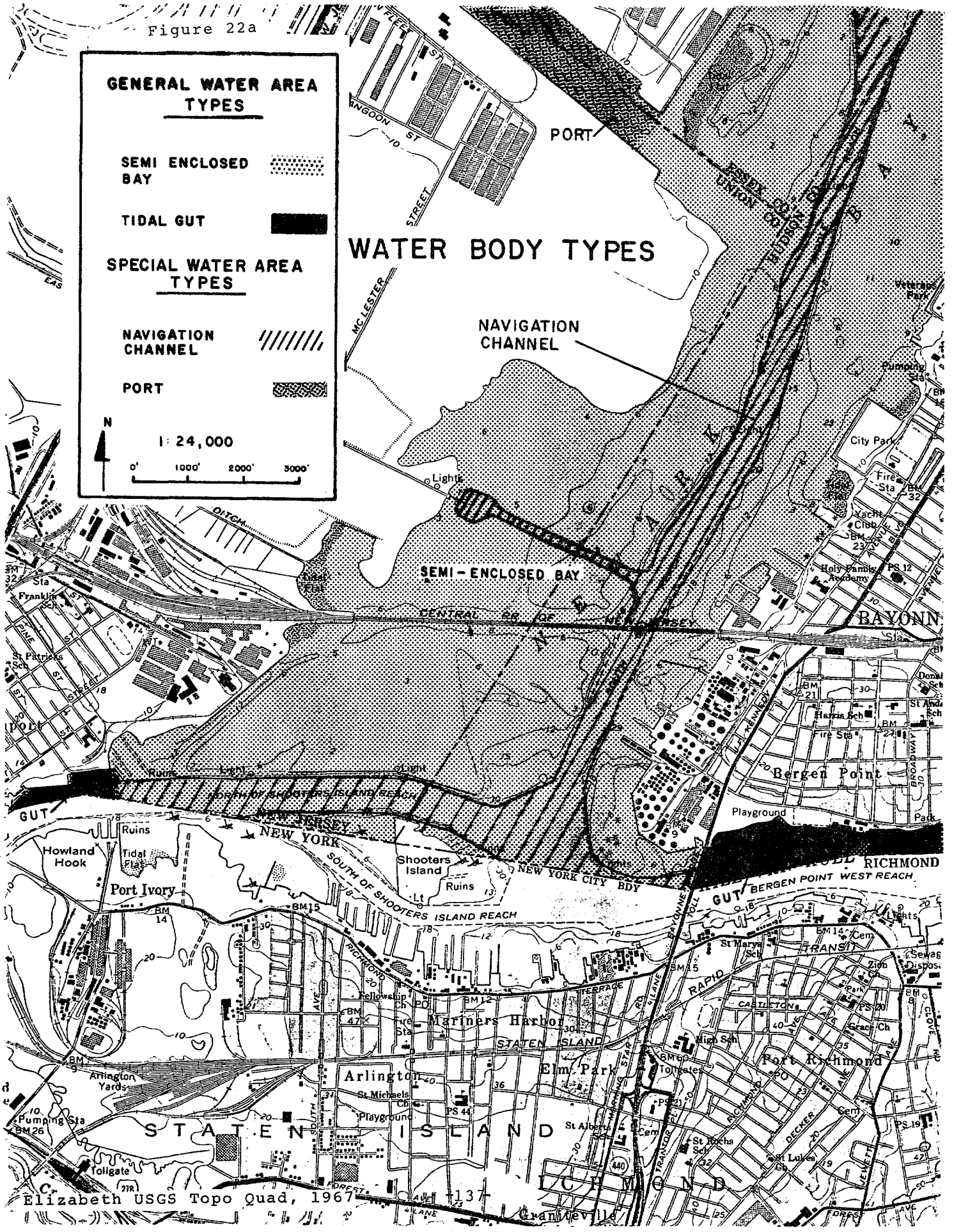
D = Discouraged

C = Conditionally Acceptable

/ = Impractical

Figure 21

Figure 22a



Elizabeth USGS Topo Quad, 1967

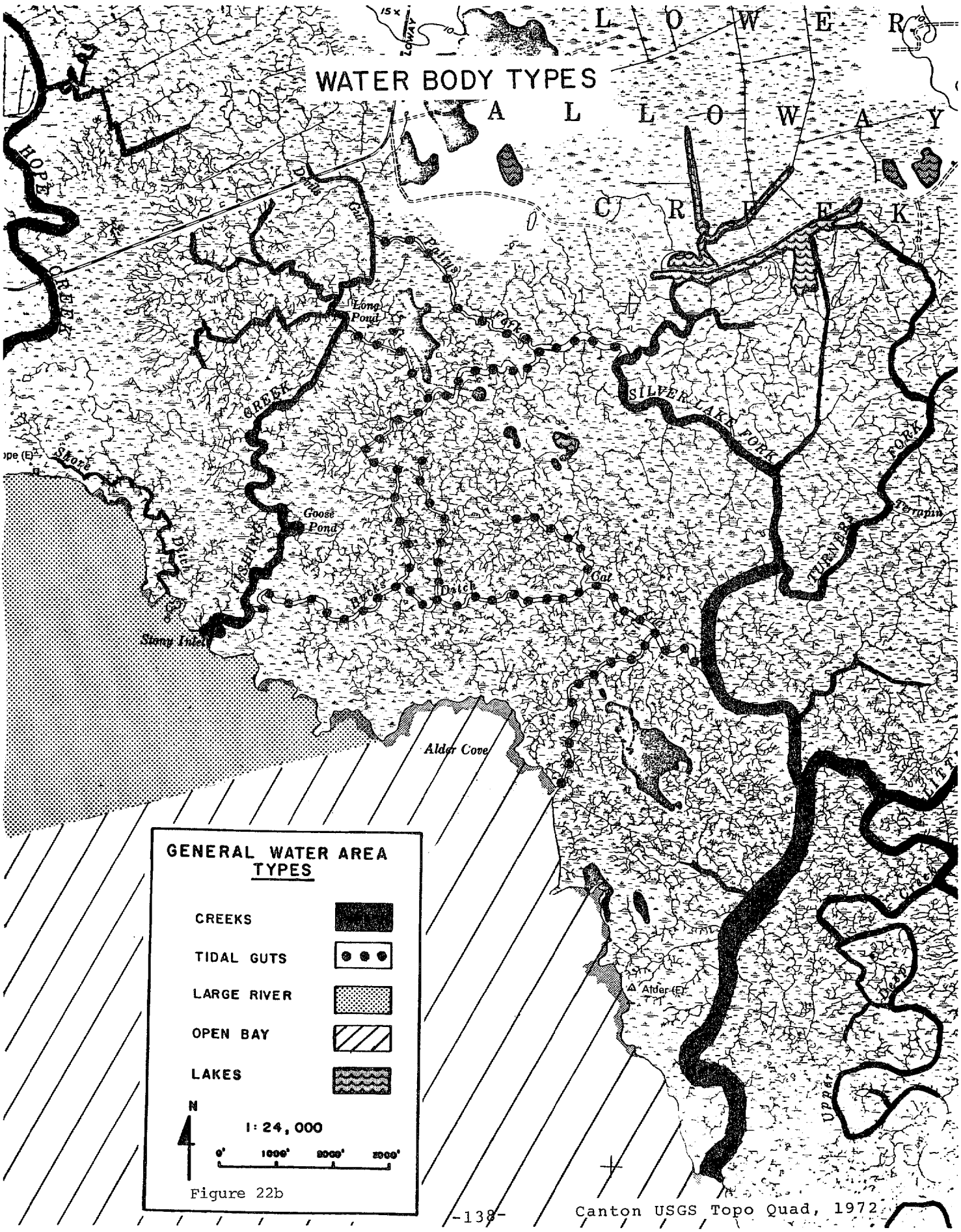
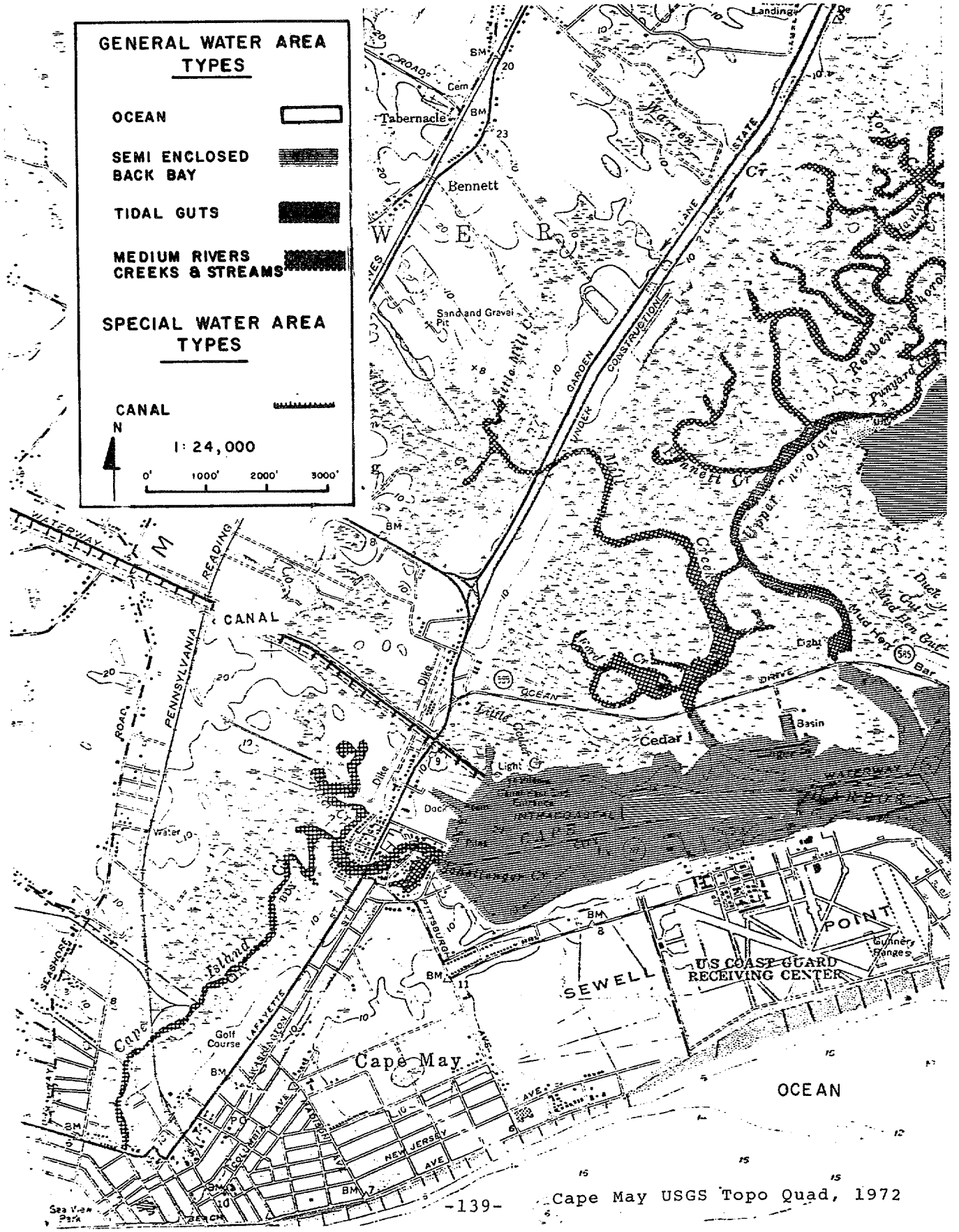


Figure 22b

Canton USGS Topo Quad, 1972

Figure 22c

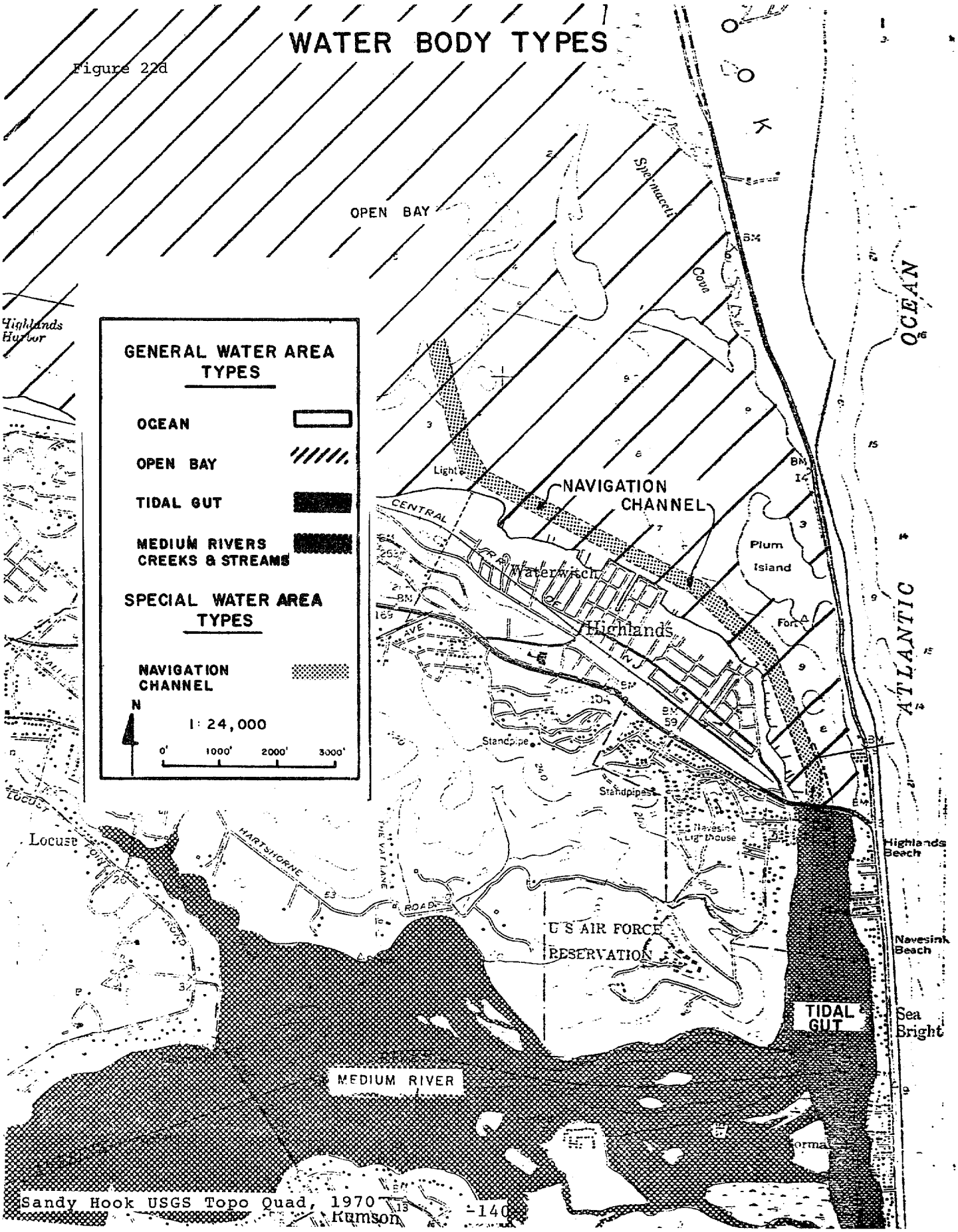
WATER BODY TYPES



Cape May USGS Topo Quad, 1972

Figure 22d

WATER BODY TYPES



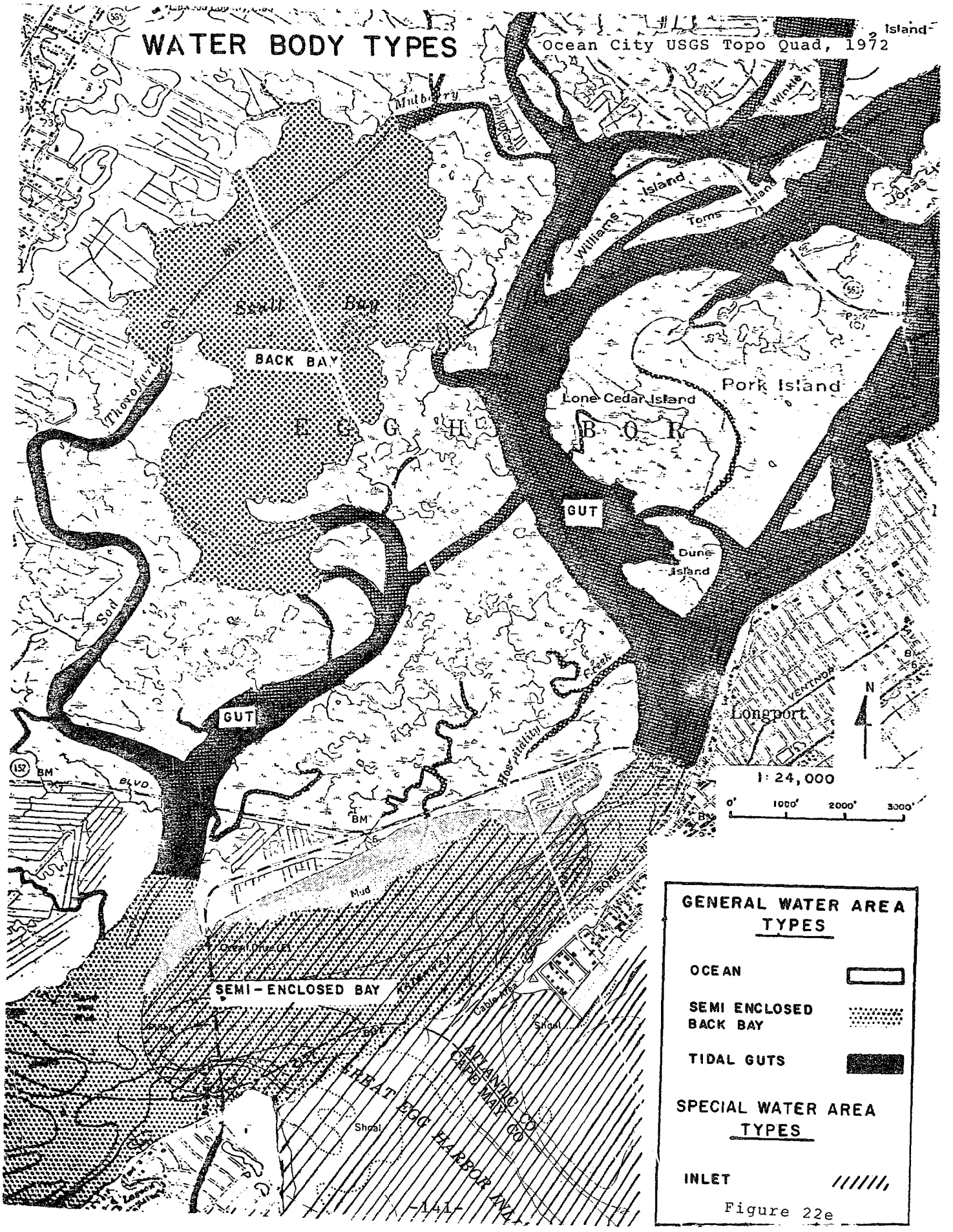

WATER BODY TYPES
Ocean City USGS Topo Quad, 1972
Island
Mulberry
Williams
Island
Toms
Island
Jonas
Scull
Bay
BACK BAY
Thorofare
E G G H
B O R
Lone Cedar Island
Pork Island
GUT
Dune
Island
Sod
GUT
Creek
Hospitality
Longport
N
1: 24,000
0'
1000'
2000'
3000'
BM
BLVD
Mud
SEMI-ENCLOSED BAY
Cable Area
Shoal
Shoal
ATLANTIC CO
CAPE MAY CO
GREAT EGG HARBOR INLET
GENERAL WATER AREA TYPES
OCEAN
SEMI ENCLOSED BACK BAY
TIDAL GUTS
SPECIAL WATER AREA TYPES
INLET

Figure 22e

(b) Policy

See Policy Summary Table Section 7:7E-4.2.

(c) Rationale

The largest water body found within the coastal zone is the Atlantic Ocean. The vast volume of water together with strong wind induced mixing, surface and subsurface currents, and tidal pulse make the ocean the water body most able to assimilate human induced stresses. The assimilative capacity of the ocean is not unlimited, nor are all the benthic and pelagic and surface organisms equally resilient to stresses. The high energy marine system simultaneously provides opportunity for various uses such as recreation and navigation [waste disposal] and imposes several constraints to human structures.

Marine waters are divided into two depth categories: the shallower portion is most commonly thought of as the surf zone, which is of national recreational value. Uses which would impact the recreational values are consequently discouraged from this [these] location. Uses located within deeper portions have less potential to adversely impact coastal resources or induce impacts such as ocean shoreline instability.

7:7E-4.4 Open Bay

(a) Definition

This basin type has three depth levels (0'-6', 6'-18', and 18+) and is defined as a large, somewhat confined estuary with a wide unrestricted inlet to the ocean and with a major river mouth discharging directly into its upper portion. Delaware Bay, Raritan Bay, Sandy Hook Bay, and Upper New York Bay are the only representatives of this water body type in New Jersey.

(b) Policy

See Policy Summary Table, Section 7:7E-4.2.

(c) Rationale

Open bays [include Delaware Bay and Raritan/Sandy Hook/Lower Bay Complex. These] are the largest estuarine systems within the New Jersey coastal zone. All estuaries provide [essential] critical nursery habitat for marine finfish and shellfish [while] and provide[ing] organic nutrients for marine/estuarine food webs.

Open bays have traditionally been used as commercial shipping entrances to the New Jersey/New York harbors and New Jersey/Pennsylvania/Delaware harbors, and have consequently suffered from extensive human perturbations, with the northern area being more severely disturbed.

Open bays have large rivers discharging into their upper portions. Although a less vigorous environment than the coastal sea, surface wave action can be high during strong wind conditions. Open bays are extensively used for commerce and recreation, although recreation and commercial fin and shellfish has been constrained by sewage pollution.

These water bodies are subdivided into three categories based solely on water depth. The criteria of depth was used as this factor is closely related to dilution potential.

7:7E-4.5 Semi-enclosed and Back Bay

(a) Definition

This basin type is a partially confined estuary with direct inlet connection and some inflow of freshwater. Semi-enclosed bays differ from back bays in depth, degree of restriction of inlet and level of freshwater inflow, but the initial location policy is identical for the two water body types. Great Bay and Great Egg Harbor are examples of semi-enclosed bays, Barnegat Bay, Little Egg Harbor, the Shark River estuary and other bays in Atlantic and Cape May Counties are back bays. This combined water body type has [three] two depth levels (0-[1/2', 1/2'-]6', and 6'+).

(b) Policy

See Policy Summary Table, Section 7:7E-4.2.

(c) Rationale

Semi-enclosed water bodies are the estuaries behind barrier beach islands with restricted, indirect, or shallow inlets to the open ocean. This category includes all non-riverine estuarine water bodies including embayments and back bays.

These areas are more sensitive to human disturbance, because of the very limited to moderate freshwater inflow, slower tidal flushing, and smaller water body volume.

The semi-enclosed estuaries are critical to the protection and perpetuation of the coastal ecosystem. Their physically protected geography allows more sensitive or fragile organisms to survive than in the more vigorous ocean and open bays. The vast majority of important marine finfish, shellfish and aquatic birds utilize these areas as critical nursery habitats. The contiguous coastal wetlands perform the essential role of photosynthesis, resulting in natural organic material export into the coastal sea through the action of tidal and storm induced flushing.

These estuarine water bodies are subdivided into three categories based solely upon the criteria of relative water depth. Deeper water portions are the areas most intensively used by man for water surface activities such as navigation. Deeper water areas have a greater physical ability to dilute pollutants and biologically detoxify[ied] toxic agents. This assimulative capacity is not unlimited however. Shallow water area generally have less potential dilution and flushing.

7:7E-4.6 Tidal Guts

(a) Definition

This channel type includes tidal waterway connections between two estuarine bodies of water. Also known as thorofares, tidal guts have no significant freshwater drainage, are tidally influenced and vary in flow rates and natural water depths. Examples range from the Arthur Kill and Kill Van Kull in the developed coast, to Clam Thorofare, Beach Thorofare and Wading Thorofare in the Shore region.

(b) Policy

See Policy Summary Table, Section 7:7E-4.2.

(c) Rationale

Tidal Guts are critical areas for estuarine ecology, controlling the mix of salt and fresh water nutrient transport, and movement corridors for aquatic organisms. Guts serve as important access ways for human navigation, physical water circulation and tidal flushing of estuaries. [Also, aquatic organisms migrate in and out of upstream tidal areas through guts.]

7:7E-4.7 Large Rivers

(a) Definition

This channel type includes flowing waterways with watersheds greater than 1,000 square miles, which means the Delaware, Hudson, and Raritan Rivers.

The Delaware River is a tidal river from the Bridge Street Bridge in Trenton to its mouth at Delaware Bay, defined as a line between Alder Cove, Lower Alloways Creek Township and the Delaware River Basin Commission River and Bay Memorial at Liston Point, Delaware.

The Hudson River is a tidal river from the New York State Line to its mouth at Upper New York Bay at the Morris Canal, Jersey City.

The Raritan River is a tidal river from the Interstate Route 287 Bridge between Piscataway and Franklin townships to its mouth at Raritan Bay and the Arthur Kill.

(b) Policy

See Policy Summary Table, Section 7:7E-4.2.

(c) Rationale

[Large rivers include the Delaware, Hudson and Raritan Rivers.] Large rivers are the principal freshwater input to the Open Bays, and the critical estuarine functions performed by these bays depends, in large part, on maintenance or improvement of water quality and flow patterns in tidal rivers. These water bodies have a long history of intensive human

use, especially in commerce. These economic interests must be accommodated. Large rivers are all drained by watersheds in excess of 1,000 square miles, and are tidally influenced within the Bay and Ocean Shore Segment. These factors allow for flushing of pollutants, although extensive portions of each are presently over-stressed with sewage and industrial wastes.

7:7E-4.8 Medium Rivers, Streams and Creeks

(a) Definition

This channel type includes rivers, streams and creeks [waterways] with a watershed area of less than 1,000 square miles. This includes watercourses such as the Hackensack, Passaic, Oldmans, Big Timber, Pennsauken, Navesink, Manasquan, Toms, Wading, Mullica, Great Egg, Maurice, Cohansey, Salem and Rancocas and smaller streams. [This water body type has three depth levels (0'-1/2', 1/2'-6', and 6'+)]

(b) Policy

See Policy Summary Table, Section 7:7E-4.2.

(c) Rationale

[This category includes all flowing riverine water bodies within the Bay and Ocean Shore Segment except as listed above.] Medium rivers have from moderate to small discharge rates. Many [within the Segment] are tidally influenced and most are relatively shallow, and of smaller volume than large rivers. These factors combine to render these features more susceptible to degradation through human activities.

[Medium rivers, creeks, and streams are subdivided by water depth, which reflects the presumed abilities of water areas with greater volume and circulation to dilute and assimilate potential pollutants or accommodate the intensity of surface water activities.]

7:7E-4.9 [Inland Basins] Lakes, Ponds and Reservoirs

(a) Definition

This category includes lakes, ponds, and reservoirs, virtually all of which in the unglaciated coastal plain of southern New Jersey are man-made (impoundments). These types are relatively small water bodies with no tidal influence or salinity. Many [inland basins] are groundwater fed, while others are known to serve as surface aquifer recharge areas.

Lakes, ponds, and reservoirs [Inland basin] have a severely limited ability to flush pollutants owing to limited freshwater inflow and lack of tidal inundation. Pollutants which enter these areas can precipitate to the bottom, remaining a continuing source of contamination. [Certain basins] Certain lakes, ponds and reservoirs also serve as potable surface water sources.

(b) Policy

See Policy Summary Table, Section 7:7E-4.2.

(c) Rationale

[This basin type] This General Water Area type includes enclosed freshwater basins, both shallow and deep, with little or insignificant flow. [, such as lakes, ponds, and reservoirs.] Due to the limited extent of this water type, no depth subdivisions are made.

7:7E-4.10 [Definitions of and Policies for Water Uses] Acceptability Conditions for Uses

Numerous developments or activities seek locations in New Jersey's coastal waters. Some uses involve locations both above and below the mean high water line, in both Water and Water's Edge areas. This section defines [generally] the important uses of water areas managed by the Coastal Management Program and the conditions under which those uses are acceptable. Some [uses] projects involve combinations of uses, such as retaining structures, dredging, and filling. Other uses, such as Shore Protection uses, are defined elsewhere under Use Policies.

NOTE: The definition and policy on Retaining Structures, formerly Sections 7:7E-4.7(a)3 and 7:7E-4.8(a)5 is now found in the Use Policy on Structural Shore Protection, Section 7:7E-7.11(e).

(a) Aquaculture

1. Definition

Aquaculture is the use of a permanently inundated water area, whether saline or fresh, for the purposes of growing and harvesting plants or animals in a way to promote more rapid growth, reduce predation, and increase harvest rate. Oyster farming in Delaware Bay is a form of aquaculture.

2. [Policy] Acceptability Conditions

Aquaculture is conditionally acceptable in all General Water Areas provided that:

(i) It does not unreasonably conflict with resort or recreation uses,

(ii) It does not cause significant adverse off-site environmental impacts, and

(iii) It does not present a hazard to navigation.

[Aquaculture is conditionally acceptable in many water body types, providing that water recreation and resort uses are not unacceptably restricted, and that aquaculture practices do not cause adverse off-site environmental impacts.]

(b) Boat Ramps

1. Definition

Boat ramps are inclined planes, extending from the land into a water body for the purpose of launching a boat into the water until the water depth is sufficient to allow the boat to float. Boat ramps are most frequently paved with asphalt or concrete, or covered with metal grates.

2. [Policy] Acceptability Conditions

(i) Where boat ramps are conditionally acceptable, they must meet the following conditions: (a) there is a demonstrated need that cannot be met by existing facilities, and (b) they cause minimal practicable disturbance to intertidal flats or subaqueous vegetation.

(ii) In all water areas, boat ramps shall be constructed of environmentally acceptable materials, such as concrete or oyster shell, and garbage cans shall be provided near the boat ramp. Public use ramps shall have priority over restricted use and private use ramps.

[Boat ramps are conditionally acceptable on ocean shores providing that there is a demonstrated need that cannot be satisfied by existing facilities; that the shoreline is not a high risk erosion area; and that the adjacent shorefront areas are intensely developed with resort-related uses.

Boat ramps are conditionally acceptable on shallow ocean and bay shores and river banks providing that (a) they cause minimal practicable disturbance to intertidal flats or subaqueous vegetation, (b) there is a demonstrated need that cannot be satisfied by existing facilities, (c) there is access to an existing navigation channel of adequate depth, and (d) the location policies for the water's edge areas are satisfied.

Boat ramps shall be constructed of environmentally acceptable materials such as concrete or oyster shell. Public use ramps have priority over restricted use and private use ramps. Applications for restricted and private use ramps will be approved only if they can demonstrate that a public use ramp is not feasible. Refuse barrels shall be provided as part of a boat ramp.]

(c) Docks and Piers (for Cargo Movement)

1. Definition

Docks and piers (for cargo movement) are structures supported on pilings driven into the bottom substrate or floating on the water surface, used for loading and unloading cargo, including fluids, connected to or associated with a single industrial or manufacturing facility. Policies for docks and piers intended for multiple uses may be found under Use Policies for Ports Uses. Policies for docks composed of fill and retaining structures may be found under the category "Filling".

[Docks and piers are large or small structures in the water for the purpose of gaining access to moored boats for commercial or recreational purposes or for fishing or recreational purposes. Docks are usually supported on pilings driven into the bottom substrate, but docks can float on the surface. Docks made of fill and retaining structures are considered under the water use types of filling and retaining structures.]

NOTE: There was previously no differentiation between "Docks and Piers (for Cargo Movement)" and "Docks and Piers (Recreational and Fishing)".

2. [Policy] Acceptability Conditions

Docks and Piers for cargo movement are conditionally acceptable in most General Water Areas, provided that: (1) they will not pose a hazard to navigation, and (2) the associated use of the adjacent land meets all Coastal Resource and Development Policies.

(d) Docks and Piers (Recreational and Fishing)

1. Definition

Recreational and fishing docks and piers are structures supported on pilings driven into the bottom substrate, or floating on the water surface, which are used for recreation or fishing or for the mooring of boats which are used for recreation or fishing, including commercial fishing.

2. [Policy] Acceptability Conditions

Docks and Piers are conditionally acceptable in General Water Areas bodies provided that: (i) there is a demonstrated need that cannot be satisfied by existing facilities, [(b) the adjacent shorefront is intensely used for coastal recreation, (c)] (ii) the associated upland use satisfies the location policies for water's edge areas [are satisfied], [(d)] (iii) the construction minimizes adverse environmental impact to the maximum extent feasible, [(e)] (iv) the docks and piers are located so as to not hinder navigation or conflict with overhead transmission lines, and [(f)] (v) there is minimum feasible interruption of natural water flow patterns.

Docks and piers on pilings shall be preferred to [solid] construction[s] on fill. [Applicants shall demonstrate why floating docks and piers cannot serve the required purpose.] Repairs and maintenance of existing docks and piers are generally acceptable.

(e) Dredging-Maintenance

1. Definition

Maintenance dredging is the removal of accumulated sediment from areas where dredging has taken place in the past, such as navigation channels, marinas, or boat moorings, for the purpose of maintaining an [required] authorized water depth and width. [for navigation purposes.]

2. [Policy] Acceptability Conditions

Maintenance dredging is conditionally acceptable to the authorized depth and width in all existing navigation channels, access channels, anchorages and [boat] moorings within all General Water Areas to ensure that adequate water depth is available for safe navigation, provided that an acceptable spoil disposal site exists and turbidity is controlled. Maintenance dredging is [acceptable] necessary to provide access to marinas, docks, ports, and other appropriate water-dependent facilities. [Maintenance dredging is impractical in a number of water body types at locations outside of the Navigation Channels Special Areas.] Beach nourishment shall be the priority use of clean dredge spoil when economically feasible.

(f) Dredging - New

1. Definition

New dredging is the removal of sediment from the bottom of a water body that has not been previously dredged or excavated, for the purpose of increasing water depth[.], or the widening or deepening of navigable channels to a newly authorized depth or width.

2. [Policy] Acceptability Conditions

New dredging is conditionally acceptable in Oceans, Rivers, Creeks and Streams [generally discouraged. On a case by case basis, new dredging may be considered for acceptability] for boat moorings, [or] navigation channels or anchorages (docks) providing that: (i) there is a demonstrated need that cannot be satisfied by existing facilities, (ii) the facilities served by the new dredging satisfy the location requirements for Special Water's Edge Areas, (iii) the adjacent water areas are currently used for recreational boating, [or] commercial fishing or shipping, (iv) the dredge area causes no significant disturbance to Special Water or Water's Edge Areas, [intertidal flats or subaqueous vegetation,] (v) the adverse environmental impacts are minimized to the maximum extent feasible, (vi) dredging will have no adverse impacts on groundwater resources, (vii) an acceptable dredge spoil disposal site exists, [and] (viii) the dredged area is reduced to the minimum practical and (ix) turbidity is controlled during the dredging operation.

New dredging or excavation to create new lagoons for residential development is prohibited. New dredging in Lakes, Ponds and Reservoirs, Bays and Guts is [prohibited] discouraged. Dredging should be conducted between November and mid-March to the maximum extent feasible.

(g) Dredge Spoil Disposal

1. Definition

Dredge spoil disposal is the discharge of sediments (spoils) removed during dredging operations.

2. [Policy] Acceptability Conditions

Dredge Spoil Disposal is prohibited in Tidal Guts, Medium Rivers, Creeks and Streams, and Lakes, Ponds and Reservoirs; and discouraged in Open Bays and Semi-Enclosed and Back Bays when the water depth is less than 6 feet. However, spoil disposal by sidecasting is acceptable in these water body types when shallow waters preclude removal of the dredge spoil from the area.

Disposal of dredge spoils in the ocean and bays is conditionallly acceptable provided that it is in conformance with USEPA guidelines (40 CFR 230, 40 FR 41291, September 5, 1975) established under Section 404(b) of the Clean Water Act.

EPA guidelines require that consideration be given to the need for the proposed activity, the availability of alternate sites and methods of disposal that are less damaging to the environment, and applicable water quality standards. They also require that the choice of site minimize harm to municipal water supply intakes, shellfish, fisheries, wildlife, recreation, threatened and endangered species, benthic life, wetlands and submerged vegetation, and that it be confined to the smallest practicable area.

[Subaqueous disposal of dredge spoils is prohibited in most water body types, until the acceptability of this technique is demonstrated by appropriate research.]

Clean dredge sediments of suitable particle size are acceptable for beach nourishment on ocean or open bay shores.

The use of clean dredge spoil to create new wetlands in any General Water Area is conditionally acceptable depending upon an evaluation of the biological value of the wetlands gained compared with the water area lost.

Note: [Additional] Conditions for Dredge Spoil Disposal on land are indicated in the Coastal Engineering Use Policies.

(h) Dumping (Solid Waste or Sludge)

1. Definition

The dumping of solid waste or sludge is the discharge of solid or semi-solid waste material from industrial or domestic sources or sewage treatment operations into a water area.

2. [Policy] Acceptability Conditions

The dumping of solid or semi-solid waste of any description in any coastal water is prohibited.

(i) Filling

1. Definition

Filling is the deposition of inorganic material (sand, soil, earth, dredge spoils, etc.) into water areas for the purpose of raising water bottom elevations.

2. [Policy] Acceptability Conditions

(i) Filling is prohibited in lakes, ponds, reservoirs, and in ocean and open bay areas at depths greater than 18 feet.

(ii) In most other water areas, filling is discouraged, but limited filling may be considered [elsewhere] for acceptability [on a case by case basis] provided that: (a) the use that requires the fill is water dependent (or water related if and extension of a Filled Water's Edge). [satisfies the location policies for the water's edge,] (b) there is a demonstrated need that cannot be satisfied by existing facilities, (c) there is no feasible or practical alternative site on an existing Water's Edge. [to filling and that filling is essential to the functioning of the use,] (d) the minimum practical area is filled, (e) the adverse environmental impacts are minimized, and (f) minimal feasible interference is caused to [intertidal flats and] Special Areas, and (g) pilings and columnar support or floating structures cannot serve the use.

(iii) Filling to create docks and wharves is conditionally acceptable provided that construction of the dock or wharf on pilings would be infeasible.

(iv) Filling using clean sediment of suitable particle size and composition is acceptable for beach nourishment projects (see the Coastal Engineering Use Policies 7:7E-7.11), and for the creation of new wetlands.

[Filling is generally discouraged in all coastal waters. Clean sediment of suitable particle size and composition is acceptable for beach nourisment projects (see the Coastal Engineering Use Polices).]

(j) Piling

1. Definition

Piling is the insertion of columnar structural members into the water bottom substrate.

2. [Policy] Acceptability Conditions

When pilings are an element of docks and moorings they must meet the acceptability conditions for those uses. The placement of pilings for other purposes is discouraged in lakes, ponds, reservoirs, and ocean and bay waters greater than 18 feet in depth. Elsewhere pilings are conditionally acceptable provided that they are not a hazard to navigation.

[Piling is ususally associated with docks, shoreline structures, and piers and must satisfy the conditions set out above for these uses. Piling that is an element of a use addressed in a Use Policy must satisfy the Use Policy.]

(k) Mooring

1. Definition

A boat mooring is a temporary or permanent, piling or floating anchored facility in a water body for the purpose of attaching a boat.

2. [Policy] Acceptability Conditions

Temporary or permanent boat mooring areas are conditionally acceptable in some General Water Areas [some water body types] provided that the mooring area is adequately marked and is not a hazard to navigation.

(l) Sand and Gravel Extraction

1. Definition

Sand and gravel extraction is the removal of sand or gravel from the water bottom substrate, usually by suction dredge, for the purpose of using the sand or gravel at another location.

2. [Policy] Acceptability Conditions

Sand and gravel extraction is prohibited in Lakes, Ponds and Reservoirs, and Tidal Guts.

This activity is discouraged in all other General Water Areas except the deep Ocean and Rivers, Creeks, and Streams. In these General Water Area types, extraction is conditionally acceptable provided that:

(i) Special Areas are not directly or indirectly degraded,

(ii) turbidity and resuspension of toxic materials is controlled throughout the extraction operation through use of the best available mitigation technology,

(iii) there is an acceptable disposal site for the waste from washing operations, and

(iv) in rivers, creeks and streams, the depth of water at the mining site is at least six feet.

[Sand and gravel mining for mineral extraction or beach nourishment is conditionally acceptable in the deep ocean and inlets providing that: (a) areas of finfish and shellfish concentration are neither directly or indirectly degraded, (b) the physical and chemical impacts associated with turbidity and release of toxic agents from

substrate layers are minmized to the maximum extent practicable, and adhere to applicable water quality standards, and (c) the visual impact of dredging machinery from shore areas is acceptable.]

(m) Bridges

1. Definition

A bridge is any continuous structure spanning a water body, except for an overhead transmission line.

[Bridge construction is the building of a vehicle or pedestrian access route across a water body.]

2. [Policy] Acceptability Conditions

Bridges are conditionally acceptable over rivers, [and] streams, and tidal guts provided that: (i) there is a demonstrated need that cannot be satisfied by existing facilities and (ii) applicable Location and Resource Policies are satisfied, with special attention to Resource Policies on Secondary Impacts. [that the secondary impacts of the new or improved bridge are acceptable (see the Secondary Impact Policy in the Resources Policies).]

(n) [Cable Routes] Submerged Infrastructure

NOTE: This policy combines the policy for Cable Routes and Pipeline Routes.

1. Definition

Cables [routes] are [the] solid underwater lines [along which] such as telecommunication cables or electrical transmission lines. [are laid.]

Pipelines [routes or corridors] are [linear sites along which] hollow underwater pipes [are] laid, buried, or trenched for the purpose of transmitting fluids. Examples would be crude oil, natural gas, [raw or potable] water, petroleum products or sewage pipelines. Construction of an underwater pipeline may involve trenching, temporary trench spoil storage, and back filling, or jetting as an alternative to trenching.

2. [Policy] Acceptability Conditions

[Pipeline routes] Submerged Infrastructure are conditionally acceptable provided that they are not sited within Special Areas, unless no prudent and feasible alternate route exists[,]. In the case of pipelines, the following conditions must also be met. (i) trenching takes place to a sufficient depth and is backfilled, either through natural or mechanical means to avoid puncturing or snagging anchors or sea clam dredges, and (ii) the pipeline is sufficiently deep to avoid uncovering by erosion of water currents, (iii) the conditions outlined for pipelines in the Use Policies (See Section 7:7E-4.4) are satisfied.

Temporary trench spoil storage and back filling as part of pipeline trenching is acceptable provided that bottom contours are reestablished following trench spoil removal to the original bottom contours, to the maximum extent practicable. Jetting pipelines into bottom sediments is conditionally acceptable provided that trenching and backfilling are impractical.

In the case of Cable routes, the following additional conditions must be met:

[Cable routes are conditionally acceptable provided that (i) the route avoids Special Areas to the maximum extent practicable,] (i) the route avoids areas where anchors may foul the cable, and (ii) the alignment of the cable route is marked at the landfall and by buoys at the surface.

(o) Overhead Transmission Lines

1. Definition

Overhead transmission lines are electrically conducting wires hung between supporting pylons for the transmission of electrical power from generating plant to the site of consumption.

2. [Policy] Acceptability Conditions

Overhead transmission lines are prohibited or discouraged, except over Rivers, Streams, Creeks and Tidal Guts, [specified water body type] where transmission lines will be considered for acceptability provided that: (i) there is a demonstrated need that cannot be satisfied by existing facilities, (ii) there is no feasible alternate route that avoids crossing water bodies, (iii) further development likely to be induced by the transmission lines is acceptable, (iv) adequate safety precautions are included to prevent a broken cable touching the water in case of accidental breakage, and (v) the transmission line provides adequate vertical clearance for masts.

(p) Dams and Impoundments

1. Definition

Dams and impoundments are structures that obstruct natural water flow patterns for the purpose of forming a contained volume of water. Impoundments include dikes with sluice gates and other structures to control the flow of water.

2. [Policy] Acceptability Conditions

Dams and impoundments are impractical in many water body types, prohibited in other water body types, and discouraged in specified water body types, unless essential for water supply purposes or the creation of special wildlife habitats.

(q) [Pipes] Outfalls and Intakes

1. Definition

Outfalls and intakes are opening in pipes [Pipes are tubular structures of metal, concrete, plastic, or other material] that are located in Water Areas for the purpose of intake of water or discharge of effluent.

2. [Policy] Acceptability Conditions

Outfalls and intakes [Pipes and outfalls for the intake or discharge of effluent] are conditionally acceptable in most water bodies provided that the use associated with the intake or outfall [pipe] meets the Coastal Resource and Development Policies. [and the effluent meets all applicable water quality statutes and regulations.] The Water Areas policy applies only to the location of the mouth of the pipes, not to the effluent[.] or the amount of diversion.

(r) Miscellaneous

1. Definition

Miscellaneous includes uses of Water Areas not specifically defined in this section or addressed in the Use Policies.

2. [Policy] Acceptability Conditions

Uses of Water Areas not identified in the Water Acceptability Table or addressed in the Use Policies will be analyzed on a case-by-case basis.

SUBCHAPTER 5 - GENERAL LAND AREAS

7:7E-5.1 Definition

General Land Areas include all mainland land features located upland of [the] Special Water's Edge Areas.[, which is typically defined by the limit of soils with a seasonal high water table at the surface.]

General Land Areas begin at the inland limit of soils with a seasonal high water table equal to, or less than, one foot; the one hundred year flood hazard line, whether tidal or fluvial; the inland limit of water's edge fill; or the inland limit of coastal bluffs, whichever is farthest inland from the water's edge.

7:7E-5.2 Acceptability of Development in General Land Areas [General Policy for Land Areas]

(a) The acceptability for development of Land Areas is defined in terms of three levels of acceptable development intensity. Three factors determine the acceptable development intensity for various locations in Land Areas:

1. Coastal [Region] Growth Rating,
2. Environmental Sensitivity, and
3. Development Potential

Assessment of these three factors indicates the appropriate pattern of development from a broad, regional perspective and provides a method for determining the acceptable intensity of development of specific sites, as well as entire regions.

(b) Determination of the specific policy for a Land Area site is a four step process. First, the Coastal [Region in which the site is located] Growth Rating is determined. Second, the Environmental Sensitivity and Development Potential of the site are determined. Third, the Land Acceptability Table (Section 7:7E-5.7) for the appropriate region is consulted to determine the acceptable intensity of development of the site, given the three possible combinations of Development Potential and Environmental Sensitivity factors for the site or parts of the sites. Fourth, the proposed intensity of development of the site is compared with the acceptable intensity of development for the site.

(c) Coastal development which does not conform with the acceptable intensity of development of a site is discouraged.

7:7E-5.3 Coastal [Regions] Growth Rating

(a) [General] Introduction

The [Bay and Ocean Shore Region of the] coastal zone is classified into [ten] thirteen different regions on the basis of the varied pattern[s] of existing coastal development and natural and cultural resources. For these regions, DEP uses three broad regional growth strategies: (a) High Growth, (b) Moderate Growth, and (c) Low Growth. High Growth means that

infill, extension, and some scattered development patterns are acceptable, from a regional coastal management perspective. Moderate Growth means that infill and some extension development patterns are acceptable. Low Growth means that only infill development is acceptable (See Figure [4] 23).

(b) Barrier Island Region

The oceanfront barrier islands and spits constitute the Barrier Island Region. The Land Areas Policy does not apply to the Barrier Island Region, which is composed entirely of various Special Areas.

(c) Urban Areas Region

Each of the Urban Aid municipalities identified below is considered an urban area. The urban areas are designated high growth areas.

Atlantic
- Atlantic City

Camden
- Camden

Cumberland
- Bridgeton
- Millville

Essex
- Newark

Hudson
- Bayonne
- Hoboken
- Jersey City
- North Bergen
- West New York

Mercer
- Trenton

Monmouth
- Asbury Park
- Keansburg
- Long Branch
- Neptune Township

Ocean
- Lakewood

Passaic
- Passaic

Union
- Elizabeth
- Rahway

Middlesex
- New Brunswick
- Perth Amboy

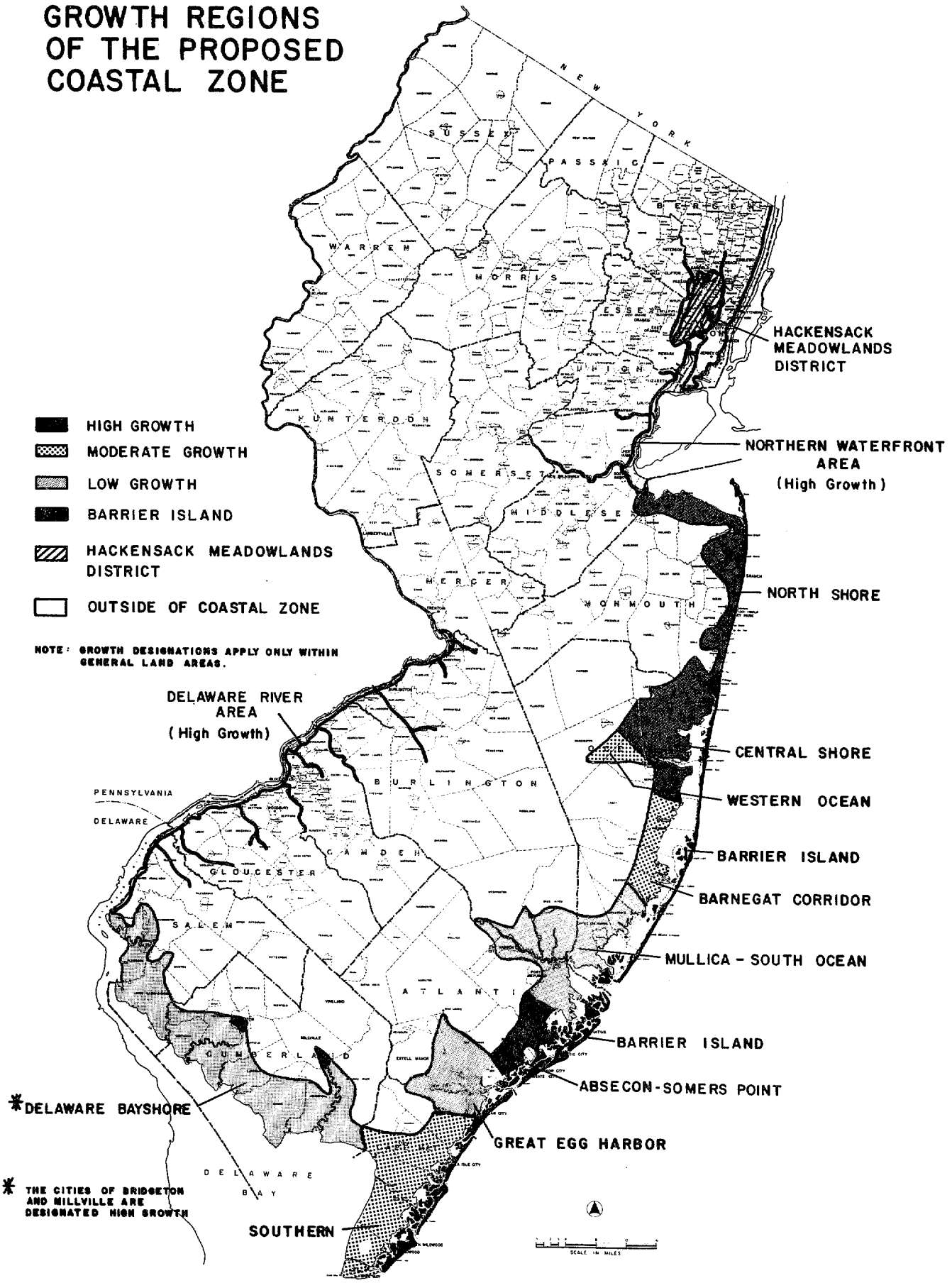
(d) North Shore Region

The North Shore Region includes those portions of Monmouth and Middlesex County that are within the Bay and Ocean Shore Region and is designated a High Growth Region.

(e) Central Shore Region

The Central Shore Region includes those portions of Ocean County within the Bay and Ocean Shore Region that are north of State Highway 37 and west of the Garden State Parkway, and those parts of the county north of Cedar Creek and east of the Parkway, and is designated a High Growth Region.

Figure 23


GROWTH REGIONS OF THE PROPOSED COASTAL ZONE
HIGH GROWTH
MODERATE GROWTH
LOW GROWTH
BARRIER ISLAND
HACKENSACK MEADOWLANDS DISTRICT
OUTSIDE OF COASTAL ZONE
NOTE: GROWTH DESIGNATIONS APPLY ONLY WITHIN GENERAL LAND AREAS.
NEW YORK
SUSSEX
PASSAIC
BERGEN
WARREN
MORRIS
ESSEX
UNION
HUNTERDON
SOMERSET
MIDDLESEX
MERCER
MONMOUTH
BURLINGTON
CAMDEN
GLOUCESTER
SALEM
ATLANTIC
CUMBERLAND
PENNSYLVANIA
DELAWARE
DELAWARE BAY
HACKENSACK MEADOWLANDS DISTRICT
NORTHERN WATERFRONT AREA (High Growth)
NORTH SHORE
DELAWARE RIVER AREA (High Growth)
CENTRAL SHORE
WESTERN OCEAN
BARRIER ISLAND
BARNEGAT CORRIDOR
MULLICA - SOUTH OCEAN
BARRIER ISLAND
ABSECON-SOMERS POINT
*DELAWARE BAYSHORE
GREAT EGG HARBOR
SOUTHERN
* THE CITIES OF BRIDGETON AND MILLVILLE ARE DESIGNATED HIGH GROWTH
SCALE IN MILES

(f) Western Ocean County Region

The Western Ocean County Region includes those portions of Ocean County west of the Garden State Parkway and south of State Highway 37, and is designated a Moderate Growth Region.

(g) Barnegat Corridor Region

The Barnegat Corridor Region includes those portions of Ocean County south of Cedar Creek and north of State Highway 72, and is designated a Moderate Growth Region.

(h) The Mullica-Southern Ocean Region

The Mullica-Southern Ocean Region includes those portions of Ocean County south of State Highway 72, all of Burlington County, and those portions of Atlantic County north of County Road 561 (Jimmy Leeds Road), located within the Bay and Ocean Shore Region, and is designated a Low Growth Region.

(Note: The appropriateness of a Low Growth designation for parts of Galloway Township, Atlantic County is under study, and may result in a change of designation.)

(i) Absecon-Somers Point Region

The Absecon-Somers Point Region includes those mainland portions of Atlantic County south of County Road 561 (Jimmy Leeds Road), and east of Garden State Parkway, and is designated a High Growth Region.

(j) Great Egg Harbor River Region

The Great Egg Harbor River Region includes those portions of Atlantic County southwest of County Road Alternate 559 and those portions of Cape May County east of State Highway 50, north of County Road 585, and west of U.S. Highway 9, and is designated a Low Growth Region. (Note: The appropriateness of a Low Growth designation for parts of Egg Harbor Township, Atlantic County is under study, and may result in a change of designation.)

(k) Southern Region

All of Cape May County, within the Bay and Ocean Shore Region, except for that portion in the Great Egg Harbor River Region and Barrier Island Region, is designated a Moderate Growth Region.

(l) Delaware Bayshore Region

All of Cumberland County and Salem County within the Bay and Ocean Shore Region is designated a Low Growth Region,[.] with the exception of the Cities of Bridgeton and Millville which are designated a High Growth Region.

(m) Delaware River Region

The area north of the Delaware Memorial Bridge to the coastal zone boundary in Trenton is designated a High Growth Region, except for land designated as a Low Growth Area by the State Development Guide Plan Concept Map. Such land is along Oldmans Creek eastward of Route I-295, and along Rancocas Creek and its tributaries in Medford and Southampton Townships.

(n) Northern Waterfront Region

The entire coastal zone from Cheesequake Creek in Middlesex County to the New York State boundary is designated a High Growth Region.

7:7E-5.4 Environmental Sensitivity Rating

(a) [General] Introduction

Environmental Sensitivity is a composite indication of the general suitability of a land area for development based on three factors -- (1) vegetation, (3) fertile soils, and (c) high [percolation] permeability wet soils -- that are combined to indicated High, Moderate, or Low Environmental Sensitivity on a site or parts of a site. This section first defines these rankings and then defines specifically the three factors.

(b) High Environmental Sensitivity

High Environmental Sensitivity Areas are land areas with: (1) forest vegetation, and (2) high soil productivity or high [percolation] permeability wet soils [which are] adjacent to a stream channel (permanent or ephemeral), as defined below.

All of the following Special Area types shall also be considered High Environmental Sensitivity areas: Farmland Conservation Areas, Steep Slopes, Endangered or Threatened Wildlife or Vegetation Species Habitats, and Critical Wildlife Habitats.

(c) Moderate Environmental Sensitivity

Moderate Environmental Sensitivity Areas are neither High nor Low Environmental Sensitivity Areas.

(d) Low Environmental Sensitivity

Low Environmental Sensitivity Areas are areas with: (1) onsite paving or structures on at least 50% of the project site or (2) areas with bare earth or herbacious vegetation or early successional meadow with low soil fertility, and [low] large depth to seasonal high water table.

(e) Definitions of Environmental Sensitivity Factors

1. Forest vegetation is defined as a natural community of trees and shrubs with tree species predominantly those of the late successional stage for the region.

2. High soil productivity is defined as soils with Agricultural Capability Class I, as defined by the U.S. Department of Agriculture, Soil Conservation Service in National Cooperative Soil Surveys. Low soil productivity is any soil [defined] designated by Agricultural Capability Class IV-VIII.

3. High [percolation] permeability wet soils are soils with a depth to seasonal high water table of three feet or less and with textures equal to or coarser than loamy sand within a 24 inch depth from the surface, as indicated in National Cooperative Soil Surveys and includes primarily the following coastal soils series: Atsion (At), Hammonton (HaA), Klej (KmA), and [Lakewood] Lakehurst [(LaA, LeB, and LeC)] (LmA and LhA).

4. [Low] Large depth to seasonal high water table is defined as a depth to seasonal high water table of more than five feet.

(f) Rationale

1. High environmental sensitivity

This ranking is given to land areas where combinations of environmental factors either make the area particularly valuable as a resource or particularly sensitive to impacts, or a combination of the two. Two area types are important. First, a combination of valuable resources exists where forest vegetation coincides with the most productive soils. [In addition, undeveloped] These areas are valuable as open space, for screening, as wildlife habitats, for ground and surface water purification, and as areas that could be used in the future for local food production and/or nutrient absorption. These areas have value both for the functions they now perform in a developing area and as a limited land bank of the most productive soils. Second, where forest vegetation coincides with a rapid soil percolation rate and a shallow depth to water table, there is a combination of resource value and impact sensitivity factors of special concern where there is an adjacent stream or water body. Areas of high soil percolation and shallow depth to water table are especially sensitive to ground water impacts because the rapid percolation offers little pollutant filtration and the distance to ground water is small. When these areas coincide with forest vegetation, itself a valuable resource in developing areas, the physical and biological processes of tree roots contribute to ground water protection by taking up nutrients and other contaminants. The combination of loss of forest vegetation and degradation of ground water that occurs when these areas are development raises the level of sensitivity.

2. Medium Environmental Sensitivity

These are land areas that are neither especially sensitive or insensitive to development.

3. Low Environmental Sensitivity

This ranking is given to areas where there would be particularly little loss of valued resources or sensitivity to impacts of concern if development took place. All paved areas are included, because in these areas most of the adverse impacts associated with development

have occurred and further development will minimally diminish natural resources or generate new adverse impacts. The second category of low sensitivity has a low resource value since the soils are infertile and there is little or no vegetation. Since the soils are coarse and have low erosion potential, there is a relatively large distance to ground water and therefore little potential for transferring adverse impacts.

7:7E-5.5 Development Potential

(a) [General] Introduction

Development Potential has three levels -- High, Medium and Low -- depending upon the presence or absence of certain development-oriented elements at or near the site of the proposed development, as defined below. The Development Potential rating applies to the entire site. Different sets of Development Potential criteria are defined below for different categories of development. Also, some of the criteria vary depending upon the regional type. If a specific set of Development Potential criteria is not defined for a particular category or type of development, then the Location Policy assumes a Medium Potential for that category until specific criteria are adopted by DEP. Recommended criteria from an applicant or the public may be considered in the course of the permit application process for a particular development prior to adoption by DEP of specific criteria.

(b) Residential Development Potential [Criteria]

1. Scope

The Residential Development category includes housing, retirement communities, hotels, motels, minor commercial facilities of a neighborhood or community scale, and intensive, community scale recreation facilities, such as parks, ball fields, and golf courses.

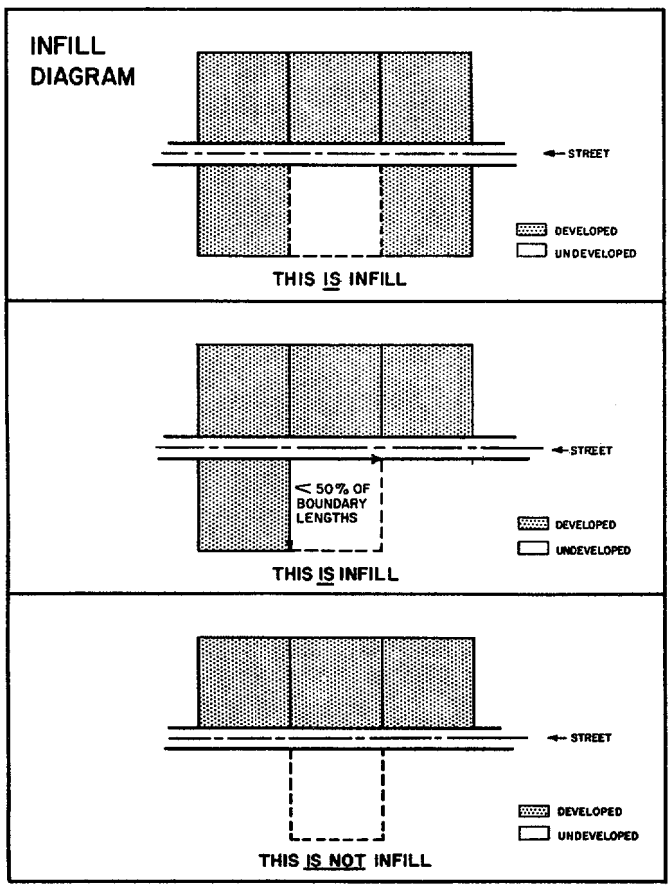
2. High Potential sites meet all of the following criteria:

(i) Roads - Direct access from the site to an existing paved public road with sufficient capacity to absorb satisfactorily the traffic generated by the proposed development, or in High Growth Regions, direct access to roads which either in their existing state, or with improvements included in the proposed coastal development, provide adequate capacity, or adjacent to roads that have been approved but not built.

(ii) Sewage - Direct access to a wastewater treatment system, including collector sewers and treatment plant, with adequate capacity to treat the sewage from the proposed development, or soils suitable for on-site sewage disposal systems that will meet applicable ground and surface water quality standards, or in High Growth Regions, access to existing or an approved wastewater treatment system.

(iii) Infill - At least 50% of the boundaries of the site are either immediately adjacent to or directly across a public road from sites with existing residential developments at a comparable scale or density or a closely related and associated type of development such as schools (See Figure [11] 24).

Figure 24


INFILL
DIAGRAM
STREET
DEVELOPED
UNDEVELOPED
THIS IS INFILL
STREET
< 50% OF
BOUNDARY
LENGTHS
DEVELOPED
UNDEVELOPED
THIS IS INFILL
STREET
DEVELOPED
UNDEVELOPED
THIS IS NOT INFILL

Medium Potential sites do not meet all of the criteria for High Potential sites and do not meet any of the criteria for Low Potential sites.

3. Low Potential sites in Low or Moderate Growth Regions meet any one of following criteria:

   (i) Roads - Site located more than 1,000 feet from the nearest paved public road,

   (ii) Sewage - Site located more than 1,000 feet from an adequate wastewater treatment system, or soils unsuitable for on-site sewage disposal systems,

   (iii) Infill - No development at a comparable scale or density is adjacent to the site boundary.

4. In High Growth Regions, Low Potential sites meet either of the following criteria:

   (i) Roads - Site located more than 1,000 feet from the nearest existing paved or proposed public road, or

   (ii) Sewage - Site located more than 1,000 feet from existing or approved adequate wastewater treatment system.

   (iii) Infill - No requirement.

(c) Major Commercial and Industrial Development Potential Criteria

1. Scope

   The Major Commercial and Industrial Development category includes all industrial development, warehouses, manufacturing plants, wholesale and major regional shopping centers, and major parking facilities.

2. High Potential sites meet all of the following criteria:

   (i) Roads - Direct access from the site to a paved public road with sufficient capacity to absorb satisfactorily the traffic generated by the proposed development, or in High Growth Regions direct access to roads which either in their existing state, or with improvements included in the proposed development, provide adequate capacity.

   Sites shall also be within two miles of an existing intersection with a limited access highway, parkway, or expressway, or for industrial development, be a site within one-half mile of a freight rail line with adequate capacity for the needs of the industrial development and with an agreement to build a spur to serve the industrial development.

   (ii) Sewage - Direct access to a wastewater treatment system, including collector sewers and treatment plant, with adequate capacity to treat the sewage from the proposed development, or soils suitable for on-site sewage disposal systems that will

meet applicable ground and surface water quality standards. In High Growth Regions, where the existing sewage collection or treatment capacity is inadequate and the soils are unsuitable for septic systems, an applicant may include an agreement with a sewage authority to increase service to provide the required capacity. This will qualify the proposal for a high potential rating, provided that secondary impact analysis demonstrates that any development likely to be induced by new sewage capacity above the requirements of the proposal is acceptable.

(iii) Infill - A part of the site boundary shall be either immediately adjacent to, or immediately across a road from, existing major commercial or industrial development.

3. Medium Potential sites do not meet all of the criteria for High Potential sites and do not meet any of the criteria for Low Potential sites.

4. Low Potential sites meet any one of the following criteria:

(i) Roads - A site located more than 1,000 feet from the nearest paved public road and more than 5 miles from the nearest intersection with a limited access highway, parkway or expressway, except in High Growth Regions where the site may be located more than 1,000 feet from the nearest paved public road.

(ii) Infill - A site located more than one-half mile from the nearest existing commercial or industrial development of more than 20,000 square feet building area.

(d) Campground Development Potential [Criteria]

1. Scope

A campground development provides facilities for visitors to enjoy the natural resources of the coast. Typically, this type of development seeks sites somewhat isolated from other development and with access to water, beach, forest and other natural amenities.

2. High Potential sites meet all of the following criteria:

(i) Roads - Sites shall have direct access to a paved public or private road of adequate capacity to serve the needs of the development.

(ii) Sewage - Direct access to a wastewater treatment system, including collector sewers and treatment plant, with adequate capacity to treat the sewage from the proposed development, or soils suitable for on-site sewage disposal systems that will meet applicable ground and surface water quality standards.

(iii) Region - The region surrounding the site is natural, undeveloped and contains either beaches, streams, or forests, and is readily accessible by foot to campground users.

3. Medium Potential sites do not meet all of the criteria for High Potential sites and do not meet any of the criteria for low potential sites.

4. Low Potential sites meet any one of the following criteria:

(i) Roads - More than one-half mile to the nearest public paved road.

(ii) Sewage - More than 1,000 feet to the nearest sewer with sufficient capacity for the needs of the development and soils unsuitable for subsurface sewage disposal systems.

(iii) Region - The region surrounding the site is at least partially developed or is not accessible by foot to campground users.

(e) Energy Facility Development Potential [Criteria]

(This section is reserved pending completion of joint coastal energy facility siting studies by DEP and NJDOE. In the interim, the development potential of energy facilities is assumed to be moderate.)

(f) Rationale

High Development Potential sites satisfy the major siting requirements of coastal uses and may be most desirable from the developer's viewpoint. The Development Potential factor also considers the extent to which the development of a site would carry out the basic coastal policy to concentrate the pattern of development by serving as infill to existing patterns of development, or whether the proposed development site would extend or scatter the pattern of development. DEP recognizes that other factors may be important in siting decisions from a developer's perspective. Use of the development potential factor stresses the advantages of existing settled areas and emphasizes the disadvantages of sparsely settled areas in determining the acceptability of locations. This factor promotes efficient capital investment in public infrastructure and community facilities, as well as conservation of open space.

7:7E-5.6 Definition of Acceptable Intensity of Development

(a) [General] Introduction

The Location Policy for General Land Areas is expressed in terms of three acceptable intensities of development of the site [or parts of a site,] as determined by consulting the Land Acceptability Tables for the appropriate region. The acceptable intensities of development are expressed in terms of maximum and minimum acceptable percentages of the gross area of the site[, or of different parts of a site,] that may be, or must be used for structures, herbs and shrubs, or forests. Permeable paving provides a 10% bonus over the permitted maximum level of structures and impervious paving.

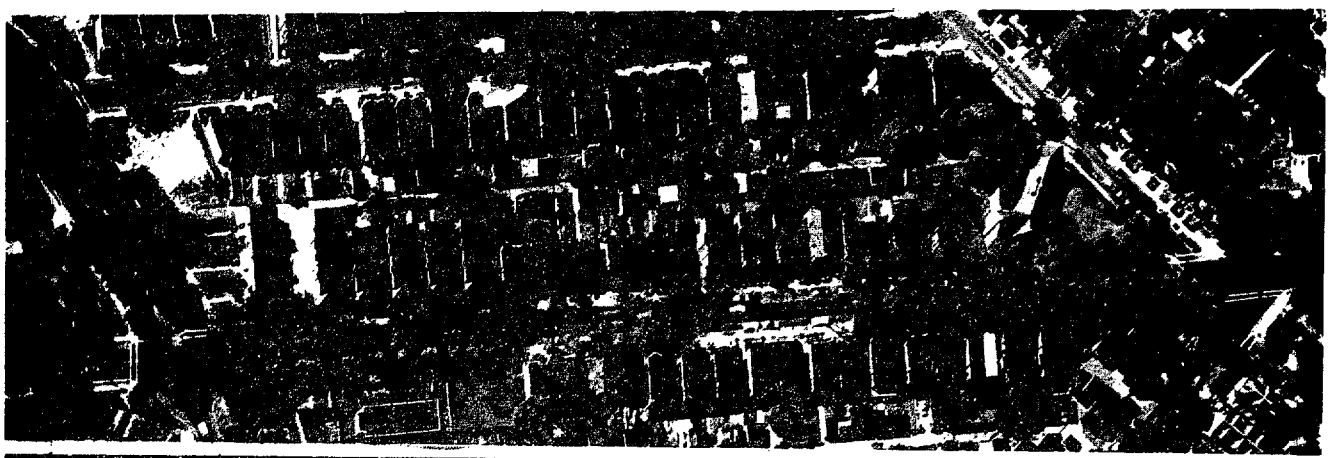
The acceptable maximum and minimum figures are percentages of the gross site area. Thus if a site were 100 acres of land with no special areas and the analysis showed acceptability for high intensity development, 80-90 acres of the site could be developed with paving and structure.

On sites with Special Area types in which the proposed use is prohibited or discouraged, this maximum area would be reduced. For example, if a site were 100 acres with 10 acres of wetlands and 20 acres of Endangered Species Habitat, only 70 acres would be acceptable for structures and paving even if the land analysis showed acceptability for high intensity development.

In some sites, clustering of development may be necessary if an applicant wishes to realize the acceptable maximum percentages. For example, on a 100 acre site proposed for housing with 20 acres of Floodplain and 30 acres of wetland and an acceptability for moderate intensity development, 30-40 acres of paving and structures would be acceptable. This represents 60%-80% of the General Land Area. These percentages are associated with higher density clustered housing rather than detached structures. In these cases, the minimum vegetation figures are relaxed since vegetation is preserved in the water's edge or special areas.

(b) High Intensity Development

This level of development permits extensive development of paving and structures. Typically, if analysis showed that most of a large area was acceptable for intensive development, the landscape that would be produced would be urban or heavily industrialized. The photomaps below show examples of typical High Intensity Development landscapes.



For parts of a site classified for High Intensity Development, the acceptable range of development is:

High Intensity Development	Structures and Impervious Paving	Permeable Paving	Herb and Shrub	Forest
Maximum	80%	90%	95%	-
Minimum	-	-	5%	5%

(Dash symbol (-) indicates no maximum or minimum)

This range allows most of each part of the site in this category to be developed with structures or paving, while preserving at least a small minimum of open space in herbs, shrubs and trees for microclimate control, aquifer recharge and visual screening. A developer planning to use pervious paving can, as a bonus, develop a larger percentage of the area.

The required percentage of forest shall either be preserved, or, if there is no forest on the site, shall be planted. Tree species shall be those of the native mature forest, and saplings shall be at least 6 feet high at a minimum density of 1 per 100 sq. ft. Forest areas shall be protected from trampling.

Shrubs and herbs shall be suitable to the substrate conditions. In the acid sandy soils common in the coastal area, this requirement excludes many species common in more inland areas.

High Intensity Development must be compatible in density with its surrounding region.

(c) Moderate Intensity Development

At this level of development, between 30 and 40 percent of a[n area] site can be developed in paving and structures. Typically, if analysis showed that most of a large area was acceptable for moderate intensity development, the landscape that would be produced would be suburban. The photomaps below show examples of Moderate Intensity Development landscapes.

For [parts of a] sites classified for moderate intensity development, the acceptable range of development elements is as follows:

Moderate Intensity Development	Structures and Impervious Paving	Permeable Paving	Herb and Shrub	Forest
Maximum	30%	40%	80%	-
Minimum	-	-	-	20%

The range allows, for example, development of residential subdivisions of up to approximately 4 dwelling units per acre or, if the porous paving allowance is used and the dwellings are clustered, up to approximately 8 dwelling units per acre.

A minimum 20 percent of forest is required to ensure that forest vegetation is preserved or planted for microclimate control, energy conservation, soil stabilization, aquifer recharge and wildlife habitat. Where the site has no existing forest, this percentage shall be met by planting native forest species of the mature forest. It is not intended that this should be costly planting. Whip saplings (less than 3 feet high) at a density of 1 per 200 square feet are acceptable. The forested areas shall be protected from trampling. The herbs and shrubs shall be adapted to the environmental conditions of the site to reduce the adverse impacts associated with extensive liming, fertilization and irrigation. The acid sandy soils common in coastal areas exclude many species common in inland areas, including most lawn grasses.

(d) Low Intensity Development

At this level of development intensity, the existing conditions of the site are not to be disturbed, [with] except for selective removal of vegetation for [clearing] agricultural use or maintenance purposes.[,

and] Also, no grading, paving or structures[.] would be allowed except for agriculture related use. Typically the landscape of Low Intensity Development areas would be rural, agricultural, or forest, as shown below in the photomaps. An exception to this general rule is the removal of vegetation for agricultural or silvicultual purposes or for recreational use that does not disturb soils. Unless the vegetation is in a special area, the following figures are applicable.

Low Intensity Development	Structures and Impervious Paving	Permeable Paving	Herb and Shrub	Forest
Maximum	3%	5%	95%	-
Minimum	-	-	-	5%

7:7E-5.7 Land Acceptability Tables

(a) [General] Introduction

The Land Acceptability Tables, one for each of the three regional growth types, indicate the acceptable intensity of development of a site or parts of a site, for each of the nine possible combinations of Environmental Sensitivity and Development Potential factors in each table. Since Development Potential applies to an entire site, each site can have a maximum of three different levels of acceptable intensity, if it has three areas with different levels of Environmental Sensitivity.

Land Acceptability Table: High Growth Region

(Urban Areas, Northern Waterfront, Northern, Central, [and] Absecon-Somers Point Regions, and Delaware River)

	DEVELOPMENT POTENTIAL			ENVIRONMENTAL SENSITIVITY			ACCEPTABLE DEVELOPMENT INTENSITY		
Line Number	High	Medium	Low	Low	Medium	High	High Intensity	Moderate Intensity	Low Intensity
1	X			X			X		
2	X				X		X		
3	X					X		X	
4		X		X			X		
5		X			X		X		
6		X				X			X
7			X	X					X
8			X		X				X
9			X			X			X

Land Acceptability Table: Moderate Growth Region

(Southern, Western Ocean, and Barnegat Corridor Regions)

	DEVELOPMENT POTENTIAL			ENVIRONMENTAL SENSITIVITY			ACCEPTABLE DEVELOPMENT INTENSITY		
Line Number	High	Medium	Low	Low	Medium	High	High Intensity	Moderate Intensity	Low Intensity
1	X			X			X		
2	X				X		X		
3	X					X		X	
4		X		X				X	
5		X			X			X	
6		X				X			X
7			X	X					X
8			X		X				X
9			X			X			X

Land Acceptability Table: Low Growth Region

(Mullica-Southern Ocean, Great Egg Harbor River Basin, and Delaware Bayshore Regions)

	DEVELOPMENT POTENTIAL			ENVIRONMENTAL SENSITIVITY			ACCEPTABLE DEVELOPMENT INTENSITY		
Line Number	High	Medium	Low	Low	Medium	High	High Intensity	Moderate Intensity	Low Intensity
1	X			X				X	
2	X				X			X	
3	X					X			X
4		X		X					X
5		X			X				X
6		X				X			X
7			X	X					X
8			X		X				X
9			X			X			X

(b) Rationale

The Land Acceptability Tables represent a striking of balances between the environmental sensitivity and development potential of sites, and balances among regions, in order to indicate both which land areas are appropriate locations for development and how the design of the development should use the land features of the site.

DEP has categorized the Coastal Zone into thirteen regions because the coastal zone is not uniform. Descriptions of the regions make possible a more graphic, though still generalized, picture of its future. The regions are: Barrier Island, Urban Areas, Northern Waterfront Area, Northern, Central, Western Ocean, Barnegat Corridor, Mullica-South Ocean, Absecon-Somers Point, Great Egg Harbor, Southern, Bay Shore, and Delaware River Area. Also, different broad growth policies -- High, and Low -- are appropriate for these regions.

Environmental Sensitivity is weighed more heavily in Low Growth Regions than in High Growth Regions. Development Potential is weighed more heavily in High Growth Regions.

The [ten] thirteen regions of the coast are divided into three regional growth types as follows: High Growth: Urban, Northern, Central, (excluding Western Ocean County and Barnegat Corridor) [and] Absecon-Somers Point, Northern Waterfront and Delaware River Area; Medium Growth: Western Ocean County, Barnegat Corridor, and Southern; Low Growth: Delaware Bayshore, Mullica-Southern Ocean and Great Egg Harbor River Basin.

[The definition and rationale for the geographic distribution and general growth policies are discussed in Chapter Three.] The[se] general growth policies are the basis for the distribution of the development acceptability. The three land acceptability tables show that in high growth areas, development potential is favored to promote growth, and in low growth areas environmental sensitivity is favored to promote conservation. This general policy affects the tables as follows:

1. High Growth Regions (Urban, Northern Waterfront, Northern, Central, [and] Absecon-Somers Point and Delaware River)

[General]

The general policy in these regions is to promote growth through infill and lightly limited extension. In the Northern and Absecon areas, as well as urban areas throughout the coastal zone, most growth will take place in high potential infill sites because of the pattern and density of existing development. In the eastern Central region, growth may occur through both infill and extension. The question here is how much to limit the extension and scattering of development so that orderly growth is promoted that does not induce sprawl without unreasonably interfering with the sequence in which sites are developed.

In this high growth category, the criteria of both high and low development potential are changed to make it easier to obtain a high or medium ranking. For example, proposals for residential developments that have adequate access to roads and sewers that have been approved but not built may qualify for high development potential status. Proposals that are within 1,000' of roads and sewers that have been approved but are not built qualify for medium development potential. In these areas of planned growth, the requirement that a site must be infill to qualify for medium development potential does not apply. This definition identifies areas where growth is currently planned and then assigns acceptable development intensities as if the infrastructure were in place, which allows non-sequential development. The definition of levels of environmental sensitivity is the same throughout the tables.

Lines 1, 2, 3 In these lines development potential is high. Basically these are infill sites. In a high growth area these are prime development areas, satisfying the policy of concentration, so development potential is weighed heavily.

Line 1. There is no conflict in this line. Sites with high development potential and low environmental sensitivity are suitable for any intensity of development compatible with their surroundings.

Line 2. There is little conflict in this line. In high growth areas the high development potential overrides medium environmental sensitivity. Impacts can generally be contained by mitigation. Development of any intensity compatible with the surroundings is therefore appropriate to promote growth.

Line 3. This is a line of high conflict. Development in these areas encroaches upon fertile forests and forested areas around streams with wet high [percolation] permeability soils. However, because of the high potential and high growth designations, moderate intensity development is considered acceptable to promote growth. Development on sites, or parts of sites, that are included on this line shall minimize disturbance to the maximum extent practicable and shall distribute the limited areas of structures and paving acceptable in the moderate intensity class as much as possible in areas with a deeper water table and less valuable forest. Mitigation measures to reduce ground and surface water impacts are essential.

Lines 4, 5, 6 In these three lines the development potential moves to medium. In high growth areas development potential is also weighed heavily, though less than in the first three lines. The balance is designed to conserve the limited areas of high sensitivity that occur in high growth regions as open space for surrounding developments.

Line 4. The environmental sensitivity is low and development of any compatible intensity is appropriate to promote growth.

Line 5. Development potential overrides the moderate environmental sensitivity to promote growth. The acceptable development intensity is high, rather than medium, because the resource loss is moderate and, to promote clustering, intensive growth is desirable. The open space necessary in a developing high growth region is better provided in larger contiguous areas which may also conserve high sensitivity land types, than dispersed through lower density development in moderate sensitivity areas.

Line 6. This is a line of conflict. Here high environmental sensitivity overrides development potential. Almost all the high sensitivity areas in the high growth regions are limited areas of forested Atsion, Lakewood or Klej soils adjacent to streams and water bodies. In these moderate development potential growth extension areas, the preservation of these water related areas is desirable for a number of reasons.

- They are linked to the water's edge corridors and so many become parks and wildlife habitats linked to an integrated non-vehicular movement system providing recreation and diversity for surrounding areas of development.

- They conserve the most valuable and sensitive land areas of a developing region improving water quality and adding to the mitigating effects of the water's edge areas.

- Development of these areas is relatively difficult and expensive: vegetation must be cleared, filling is necessary for foundations and paving and special mitigation measures are necessary for the release of sewage and runoff effluents.

Conservation therefore benefits both the community and the environment.

Lines 7, 8, 9 In these three lines, development potential is low, sites are distant from existing or approved roads and sewers, and soils are unsuitable for septic systems. The criteria for low development potential in high growth areas allows scattered non-sequential development in areas where growth is planned. Environmental sensitivity must be weighed more heavily in these three lines to prevent sprawl into unsewered areas where soils are unsuitable for septic systems. This is particularly common in the sandy soils of high growth regions.

Line 7. This is the only line of these three where conflict arises between the policy of promoting development in high growth areas and the policy of discouraging sprawl. The criteria for low potential in high growth areas are designed more narrowly than in other areas to allow most sites to qualify for medium development potential. Environmental sensitivity overrides development potential in this line to restrict scattered development in unsewered sandy soils.

Lines 8 & 9 In these two lines, environmental sensitivity overrides development potential to prevent scattered development into areas of low potential where resource loss and impacts are of concern.

2. Medium Growth Areas (Western Ocean County, Barnegat Corridor, and Southern)

[General]

The general policy in these areas is to promote nodal growth based on existing centers of development and to limit ribbon and scattered development along minor roads. It is desirable in these areas to promote settlement patterns that could be served by public transportation systems, particularly buses.

Because of this policy, development acceptability is more limited in areas of extension. Environmental sensitivity is weighed more heavily than in high growth areas. The criteria for inclusion in high and medium development categories are also more rigorous for this reason. Sites must be adjacent to existing roads and sewers to qualify for high potential and adjacent to existing developed sites and within 1,000 feet of existing roads and sewers to qualify for medium potential. These more rigorous standards are set to increase the limitations to sprawl in moderate growth areas.

Lines 1, 2, 3 In these three lines, development potential is high, sites infill or round off, and the necessary infrastructure is available. These are the nodes where growth is to be promoted. Development potential is weighed more heavily than environmental sensitivity.

Lines 1 & 2 Here development potential overrides environmental sensitivity. The acceptable development intensity is kept high in both lines to promote clustering in the growth nodes.

Line 3. This is a line of conflict, with development encroaching upon highly sensitive areas. In order to promote concentration at nodes, development potential partly overrides environmental sensitivity to permit

moderate intensity development. Developers building on sites or parts of sites that are regulated by this line shall place structures and paving in a way that avoids the most sensitive parts of the area as much as possible and mitigate impacts according to the Resource Policies.

Lines 4, 5, 6 In these three lines, development potential is medium, sites are extensions of existing development and within moderate distances of roads and sewers. If development acceptability is moderate or high, ribbon development along roads is possible conflicting with the policy of nodal development.

In moderate growth regions in the south, extensive land areas fall within the Farmland Conservation Area. In western Ocean County, there are few land areas adjacent to existing roads. Little ribbon development is therefore possible. To allow limited growth, development potential partly overrides environmental sensitivity in all but the most sensitive areas to allow moderate intensity development.

Lines 4 & 5 Here moderate intensity development is acceptable to allow very limited extensions of existing roadside developments.

Line 6. Here the most sensitive areas are conserved from ribbon development both to prevent sprawl in moderate growth areas and to protect valued and sensitive land areas.

Lines 7, 8, 9 In these areas development potential is low, sites are distant from roads, and sewers and soils are unsuitable for septic tanks. To prevent scattered sprawl development in limited growth areas, the acceptable intensity of development is low.

3. Low Growth Areas (Delaware Bayshore, Mullica-Southern Ocean Great Egg Harbor River Basin)

[General]

The general policy in these areas is that conservation is more important than development and environmental sensitivity is therefore weighed more heavily than other areas. In the Delaware Bayshore, the concern is the conservation of agricultural land. In the Mullica-Southern Ocean and Great Egg Harbor River Basin regions the concern is conservation of the natural environment. The spread of development must, therefore, be highly restricted. In order to satisfy these policies, development has been limited to infilling and rounding off in areas of moderate and low environmental sensitivity.

Lines 1 & 2 These lines show moderate intensity development acceptable in infill sites. This allows a limited amount of growth within existing settlements especially where development had leapfrogged in the past leaving pockets of undeveloped land.

Lines 3 to 9 In these lines development is restricted in low growth areas either because the lower development potential implies ribbon or scattered sprawl in conflict with the subregional growth policy or, to conserve the environmentally sensitive areas which are more valuable in low growth areas than elsewhere.

(c) Determination of Location Acceptability

The location acceptability of a coastal development proposed for a General Land Area is determined by comparing the site plan of the proposed development, [and the proposed percentages of the site to be used for structures, paving, herb and shrub vegetation, and forest vegetation,] with the acceptable minimum and maximum percentages of the site [to be used] for structures, paving, herb and shrub vegetation, and forest vegetation, as specified in the three levels of acceptable development intensity in the Land Acceptability Tables that apply to the site or parts of the site. [according to the Land Acceptability Tables.] The percentages of the proposed development's site plan shall conform with the percentages determined using the Land Acceptability Tables, to the maximum extent practicable.

SUBCHAPTER 6 - GENERAL LOCATION POLICIES

7:7E-6.1 Policy on Location of Linear Development

A linear development, such as but not limited to a road, sewer line, or offshore pipeline, that must connect two points to function shall comply with the specific location policies to determine the most acceptable route, to the maximum extent practicable. If part of the proposed alignment of a linear development is found to be unacceptable under the specific location policies, that alignment (perhaps not the least possible distance) may nonetheless be acceptable, provided the following conditions are met:

(a) there is no prudent or feasible alternative alignment which would have less impact on sensitive areas,

(b) there will be no permanent or long term loss of unique or irreplaceable areas,

(c) appropriate measures will be used to mitigate adverse environmental impacts to the maximum extent feasible, such as restoration of disturbed vegetation, habitats, and land and water features,

(d) the alignment is located on or in existing transportation corridors and alignments, to the maximum extent practicable.

7:7E-6.2 [General] Basic Location Policy

A location may be acceptable for development under the specific location policies above, but the DEP may reject or conditionally approve the proposed development of the location as reasonably necessary to:

(a) promote the public health, safety, and welfare,

(b) protect public and private property, wildlife and marine fisheries, and

(c) preserve, protect and enhance the natural environment.

7:7E-6.3 Secondary Impacts

(a) Definition

Secondary impacts are the effects of additional development likely to be constructed as a result of the approval of a particular proposal.

(b) Policy

Coastal development that induces further development shall demonstrate, to the maximum extent practicable, that the secondary impacts of the development will satisfy the Coastal Resource and Development Policies and will not be in conflict with the State Development Guide Plan. The level of detail and areas of emphasis of the secondary impact analysis are expected to vary depending upon the type of development. Minor projects may not even require such an anaylsis. Transportation and

wastewater treatment systems are the principal types of development that require a secondary impact analysis, but major industrial, energy, commercial, residential, and other projects may also require a rigorous secondary impact analysis.

Secondary impact analysis must include an analysis of the likely geographic extent of induced development, its relationship to the State Development Guide Plan Concept Map, an assessment of likely induced point and non-point air and water quality impacts, and evaluation of the induced development in terms of all applicable Coastal Resource and Development Policies. Models for secondary impact analysis may be found in New Jersey Department of Community Affairs, Division of State and Regional Planning, Secondary Impacts of Regional Sewerage Systems (1975) and in USEPA, Manual for Evaluating Secondary Impacts of Wastewater Treatment Facilities (EPA-600/5-78-003, 1978).

(c) Rationale

Further development stimulated by new development and the cumulative effects of coastal development, including development not directly managed by DEP, may gradually adversely affect the coastal environment. The capacity of existing infrastructure does, however, limit the amount and geographic extent of possible additional development. Secondary impact analysis, particularly of proposed infrastructure, enables DEP to ascertain that the direct, short term effects, and the indirect or secondary effects of a proposed development will be consistent with the basic objectives of the Coastal Management Program. Secondary impact analysis enables DEP to evaluate likely cumulative impacts in the course of decision-making on specific projects.

[Secondary impact analysis must include, to an appropriate level of detail, an analysis of the likely geographic extent of induced development, an assessment of likely point and non-point air and water quality impacts, and evaluation of the induced development in terms of all the applicable Coastal Resource and Development Policies. A study by the New Jersey Department of Community Affairs, Division of State and Regional Planning, Secondary Impacts of Regional Sewer Systems (1975) provides one model for carrying out secondary impact analysis.]

7:7E-6.4 Transferred Impacts

(a) Definition

Transferred impacts are the effects of new development which are transferred to another location through a direct chain of cause and effect. For example, dredging may cause turbidity which is carried by currents to impact a shellfish harvest area. Although no activity occurs in the harvest area, it is affected through transferred impacts. Acid rain falling at one place because of the burning of high sulfur fuel at another place is a second example.

(b) Policy

Development which would cause transferred impacts which would significantly degrade the special function or reduce the extent of a Special Area is prohibited, except where stated otherwise by Special Area policy.

(c) Rationale

Special Areas are singled out in these policies for special consideration, and in many cases for special protective regulations. The Special Area list contains the key resources of the coast. The rationale for each Special Area policy is noted in the Special Area listings.

The protection of these areas from immediate impacts within the Special Area is not sufficient to ensure protection since impacts originating outside Special Areas may be transferred into the Special Area through direct chains of cause and effect and thereby cause degradation.

The commonest transfer processes are air and water movements. Predator-prey relationships may also transfer impacts. In order to ensure protection of the most valued coastal resources, these transferred impacts must be managed.

Any proposal with the capacity to transfer impacts to Special Areas, in particular projects upslope in the surface or ground watershed of Special Areas, must demonstrate how the transfer of degrading impacts to Special Areas is prevented. In particular, runoff management and groundwater flow and quality must be addressed. This analysis may require a more extensive geographic scope than is normally required, and the applicant may be required to demonstrate that proposed development will not transfer degrading impacts to Special Areas.

SUBCHAPTER 7 - USE POLICIES

7:7E-7.1 Purpose

Many types of development seek locations in the coastal zone. The second stage in the screening process of the Coastal Resource and Development Policies spells out a set of policies for particular uses of coastal resources. Use policies are policies and conditions addressed to particular kinds of development. Use policies do not pre-empt location policies which restrict development, unless specifically stated. In general, they introduce conditions which must be satisfied in addition to the Location Policies, and the Resource Policies described in the following section. [The Use Policies often reinforce and highlight Location Policies.]

7:7E-7.2 Housing Use Policies

(a) Definition

Housing [in the Bay and Ocean Shore Segment] includes both large and small developments of single family detached houses, multi-family units with apartments or town houses, high rise buildings and mixed use developments. [The Housing Policies which follow will apply to all proposed housing on wetlands or riparian lands and to housing projects of 25 or more units in other parts of the Bay and Ocean Shore Segment.]

(b) Water Area and Water's Edge Housing

1. Policy

(i) New housing development is prohibited in Water Areas except for reconstruction of existing residential structures on pilings located on guts, canals, lagoons and ports which have been damaged by causes other than wind, water or wave, which is conditionally acceptable.

(ii) New Housing development is prohibited in most Special Water's Edge Areas outside of Special Urban Areas (See specific Special Water's Edge Area policies).

(iii) [The] New housing development involving the stabilization of existing lagoons through revegetation, bulkheading or other means is conditionally acceptable provided that the conditions of the [Retained Water's Edge and Filled Water's Edge] Existing Lagoon Edges policy are satisfied.

2. Rationale

Housing is not dependent on water access, and does not generally qualify for [any] exceptions to the policy of restricting non-water dependent development along the water's edge. [in sensitive areas.] In addition to this general restriction, most of the Special Area policies contain specific restrictions that have the practical effect of discouraging or prohibiting new development, including housing, from sensitive areas. [Housing in these areas would require new lagoons, dredging, and filling.]

(c) Cluster Development

1. Policy

Housing developments are encouraged to [that] cluster dwelling units on the areas of sites most suitable for development [are encouraged].

2. Rationale

Clustering is defined as an increase of net density realized by reducing the size of private lots and retaining or increasing the gross density of a project. The open space that is produced by clustering can be returned to the community as common open space. The location policies define certain sensitive areas where development is limited. When such areas are present on a site, the acceptable gross density may have to be reduced, unless the net density can be increased by clustering. Where municipal zoning requires minimum lot sizes that preclude clustering, applicants are encouraged to seek local approval, through new ordinances and/or variances, to maintain the permissible gross density by clustering. DEP will aid this endeavor by providing a rationale and testimony, as appropriate, especially for the protection of sensitive areas. Cluster developments lessen the impact of construction by preserving valued soil, open space, vegetation and aquifer recharge resources. Some cluster developments also increase insulation and reduce energy consumption due to shared walls between units.

(d) Residential Mix

1. Policy

Housing development that provides for a mix of dwelling types and for persons of different age and income groups is encouraged.

2. Rationale

The quality of life improves when residential areas provide a diversity of dwelling types, at different cost levels, so that people of different ages, life styles, and incomes can live together, rather than the post-war [traditional] pattern of highly stratified development that has taken place in the process of suburbanization of the coastal zone. At the same time, the coastal region already provides specialized dwelling types for particular groups, such as senior citizens.

(e) Fair Share Housing

1. Policy

Residential development is encouraged to help municipalities to accommodate their fair share of the regional need for low and moderate income housing, as defined in "A Revised Statewide Housing Allocation Report for New Jersey" (Department of Community Affairs,

Division of State and Regional Planning, Bureau of Urban Planning, May, 1978). [Housing developments which contribute to a municipality's efforts to accommodate its fair share of low and moderate income housing are encouraged.] Residential [Housing] developments shall provide least cost housing where feasible[.], especially in high growth regions and in municipalities not presently providing their fair share of low and moderate income housing.

2. Rationale

In March 1975, the New Jersey Supreme Court, in Southern Burlington County NAACP v. The Township of Mount Laurel 67 N.J. 151 (1975) declared that a municipality must "presumptively make realistically possible an appropriate variety and choice of housing ... at least to the extent of the municipality's fair share of the present and prospective regional need ..." In April 1976, the Governor issued Executive Order No. 35, (amended by Executive Order No. 46 of December 1976) which directed the Division of State and Regional Planning in the Department of Community Affairs to prepare a statewide fair share housing allocation plan. Developments in the coastal zone that contribute to meeting [defined] judicial intent concerning municipal fair shares are encouraged.

Atlantic City is a unique case in that is has more than its fair share of least cost housing, but as casinos increase the demand for and cost of housing, it is necessary that new least cost housing be provided in the city and its surrounding coastal region to accommodate persons forced out of housing by rising costs as well as people attracted to the region by new jobs.

(f) Housing and Public Transportation

1. Policy

The development of housing at locations and densities that contribute to the feasibility of public transportation is encouraged.

2. Rationale

Public health and welfare concerns about air quality, as well as the necessity to limit energy consumption, require that public policies and decisions encourage public transportation.

(g) Housing Rehabilitation

1. Policy

Residential development involving the demolition and redevelopment of existing structures is discouraged, unless rehabilitation of the existing structures is demonstrated to be impractical, infeasible, [and] or contrary to the public interest.

2. Rationale

The preservation, restoration, or rehabilitation of existing structures is preferable to demolition and redevelopment in order to save structures and neighborhoods with historic and aesthetic interest. Rehabilitation is [can] often [be] more labor intensive than construction of a new building. [which] This means that more jobs are created and less energy is consumed through the production of new building materials. [Applicants who build on developed sites must demonstrate that existing structures cannot be rehabilitated.]

(h) High Rise Housing

1. Policy

All high rise housing developments, defined as structures for residential use more than six (6) stories or more than sixty (60) feet from grade, are encouraged to locate in areas of existing high density, high-rise and/or intense settlements. High rise housing is acceptable subject to the following conditions:

(i) high-rise structures within the view of coastal waters must be separated from coastal waters by at least one public road or an equivalent [park distance,] area physically and visually open to the public,

(ii) the [largest] longest lateral dimension of any high-rise structure must be oriented perpendicular to the beach or coastal waters,

(iii) the proposed structure must not block the view of dunes, beaches, horizons, skylines, rivers, inlets, bays, or oceans that are currently enjoyed from existing residential structures, public roads or pathways,

(iv) the structure must not overshadow beaches between May and October, or waterfront parks year round,

(v) the proposed structure must be in character with the surrounding transitional heights and residential densities, or be in character with a comprehensive development scheme requiring an increase in height and density,

(vi) the proposed structure must not have an adverse impact on air quality, traffic, and existing infrastructure.

2. Rationale

Considerable recent residential development along the coast, from the Palisades to the barrier islands, has taken the form of high-rise, high-density towers. While conserving of land, some high-rise structures represent a visual intrusion, cause adverse traffic impacts, and cast shadows on beaches and parks. Under CAFRA, DEP has approved several high-rise structures in Atlantic City and denied two CAFRA applications for high-rise

proposals, one in downtown Toms River (Ocean County) and another in Brigantine (Atlantic County). This policy strikes a balance, between banning high-rises and allowing tall residential structures anywhere in the coastal zone.

(i) Large-Scale [Planned Residential] and Multi-Use Development

[Policy Large scale, free-standing planned residential developments, such as planned unit developments, shall be evaluated on a case-by-case basis to determine the extent that the proposed development carries out the basic coastal policy to concentrate the pattern of development, contributes to regional housing needs, and does not cause significant adverse secondary impacts.]

1. Definition

This policy applies to large-scale, free standing, planned developments, such as planned unit developments, which combine residential with commercial, industrial, recreational, or other uses.

2. Policy

(i) Large-Scale Multi-Use Developments are discouraged in Low Growth Regions.

NOTE: The appropriateness of a Low Growth designation for parts of Galloway and Egg Harbor Townships, Atlantic County is under study and may result in a change of designation.

(ii) Large-Scale Multi-Use Developments are discouraged in Moderate Growth Regions, unless adjacent to an existing developed area.

(iii) Large-Scale Multi-Use Developments are conditionally acceptable in High Growth Regions and adjacent to existing development in Moderate Growth Regions, provided that;

- All Special Area, Use and Resource Policies are satisfied,
- New infrastructure will not induce growth outside the site boundary which is inconsistent with Coastal Policies, and
- the proposed population densities can be served by public transportation.

3. Rationale

[Large planned communities offer advantages of scale in creating new modes of development and providing housing. Such large projects may, however, detract from, or alter, appropriate regional patterns of development.]

New large-scale development in Low Growth Regions would threaten both the natural resources and the character of the region.

In High and Moderate Growth Regions, new mixed developments of employment, housing and commerce may be acceptable. The main concern is that these developments may "leap frog" into undeveloped areas inducing further development along the infrastructure lines built to serve them. This is against the basic coastal policy to concentrate development. For this reason, the adjacency test is applied in Medium Growth Regions.

7:7E-7.3 Resort/Recreational Use Policies

(a) Definition

Resort-recreation uses include the wide range of small and large developments attracted to and often dependent upon locations along the coast.[, particularly in the Bay and Ocean Shore Segment.] Resort-recreation uses include hotels, motels, marinas, boating facilities, campgrounds, amusement piers, parks and recreational structures such as bath houses, [and] fishing piers].], natural areas, open space for active and passive recreation, and linear paths for bicycling and jogging.

(b) Recreation Priority

1. Policy

(i) Each waterfront municipality should contain at least one waterfront park on each body of water within the municipality. This policy will be implemented through DEP regulatory and funding decisions, including the denial of permits or funds to non-recreational waterfront proposals in municipalities which do not have at least one waterfront park or do not have adequate plans for a waterfront park, unless the Department, through the Green Acres Program, determines that the municipality contains either too small a demand or no adequate site for a waterfront park.

(ii) Resort/Recreation Uses shall have priority [in the Bay and Ocean Shore Segment] over all other uses, in Monmouth, Ocean, Atlantic, and Cape May, Cumberland and Salem Counties with highest priority reserved for those uses that serve a greater rather than a lesser number of people, and those uses that provide facilities for people of all ages and for people with physical handicaps.

2. Rationale

The national and state interests in recreation are clearly indicated in the coastal economy and are essential for the quality of life. The coastal environment provides numerous opportunities for recreation which should be expanded by public policy and action, including priority setting.

(c) [New] Recreation Areas Within Developments

1. Policy

Recreation areas shall be incorporated in the design of all residential [and], industrial and commercial development, to the maximum extent practicable.

2. Rationale

The recent national recognition that recreation is physically and mentally important for people of all ages should be accommodated by new development. Recreational facilities are important near places of employment, as well as in residential areas, since many people only have opportunities for recreation during the working day.

[Public Access]

NOTE: See Resource Policy on Public Access to the Shorefront

[Policy

All public and private resort-recreation development adjacent to coastal waters must provide for reasonable public access to the shorefront.]

[Rationale

Shorefront areas maintained and protected by state tax revenues, as well as by local funds, must be made available to all state residents and visitors. Access includes visual access to the shorefront, direct physical access, and indirect physical access such as provision of transportation and supporting facilities.]

[Hotel-Motel Developments]

NOTE: This policy has been moved to Commercial Policies

[Hotel-Casino Development]

NOTE: This policy has been moved to Commercial Policies

(d) Marinas

1. Policy

(i) New or expanded marinas for recreational boating are conditionally acceptable if:

(a) the demonstrated regional demand for recreational boating facilities cannot be met by the upgrading or expansion of existing marinas, and

(b) the proposed marina includes the development of an appropriate mix of dry storage areas, public launching facilities, and berthing spaces, depending upon the site conditions and

(c) the proposed marina provides adequate pump out stations for wastewater disposal from boats in a manner consistent with federal and state water quality laws and regulations.

(ii) New marinas or boat launching facilities that provide primarily for sail and oar boating are encouraged.

(iii) Expansions of existing marinas shall be encouraged by limiting non-water dependent land uses that preclude support facilities for boating.

(iv) Publicly funded marinas shall be designed to be part of multiple use parks, to the maximum extent practicable.

(v) Recreational boating facilities are acceptable provided that they are designed and located in order to cause minimal feasible interference with the commercial boating industry.

2. Rationale

The location of marinas requires the use of sensitive lands at the waters edge which exist in only limited supply and are also valued for other activities. The policies aim to ensure that the area devoted to marinas is fully and efficiently utilized to keep the size of the area required to a minimum. Waiting lists for slips at existing marians would be one type of evidence of regional need for additional facilities. Facilities for sail and oar boating are encouraged because such boats consume less energy and have less of a polluting impact on the water than motor boats.

(e) Amusement Piers, Parks and Boardwalks

1. Policy

New amusement piers are prohibited, except in areas with privately held riparian grants, where they are discouraged. Expanded or extended amusement piers, parks, and boardwalks at the water's edge or in the water and the on-site improvement or repair of existing amusement piers, parks and boardwalk areas are discouraged unless the proposed development meets the following conditions:

(i) the amusement pier, parks, or boardwalk does not unreasonably conflict with aesthetic values, ocean views, other beach uses, and wildlife functions, and

(ii) public access to the shorefront is not limited, and

(iii) the surrounding community can adequately handle the activity and uses to be generated by the proposed development.

2. Rationale

Amusement piers, amusement parks, and boardwalks form an essential element of the resort and recreational character of some of the communities fronting on the Atlantic Ocean. The carnival atmosphere of these areas provides fun and excitement annually for hundreds of thousands of people. However, new piers for amusement purposes are an inappropriate use of scarce coastal resources, due to the natural hazard of the desired ocean location and the importance of maintaining the visual quality of the oceanfront. Also, amusement parks are not a water-dependent use; these facilities may be located inland on less sensitive land and water features.

7:7E-7.4 Energy Use Policies

(a) General Definition of Energy Uses

Energy uses include facilities, plants or operations which produce, convert, distribute, or store energy. Under the Department of Energy Act, the term "energy facility" does not include an operation conducted by a retail dealer.

(b) General Energy Facility Siting Procedure

1. Policy

(i) The acceptability of all proposed new or expanded coastal energy facilities shall be determined by a review process that includes both NJDEP and the New Jersey Department of Energy (N.J.S.A. 52:27F-1 et seq.) according to the procedures defined in the Memorandum of Understanding between NJDEP and NJDOE on Coordination of Permit Reviews.

(ii) NJDOE will determine the need for future coastal energy facilities according to three basic standards. NJDOE will submit an Energy Report to DEP with its determination of the need for a coastal energy facility based on three required findings:

- the existing sources of supply will not be adequate to meet future levels of demand, including careful consideration of the potential effects of conservation,

- that no better technological alternative exists to meet future levels of demand,

- that no better locational alternative to the proposed site exists.

(iii) NJDEP will determine the acceptability of coastal energy facilities using the Coastal Resource and Development Policies.

(iv) If NJDOE has submitted an Energy Report to DEP, the DEP decision document shall refer to the NJDOE Energy Report and indicate DEP's reasons for differences, if any, between the DEP decision and the NJDOE Energy Report.

(v) Where NJDOE and NJDEP disagree on the acceptability of a specific proposed coastal energy facility (for example, on a specific proposed site for one type of energy facility), the disputed decision shall, in accord with state law, be submitted to the State's Energy Facility Review Board for final administrative action.

2. Rationale

NJDOE and NJDEP share responsibility for carrying out the energy facility siting, planning and project review elements of the New Jersey Coastal Management Program. The State Energy Master Plan and its appendices, the Coastal Resource and Development Policies, and the Memorandum of Understanding between NJDEP and NJDOE provide a clear framework for decision-making by these two State agencies on the review of proposed facilities, as well as a basis for continued consultation and cooperative planning.

(c) Outer Continental Shelf (OCS) Oil and Gas Exploration and Development

1. Policy

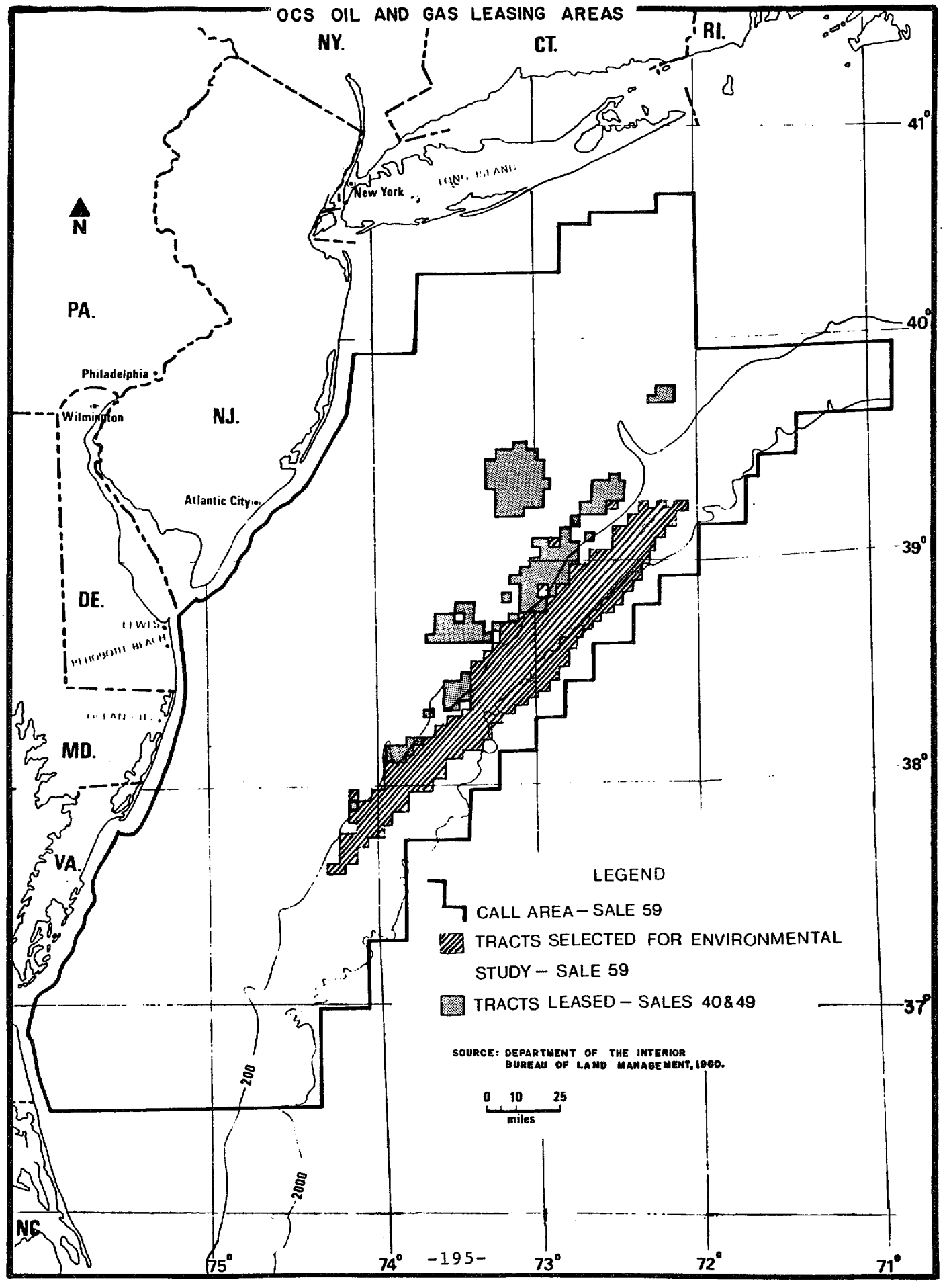
Rapid exploration of the Mid-Atlantic, North Atlantic, and other offshore areas with potential reserves of crude oil and natural gas is encouraged, as long as all related onshore activities do not conflict with existing land uses and are conducted in accordance with the policies of the program. Onshore activities for development and production of offshore hydrocarbons shall be carried out according to the specific energy facility policies of this section.

2. Rationale

The decision of the U.S. Department of Interior to lease offshore tracts for crude oil and natural gas exploration presents New Jersey with new onshore and marine-related environmental problems and opportunities (See Figure 25). New Jersey supports offshore exploration, recognizing the national need to identify new energy supplies, as long as this new industrial activity does not conflict with the State's second most important industry, tourism, which depends upon the maintenance of a high quality coastal environment.

In the event that commercially recoverable finds of oil and gas are made off the New Jersey coast, there may be considerable onshore and offshore [building] activity during the development stage of OCS operations that is necessary for production of these hydrocarbon resources. Development [initial years while the industry prepares for production. This] activity will diminish once production begins [gets underway].

Figure 25


OCS OIL AND GAS LEASING AREAS
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PA.
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MD.
VA.
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Philadelphia
Wilmington
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LEGEND
CALL AREA – SALE 59
TRACTS SELECTED FOR ENVIRONMENTAL STUDY – SALE 59
TRACTS LEASED – SALES 40&49
SOURCE: DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT, 1980.
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miles

To minimize the impact of needed facilities, DEP encourages the location of OCS-related facilities in developed areas where the infrastructure and labor market already exist to absorb such activity.

During the construction of onshore oil and gas facilities, there may be an influx to the coastal zone of the marine service and engineering industry. This service sector office-oriented activity will be encouraged to locate in urban centers, such as Atlantic City, which because of its proximity to OCS Lease Sale 40 has already been selected by industry as the take-off point for helicopters to the offshore rigs and platforms. Also, the U.S. Geological Survey (U.S.G.S.) has located its mid-Atlantic field office in Atlantic City to supervise and monitor offshore operations.

(d) Onshore Support Bases

1. Policy

New or expanded onshore support bases and marine terminals to support offshore oil and gas exploration, development, and production (including facilities for work boats, pipelaying barges, pipeline jet barges, ocean-going tugs, anchor handling vessels, [crew boats, pipeline barges, helicopters,] and limited, short-term storage facilities), are encouraged at locations in built-up urban coastal areas [of the [state outside of the Bay and Ocean Shore Segment] and discouraged in less developed areas of the coastal zone. Preferable locations for water-dependent onshore support bases include urban waterfront areas, where onshore adverse physical, economic, and institutional impacts will be less than the impacts likely to be placed on less industrially developed areas which are more dependent upon tourism and the resort industry. Small facilities for storing oil spill containment and cleanup equipment for offshore operations and emergency crew transport facilities, including crew boat operations will, however, be acceptable along the Atlantic Ocean or Delaware Bay [within the Bay and Ocean Shore Segment] where such a location would facilitate and expedite offshore emergency operations.

2. Rationale

Offshore exploratory activity began off New Jersey in the Baltimore Canyon on March 29, 1978. If the exploratory drilling is successful, the offshore oil and gas industry is likely to seek onshore support bases closer to the offshore tracts than the present temporary bases established by the major oil, gas, and offshore service and supply companies at Davisville, Rhode Island. Because of shallow inlets in the Bay and Ocean Shore Segment, few locations in this part of New Jersey meet industry's siting requirements. This policy recognizes that the New Jersey coast is favored by proximity to the offshore tracts as a site for onshore staging bases, and carries out the basic policy to concentrate rather than disperse industrial development in the coastal zone.

(e) Platform Fabrication Yards and Module Construction

1. Policy

Platform fabrication yards and module construction [will be] are encouraged in built-up coastal areas of the coastal zone, [outside of the Bay and Ocean Shore Segment] along the Hudson, Raritan and Delaware Rivers which have the requisite acreage, adequate industrial infrastructure, ready access to the open sea, and adequate water depth, and where the operation of such a yard would not alter existing recreational uses of the ocean and waterways in the areas. They are discouraged elsewhere in the coastal zone.

2. Rationale

If offshore exploration proves successful, the development phase of OCS activity in the Mid-Atlantic may require one or more sites for constructing the steel platforms used offshore, in addition to the platform construction yard tentatively planned for Cape Charles in Virginia. [Platform yards typically do not have the adverse air and water quality impacts associated with some other industries.] However, platform construction yards require large tracts of land and are labor intensive. The operation of a platform construction yard could severely disrupt the economy and social fabric [at] at less developed communities and areas. For these reasons, offshore platform construction yards are encouraged to seek locations in the already developed areas of the New Jersey coast. However, the height restrictions of bridges on certain [the Delaware River and other] New Jersey waterways may sharply limit the suitability of sites in New Jersey. Existing under-utilized shipyards may be used, however, for platform module construction.

(f) Repair and Maintenance Facilities

1. Policy

Repair and maintenance facilities for vessels and equipment for offshore activities [will be] are encouraged in the Delaware River and Northern Waterfront Areas. [particularly at under-utilized existing shipyards within the Bay and Ocean Shore Segment.] Repairs can be accommodated on an emergency basis in existing ship repair facilities in the Atlantic Ocean and Delaware Bay area, but not on a continual, long term basis.

2. Rationale

Ship repair yards presently exist in the developed coastal areas and should be utilized by OCS vessels that will be based in the same portion of the coast. Small shipyards within the Bay and Ocean Shore region can serve valuable repair functions on an emergency basis because of their proximity to the offshore leased areas. Utilization of repair yards in this region on a continuing basis, however, is not encouraged because of problems in meeting the OCS vessel draft requirments and because of possible conflicts with recreational vessels.

[Existing small shipyards within the Bay and Ocean Shore Region, such as these along the Maurice River in Cumberland County, may serve valuable repair and maintenance support functions for offshore operations without requiring construction of new shipyards.]

(g) Pipe Coating Yards

1. Policy

Pipe coating yards are discouraged along the Atlantic Ocean and Delaware Bay [in the Bay and Ocean Shore Segment] and encouraged along the Delaware River and in the area under the jurisdiction of the Port Authority of New York and New Jersey. [, in such communities as Middlesex, Union, Essex, and Hudson Counties.]

2. Rationale

Pipe coating yards constitute an industrial activity that is generally incompatible with the suburban and rural character of the Delaware Bay and Atlantic Ocean shore region. Further, pipe coating yards typically require 100-150 acres, and wharf space with a preferred depth at the wharf of 20 to 30 feet. These siting requirements suggest that highly industrial port areas[, located outside of the Bay and Ocean Shore Region,] are preferred locations.

(h) Pipelines and Associated Facilities

1. Policy

Crude oil and natural gas pipelines to bring hydrocarbons from offshore New Jersey's coast to existing refineries, and oil and gas transmission and distribution systems and other new oil and natural gas pipelines [will be] are conditionally acceptable, subject to the following conditions:

(i) For safety and conservation of resources, the number of pipeline corridors, including trunk pipelines for natural gas and oil, shall be limited, to the maximum extent feasible, and designated following appropriate study and analysis by the Department of Environmental Protection and the New Jersey Department of Energy, and interested federal, state and local agencies and affected industries,

(ii) The pipeline corridors for landing oil or natural gas are conditionally acceptable provided they [follow] are to be located in or adjacent to existing already developed or disturbed road, railroad, pipeline, electrical transmission or other rights-of-way [(such as the Atlantic City Expressway)], to the maximum extent practicable,

(iii) Pipeline corridors for landing oil are prohibited in the Central Pine Barrens area of the Mullica River, Cedar Creek watersheds and portions of the Rancocas Creek and Toms River watersheds, defined as the 760 square mile region adopted by

DEP as a "critical area" for sewerage purposes and non-degradation surface and ground water quality standards -- see N.J.A.C. 7:9-4.6(i), (j), and N.J.A.C. 7:9-10.1(b) and Figure [13] 26 -- and discouraged in other undeveloped parts of the Pine Barrens,

(iv) Pipeline corridors for natural gas are discouraged in the Central Pine Barrens as defined above, unless the developer can demonstrate that construction and operation of the proposed pipeline will meet the adopted non-degradation standards for water quality and cause no long term adverse environmental impacts,

(v) Proposals to construct offshore oil and gas pipelines, originating on the Outer Contintental Shelf and [including] all of the contemplated ancillary facilities along the pipeline route such as, for example, separation and dehydration facilities, gas processing plants, oil storage terminals, booster stations, surge tanks, and other related facilities, shall be evaluated by DEP and the New Jersey Department of Energy, in terms of the entire new potential pipeline corridor through the State of New Jersey,

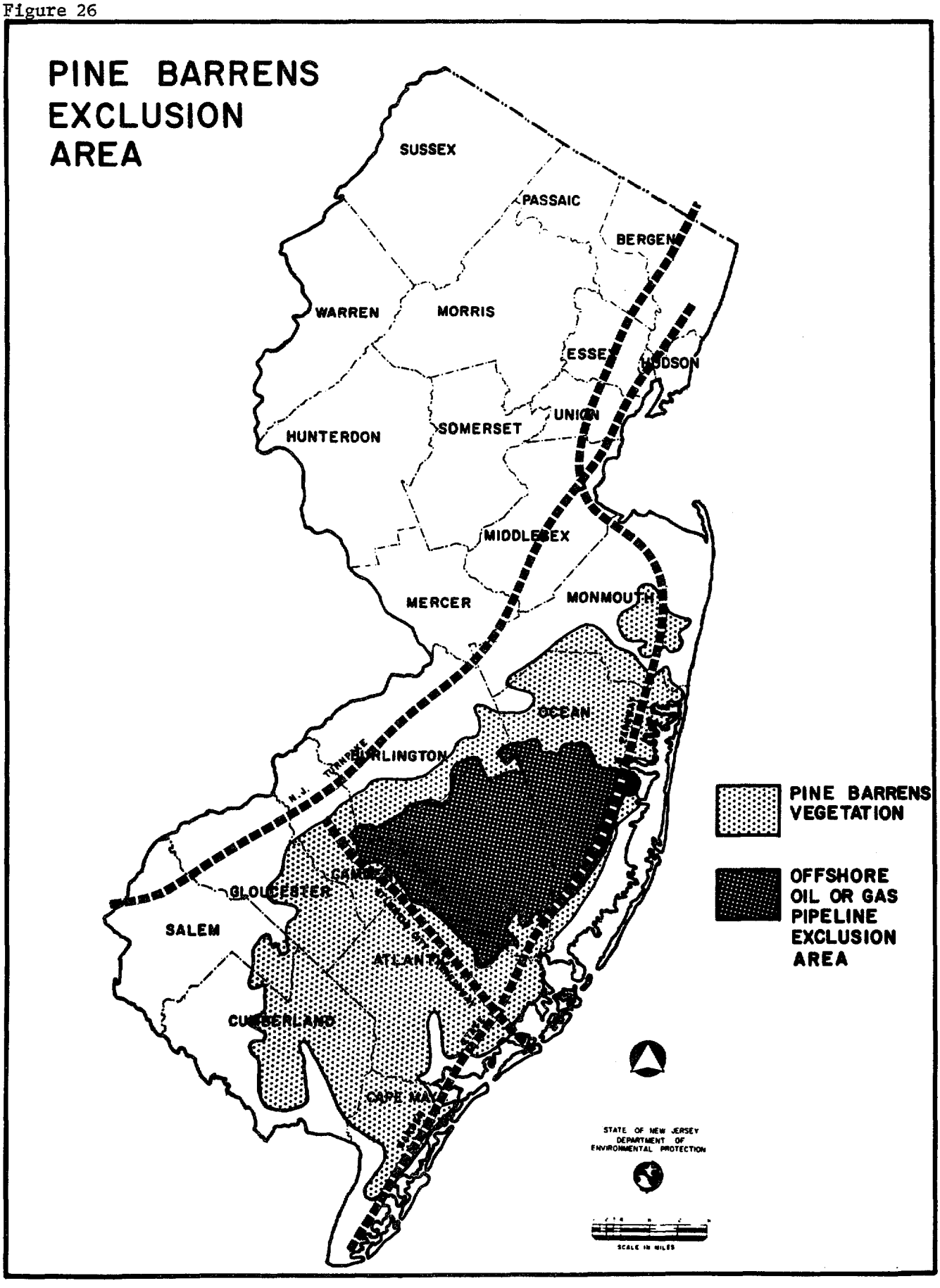
(vi) To preserve the recreational and tourism character of the coastal areas, new major pumping stations and other ancillary facilities associated with [to the] offshore oil and gas pipelines shall be prohibited from locations in the Bay and Ocean Shore Segment, except for major gas processing plants and required compressor stations. Gas processing plants and compressor stations [Ancillary facilities] shall be protected by adequate visual, sound, and vegetative buffer areas. Offshore P[p]latforms for pumping or compressor stations are encouraged to [shall be] locate[d] out of sight of the shoreline, and

(vii) Pipeline corridors through the state coastal waters shall, at a minimum and to the maximum extent feasible, avoid offshore munitions, chemical and waste disposal areas, heavily used waterways, geological faults, wetlands and significant fish or shellfish habitats. Pipelines shall be buried [trenched] to a depth sufficient to withstand exposure by scouring, shipgroundings, anchors, fishing and clamming and other potential obstacles on the sea floor.

2. Rationale

New Jersey recognizes that pipelines,.rather than other modes of surface transportation such as tankers and barges, are the preferred and more environmentally sound method of bringing crude oil and natural gas ashore from offshore wells. Pipelines affect their immediate surroundings most dramatically during construction. If construction is carried out properly, there will be short term impacts, most visible during the period of revegetation. At the same time, the potential onshore effects of pipelines on the sensitive ecosystem of the coast and the Pine Barrens, and the visual,

Figure 26


PINE BARRENS
EXCLUSION
AREA
SUSSEX
PASSAIC
BERGEN
WARREN
MORRIS
ESSEX
HUDSON
UNION
HUNTERDON
SOMERSET
MIDDLESEX
MERCER
MONMOUTH
OCEAN
BURLINGTON
N.J. TURNPIKE
CAMDEN
GLOUCESTER
SALEM
ATLANTIC
CUMBERLAND
CAPE MAY
PINE BARRENS
VEGETATION
OFFSHORE
OIL OR GAS
PIPELINE
EXCLUSION
AREA
STATE OF NEW JERSEY
DEPARTMENT OF
ENVIRONMENTAL PROTECTION
SCALE IN MILES

noise, and odor impacts potentially created with the ancillary facilities associated with OCS pipelines, require that New Jersey proceed cautiously and prudently in selecting pipeline corridors, specific alignments, and locations for ancillary facilities.

New Jersey along with the numerous public and private interests at the local, state, and national levels involved in pipeline siting, expects to participate in the proposed intergovernmental offshore oil and gas transportation planning process being established by the U.S. Department of Interior, Bureau of Land Management. The Federal Energy Regulatory Commission with responsibiity for siting gas pipelines, has also endorsed the concept of utility corridors.

(i) Oil Refineries and Petrochemical Facilities

1. Policy

New oil refineries and petrochemical facilities are conditionally acceptable outside of the Bay and Ocean Shore area provided that: (i) they are consistent with all applicable Location and Resource policies, (ii) there is a need for the facility as determined by NJDOE, and (iii) an EIS determines that the facility will have no unacceptable impacts. New oil refineries and petrochemical facilities outside the Bay and Ocean Shore area are encouraged to locate in established industrial areas accessible to their potential labor force. [Oil refineries and petrochemical facilities are prohibited in areas where they might conflict with the resort-tourism industry or areas of recreational or biological value.] New oil refineries and petrochemical facilities are prohibited in the Bay and Ocean Shore Segment. Expansion in capacity of existing oil refineries and petrochemical facilities at existing sites, which are all located outside of the Bay and Ocean Shore Segment, will be acceptable if such expansion does not violate applicable State air and water water quality standards.

2. Rationale

[Based on the best available information, oil recovered from the Baltimore Canyon and the Georges Bank is expected to be routed by pipeline and tanker to the existing New Jersey, Pennsylvania or Delaware refineries, to replace existing imported oil. Consequently, no new refineries are expected to be necessary in New Jersey. However, the Draft EIS prepared by the U.S. Department of Interior on OCS Lease Sale No. 49 (May 1978, Vol. 3 p. 614) indicates that additional refinery capacity might be needed on the East Coast. With five of the mid-Atlantic region's ten refineries (with one out-of-operation since 1974), New Jersey has already more than contributed its regional fair share of coastal lands to refineries. Also,] Refineries are large-scale industrial facilities that are neither coastal-dependent nor compatible with the character of the Bay and Ocean Shore Segment. However, new refineries or additions to existing refineries using advanced technology to control air and water pollution and other hazards could be compatible with existing development in the Delaware River Area or northern waterfront. A clean, high technology refinery could help to revitalize an urban waterfront, while providing jobs for urban residents.

(j) Gas Processing Plants

1. Policy

Gas processing plants, including partial processing plants, between the offshore pipeline landfall and commercial natural gas transmission lines shall be excluded from sites within the Bay and Ocean Shore Segment and the Central Pine Barrens Critical Area, to the maximum extent practicable, and shall be located the maximum feasible distance from the shoreline. [Such plants should be located close to existing petrochemical plants to which they may provide feedstock.] The siting of gas processing plants will be reviewed in terms of the total pipeline routing system.

2. Rationale

Gas processing plants will be needed if natural gas is found off New Jersey's shore and is transported to land by pipelines. These facilities, however, do not require locations on the shoreline. A gas processing plant may induce the location and/or expansion of chemical plants since gas and its byproducts often provide the feedstock for the petrochemical industry. Petrochemical plants, however, are prohibited in the Bay and Ocean Shore Segment. Gas processing plants which are economically and technically expedient, and petrochemical plants that do not exceed new source and performance standards regarding air and water quality that are linked to gas processing plants are conditionally acceptable in the Delaware River and Northern Waterfront Areas.

[Gas processing plants will be needed if gas is found off New Jersey's shore, but these facilities do not require locations on the shoreline. Gas is best transported by pipeline. To promote the most efficient use of land, gas plants should be located close to existing gas distribution lines. Alternatively, where gas is associated with oil in oil pipelines, gas separation plants should be located close to refineries to which the oil pipelines will be routed.]

(k) Storage of Crude Oil, Gases and Other Potentially Hazardous Liquid Substances

1. Policy

The storage of crude oil, gases and other potentially hazardous liquid substances as defined in N.J.A.C. 7:1E-1.1 under the Spill Compensation and Control Act (N.J.S.A. 58:10-23.11) [related to offshore oil and gas production] is prohibited on barrier islands and discouraged elsewhere in the Delaware and Raritan Bay and Atlantic Ocean Shore region [Segment]. In the Northern Waterfront and Delaware River areas, such facilities are conditionally acceptable if they meet air and water Resource Policies and are compatible with or adequately buffered from surrounding uses. They are not acceptable along most of the water's edge as they are not water dependent, but if supplied by ship they may be acceptable on the Filled Water's Edge. They are not acceptable where they would limit

or conflict with a potential recreational use. [Major new storage facilities for crude oil and gas, in the absence of processing facilities, will be permitted only outside the Bay and Ocean Shore Segment in the Port of New York and New Jersey and the Delaware River Port and where such storage will not contribute unacceptably to overall regional air or water quality degradation. Facilities for storing and distributing finished petroleum products on a wholesale or retail basis will be reviewed on a case-by-case basis.]

2. Rationale

Major storage facilities for potentially hazardous substances are not coastal-dependent and will not be permitted where storage might limit or conflict with recreational or open space uses of the coast.

(l). Tanker Terminals

1. Policy

New or expanded tanker facilities will be acceptable only in existing ports and harbors [outside of the Bay and Ocean Shore Segment] where the required channel depths exist to accommodate tankers. Multi-company use of existing and new tanker terminals will be encouraged in the Port of New York and New Jersey and in the area bounded by the Delaware River Port Authority, where adequate infrastructure exists to accommodate the secondary impacts which may be generated by such terminals, such as processing and storage facilities. New tanker terminals will be discouraged in other parts of the coast.[, including the Bay and Ocean Shore Segment.] Off-shore tanker terminals and deepwater ports are discouraged from the Bay and Ocean Shore Region, pending a thorough evaluation of the implications of such a facility, on a case-by-case basis.

2. Rationale

Onshore tanker facilities pose potential adverse environmental impacts and could encourage secondary development activity that is not necessarily coastal dependent. Also, even medium sized tankers require minimum channel depths of 30 feet, which excludes locations within the Bay and Ocean Shore Region. New or expanded tanker terminals are therefore directed toward New Jersey's established port areas. Deepwater ports appear attractive to industry due to increasingly larger tankers, limitations on dredging and the scarcity of waterfront land. However, a deepwater port may, depending on its location, cause severe adverse primary and secondary impacts on the built, natural, and social environment.

(m) Electric Generating Stations

1. Policy

New or expanded electric generating facilities (for base load, cycling, or peaking purposes) and related facilities are conditionally acceptable subject to the following conditions:

(i) The construction and operation of the proposed facility shall comply with the Coastal Resource and Development Policies, with special reference to air and water quality standards and policies on marine resources and wildlife,

(ii) NJDEP and NJDOE shall find that the proposed location and design of the electric[al] generating facility is the most [prudent and feasible] reasonable alternative for the production of electrical power that NJDOE has determined is needed[,]. The finding shall be based on a comparative evaluation by the applicant of alternative sites within the coastal zone and inland, and of alternative technologies for the transportation and conversion of energy as well as the productive use of plant residuals, including thermal discharges. [including consideration, evaluation, and comparison by the applicant of alternative sites within the coastal zone and inland,]

(iii) Fossil fuel (coal, oil or gas) generating stations are discouraged [shall not be located] in [particularly] scenic or natural areas that are important to recreation and open space purposes,

(iv) Nuclear generating stations shall be located in generally remote, rural, and low density areas, consistent with the criteria of 10 CFR 100 (U.S. Nuclear Regulatory Commission rules on siting nuclear generating stations and population density) and/or any other related federal regulations. In addition, NJDEP shall find that the nuclear generating facility is proposed for a location where the appropriate low population zone and population center distance are likely to be maintained around the nuclear generating facility, through techniques such as land use controls or buffer zones,

(v) The construction and operation of a nuclear generating station shall not be approved unless DEP finds that the proposed method for [storage and] disposal of the spent fuel to be produced by the facility: (i) will be safe, (ii) conforms to standards established by the U.S. Nuclear Regulatory Commission, and (iii) will effectively remove danger to life and the environment from the radioactive waste material. This finding is required under present state law (N.J.S.A. 13:19-11) and will be made consistent with judicial decisions (see Public Interest Research Group v. State of New Jersey, 152 N.J. Super. 191) and federal law.

(vi) The construction of electric generating facilities using renewable forms of energy such as solar radiation, wind, and water, including experimental and demonstration projects, is encouraged in the coastal zone provided that the facilities do not significantly adversely affect scenic or recreational values. The cogeneration of process steam for industrial use is also encouraged.

2. Rationale

The siting of an electric generating station is an extraordinary event with far-reaching impacts, when compared with the typical day-to-day decisions made under the State's coastal management program. Such siting decisions therefore require special scrutiny using: (a) the State's authority in its management of state-owned tidelands and submerged lands contemplated as sites for all or part of an electric generating station, (b) the State's regulatory authority, and (c) the State's influence in federal proceedings on aspects of the siting process.

New Jersey's coastal zone, especially along Barnegat Bay and Delaware Bay, has experienced the consequences of several major siting decisions in the past decade and already has a diverse mix of existing, proposed, and potential fossil fuel and nuclear generating facilities, both onshore and offshore.

For example, in 19[78]80 two nuclear generating units were [are] in operation in the coastal zone[;]: Salem Unit I on Artificial Island on the Delaware River in Salem County and at Oyster Creek near Barnegat Bay in Ocean County. Four additional nuclear generating units are under construction in the Bay and Ocean Shore Segment and have received the appropriate federal and state approvals, including Forked River on the Oyster Creek site in Ocean County, and Salem 2 and Hope Creek 1 and 2 on Artificial Island. The Hope Creek project, which DEP approved under CAFRA in 1975, had its genesis in a project contemplated at Newbold Island in the Delaware River, less than five miles south of Trenton. In 1973, the U.S. Atomic Energy Commission (the predecessor to the Nuclear Regulatory Commission), acting in accord with the view of New Jersey, recommended that Artificial Island would be a more suitable site than Newbold Island because of population density concerns. Until PSE&G decided to withdraw its proposal, New Jersey's coastal zone [is] was also the site of [the] two proposed floating nuclear [plant] reactors, the Atlantic Generating Station, Units 1 and 2, at a site in the Atlantic Ocean east of Little Egg Harbor. [however, the sponsor of the project, Public Service Electric and Gas Company, announced in 1978 a delay of at least three years in the timetable for this unprecedented project.] The [Bay and Ocean Shore Region] coastal zone also includes generating stations that have used various fossil fuels depending upon the price and availability of fuel as well as well as upon the applicable air quality rules.

New Jersey recognizes the interstate nature of the electric power system. Some electricity is produced in New Jersey at facilities owned partially by utilities in other states and exported to those states. New Jersey also imports electricity produced in adjacent states. In short, New Jersey is an integral part of the Pennsylvania-New Jersey-Maryland interconnecting grid system, importing and exporting electricity from the system at different times of the day, season and year in order to generate electricity efficiently and achieve the lowest achievable cost to electricity users throughout this multi-state region.

New Jersey also recognizes that most electric generating facilities may not be coastal-dependent but do require access to vast quantities of cooling waters, a siting factor that, from the perspective of utilities, increases the attractiveness of coastal locations. This siting policy strikes a balance among various competing national, regional, and state interests in coastal resources, and recognizes some of the differences in the siting requirements of fossil fuel and nuclear generating stations.

The policy directs fossil fuel stations toward built up areas in order to preserve and protect particularly scenic and natural areas important to recreation and open space purposes. New Jersey has articulated this policy with a conscious recognition of the state's progress in attaining and maintaining high air quality. Given the use of appropriate control technology, coal-fired generating stations, for example, appear feasible at various coastal locations. The siting of coal-fired power plants in urban areas also promotes efficient energy use due to the proximity of power plants to load centers.

The nuclear siting policy recognizes public concern for the disposal of spent fuel, as mandated in 1973 by the New Jersey Legislature in CAFRA.

(n) Liquefied Natural Gas (LNG) Facilities

1. Policy

(i) New marine terminals and associated facilities that receive, store, and vaporize liquefied natural gas, and serve base load demand [for transferring, tranforming and storing liquefied natural gas, prior to distribution by pipeline,] are discouraged in the coastal zone [Bay and Ocean Shore Region] unless the proposed facility is located or constructed so as to neither unduly endanger human life nor property nor otherwise impair the public health, safety and welfare, as required by N.J.S.A. 13:19-10f, and complies with the Coastal Resource and Development Policies. In determining the acceptability of proposed LNG facilities, DEP shall also consider siting criteria such as: (a) applicable federal siting criteria, (b) the risks inherent in tankering LNG along New Jersey's water ways and rivers, (c) the risks inherent in transferring LNG onshore, and (d) the compatibility of the facility with surrounding land uses, population densities, and concentrations of commercial or industrial activity.

(ii) New LNG facilities that liquefy, store and vaporize LNG to serve demand during peak periods shall be located in generally remote, rural, and low-density areas where land use controls and/or buffer zones are likely to be maintained.

2. Rationale

New Jersey's policy on LNG facility siting recognizes the responsibilities of various federal agencies, including the Coast Guard and Office of Pipeline Safety Operations in the U.S. Department of Transportation, the Economic Regulatory Administration in the U.S. Department of Energy (US DOE), and the independent Federal Energy Regulatory Commission within USDOE, for management of various aspects of the siting and operations of LNG facilities. New Jersey seeks and welcomes rigorous and consistent federal LNG siting standards. In fact, the State of New Jersey petitioned the former Federal Power Commission in May 1976 for the issuance of such siting criteria. The petition (RM76-13) is still under consideration by the Federal Energy Regulatory Commission.

LNG facilities have been proposed in the 1970's in New Jersey's coastal region along the Delaware River at sites in Logan Township (Transco) and West Deptford Township (Tenneco) in Gloucester County, as well as on Staten Island, New York (Distrigas and Eastcogas), with a proposed natural gas pipeline connection to New Jersey under the Arthur Kill. [As of mid-1978] To date, none of these proposals have received the required federal approvals. The former New Jersey policy on LNG policy is based in part on the results of the Federal Power Commission staff alternative LNG terminal site analysis and recommendation that the West Deptford site not be approved (see Federal Power Commission, Bureau of Natural Gas, Draft Environmental Impact Statement for the Construction and Operation of a Liquefied Natural Gas Import Terminal in West Deptford, New Jersey, Docket No. CP 76-16, Tenneco LNG, Inc., December 1976). The tankering, transfer, and storage of LNG pose significant risks to public health, safety and welfare and may cause serious adverse environmental impacts which may not be restricted to one state, given the likely potential locations of LNG terminals along interstate waterways. New Jersey therefore recommends that the siting of LNG facilities be treated as a regional issue on an interstate basis, ideally by the adoption of consistent federal siting criteria. At the same time, NJDEP and NJDOE will continue to explore the potential and likely impacts of onshore and offshore sites for LNG facilities.

7:7E-7.5 Transportation Use Policies

(a) Roads

1. Policy

New road construction shall be limited to situations where:

(i) a clear need exists, taking into account the alternatives of upgrading existing roads and of using public transportation to meet the need,

(ii) provision is made to include construction of bicycle and foot paths, except where these would not be feasible,

(iii) provision is made for coordinated construction of public transportation rights-of-way and facilities, such as bus lanes, rail lines, and related transit stop or station facilities and parking, except where such construction would not be feasible,

(iv) surrounding land does not lose its recreational and aesthetic opportunity, and

(v) induced development in conflict with coastal policies would not be expected to result.

[Proposals to build new roads or expand existing roads must demonstrate a need, and indicate why alternate solutions, including, as appropriate, upgrading existing roads and/or the use of public transportation, are not feasible.]

2. Rationale

This policy is based on two assumptions: (i) that the coastal zone, is for the most part adequately served already by the existing road network, and (ii) that further capital investment in transportation facilities for the coastal region should emphasize those kinds of facilities which would minimize environmental damage and energy use. Consequently, new road construction should be undertaken only where the burden of proving need is met after less damaging and more fuel efficient alternatives have been considered. In addition, further investment in road construction should include coordinated investment in low-damage, highly fuel-efficient modes whereover possible.

[Only minor road improvements are likely to take place in the more densely populated coastal regions. Which have adequate road systems. Selective road improvements should always be evaluated in the context of public transportation alternatives. New or expanded roads should facilitate public transportation and pedestrian and bicycle use.]

(b) Public Transportation

1. Policy

New and improved needed public transportation facilities, including bus, rail, air, and boat travel and related parking facilities, are encouraged.

2. Rationale

A basic premise of the coastal management program is concentrating the pattern of development, in part to facilitate public transportation. While new air transportation facilities appear unlikely in the Delaware Bay, Raritan Bay and Atlantic Ocean shore areas, bus facilities and parking systems appear appropriate, particularly as a solution to the transportation problems of barrier island resorts.

In the more developed parts of the coastal zone, expansion, improvement and new construction of all forms of public transportation are the most appropriate ways to meet the new transportation needs generated by goods and people.

(c) Bicycle and Foot Paths and Fishing Platforms

1. Policy

The construction of bicycle and foot paths[,] in residential projects, and in or around commercial and industrial development and fishing catwalks and platforms on new or improved bridges, is required to the maximum extent practicable.

2. Rationale

Paths for pedestrians and bicycles provide active outdoor recreation and may lead to reduced dependency on cars, particularly with increasingly compact settlement patterns. Fishing platforms also provide for outdoor recreation and must be seriously considered in the design process for new or improved bridges.

7:7E-7.6 Public Facility Use Policies

(a) Definition

Public Facilities includes a broad range of public works for the production, transfer, transmission, and recovery of water, sewerage and other utilities. The presence of an adequate infrastructure makes possible future development and responds to the needs created by present development.

(b) General Public Facilities

1. Policy

New or expanded public facility development is conditionally acceptable provided that:

(i) The public facility would serve a demonstrated need that cannot be met by an existing public facility at the site or region,

(ii) Alternate technologies, including conservation, are an impracical or infeasible approach to meeting all or part of the need for the public facility,

(iii) The public facility would not generate significant secondary impacts inconsistent with the Coastal Resource and Development Policies, and

Upgrading existing facilities to meet development and redevelopment needs in developed waterfront areas is encouraged.

2. Rationale

Public facilities provide all important public services, but can also adversely affect the coastal environment and economy if improperly located, designed, or constructed. In particular, the secondary impacts of new public facility construction and the need for the facility require scrutiny. In developed areas, some inadequate public facilities need to be upgraded and improved.

(c) Solid Waste

1. Policy

Solid waste conservation techniques such as recycling, resource and energy recovery and volume reduction, must be explored and proved infeasible before a new or expanded sanitary landfill [solid waste disposal facility,] preferably at a regional scale, is deemed acceptable.

Sanitary landfills that locate in the upland must demonstrate that the leachate will not adversely impact the ground or surface waters, by using a lining and/or a leachate filtration plant. Acceptable plans for restoring the site must be submitted with the original proposal.

2. Rationale

Solid waste is a resource whose potential for recovery must be evaluated before locating new sanitary landfills. Further, regional solutions to solid waste management are mandated under State law. In addition, the development of new landfills is subject to the regulations of DEP's Solid Waste Administration.

(d) Wastewater Treatment

1. Policy

(i) Coastal development[s] that does not employ the most energy-efficient wastewater treatment system practicable [are] is discouraged. Energy efficient systems are encouraged.

(ii) On-site sewage disposal systems which recycle nutrients and water for productive use are encouraged where the design, installation, operation, and maintenance will be consistent with applicable ground and surface water quality statutes and regulations.

(iii) Wastewater treatment systems that recharge the groundwater with highly treated effluents are encouraged, provided that consistently high quality effluents and acceptable recharge techniques are demonstrated.

(iv) Wastewater treatment facilities shall, to the maximum extent feasible, provide for multiple use of the site, including open space and recreation use.

2. Rationale

Wastewater treatment systems range in scale from on-site sewage disposal systems to regional treatment systems with centralized plans, major interceptors, and ocean outfalls. In the past decade considerable wastewater treatment system construction has taken place or been authorized[,] in developing parts of the coastal zone with corresponding improvements in water quality. New wastewater treatment systems must be carefully evaluated in terms of water quality impacts and secondary impacts.

The federal Clean Water Act encourages federally funded wastewater treatment facilities to provide for multiple use of the site. The Coastal Policies support and extend this federal policy by requiring that all new wastewater treatment facilities in the coastal zone consider the feasibility of multiple use.

7:7E-7.7 Industry[-Commerce] Use Policies

(a) Definition

Industry[-commerce] uses include a wide variety of industrial processing, manufacturing, storage[,] and distribution activities[, service sector, retail and similar uses]. Industry is defined by Standard Industrial Classification (SIC) categories 2011 to 3999, except for 2991 (petroleum refining), which is covered by Use Policy 7:7E-7.4(i).

1. Policy

(i) Industry is encouraged in Special Urban Areas and conditionally acceptable elsewhere provided it is compatible with all applicable Location and Resource Policies. Particular attention should be given to Location Policies which reserve the water's edge for water dependent and water related uses (Sections 7:7E-3.17 and 7:7E-3.21); to Resource Policy 7:7E-8.15, which requires that the use be compatible with existing uses in the area or adequate buffering be provided; and to Resource Policy 7:7E-8.13, which places public access requirements upon the use.

(ii) [In Land Areas] New [or expanded coastal dependent] industrial [or commercial] development is encouraged to locate at or adjacent to existing sites, to the maximum extent practicable.

(iii) Industry that is easily accessible to its labor force by foot or public transportation is encouraged.

(iv) Marine resource dependent industry, such as commercial fishing, is encouraged and shall have priority over other waterfront uses, except for recreation.

(v) The cogeneration of electricity with process steam is encouraged.

[If existing sites are demonstrated to be impractical or the development is not coastal-dependent, then new sites may be acceptable provided that:

- The development can demonstrate a high ratio of jobs created to the per acres of the site used for the development, and

- the development poses no conflict with resort-recreation uses of the coast and is compatible with adjacent uses.]

2. Rationale

A strong industrial base is vital if an area is to be healthy and vibrant. Many of the developed parts of the coast are suffering from a declining industrial base. Land which had been productive is now vacant and in need of redevelopment. The industrial policies encourage industry to locate in the vacant areas of the the cities of the Northern and Delaware waterfronts. However, the policies recognize that a healthy waterfront will host a mix of uses. By asking waterfront industries to create public access to the water and to make sites they would vacate available to the public, the policies also recognize the waterfront as a valuable public resource.

The industrial policies address the conflicting demands and effects of industrial waterfront development. The policies recognize several factors which must be considered in the decision making process. First, water dependent industry must locate somewhere along the waterfront. Other industry which needs water for operating or processing, some or all of the time, might also require a location near the waterfront, but landward of the water's edge. Second, as a result of environmental degradation, urban areas are suffering from unmet recreation and open space needs. Third, urban areas typically suffer from high unemployment and deteriorating tax bases. Fourth, city dwellers must be supported in their efforts to rejuvenate and revitalize their cities, making them pleasant and economically viable places to live.

7:7E-7.8 Mining Use Policies

1. Policy

New or expanded mining operations on land, and directly related development, for the extraction and/or processing of construction sand, industrial sand, gravel, ilmenite, glauconite, and other minerals are conditionally acceptable, provided that the following conditions are met (mining is otherwise exempted from the General Land Areas policy, but shall comply with the Special Areas, and General Water Areas[, and Water's Edge Areas] policies):

(i) the location of mining operations, such as pits, plants, pipelines, and access roads, causes minimal practicable disturbance to significant wildlife habitats, such as lowland swamp forests and stands of mature vegetation,

(ii) the location of new or expanded mining operations is generally contiguous with or adjacent to sites of existing mining operations, or probable locations of mineral resources on nearby sites, in order to concentrate and not scatter the location of mineral extraction areas within a region, recognizing that mineral resources occur only in certain limited areas,

(iii) adequate buffer areas are provided, using existing vegetation and/or new vegetation and landscaping, to provide maximum feasible screening of new on-land extractive activities and related processing from roads, water bodies, marshes, and recreation areas,

(iv) the mine development and reclamation plan, including the timetable, phasing, and activities of the new or expanded mining operations, has been designed with explicit and adequate consideration of the ultimate reclamation, restoration, and reuse of the site and use of its surrounding region, once the mineral resource is depleted,

(v) the mineral extraction areas shall be reclaimed, contoured and replanted, to ensure slope stability, control erosion, afford adequate drainage, provide as natural an appearance as possible, and increase the recreation potential of the restored site,

(vi) the mining operations control and minimize to the maximum extent practicable adverse impacts from noise and dust, surface water pollution, and disposal of spoils and waste materials and conform to all applicable federal, state, and local regulations and standards,

(vii) the mineral extraction will not have a substantial or long-lasting adverse impact on coastal resources including local economies, after the initial[,] adverse impact of removal of vegetation, habitat, and soils, and not including the long term irretrievable impact of use of the non-renewable mineral resource.

2. Rationale

New Jersey's coastal zone includes important deposits of minerals. Mining these non-renewable resources is vital to certain sectors of the economy of selected regions of the coastal zone, the entire state and in some cases the nation, depending upon the specific type of mineral. For example, the high quality silica sands of Cumberland County supply an essential raw material for New Jersey's glass industry. Other industrial sands mined and processed in Cumberland County serve as basic ingredients in the iron and steel foundry industry. Ilmenite deposits in Ocean County produce titanium dioxide which is used in paint pigment. Construction grade sands are used in virtually all construction activity.

The extraction and processing of minerals from mines on land also produces short and long term adverse environmental impacts. For example, open-pit mining removes all vegetation and soil, destroys wildlife habitat, changes the visual quality of the landscape, and irretrievably consumes the depletable mineral resource. Many of thse impacts can be ameliorated by incorporating proper, imaginative and aggressive reclamation and restoration planning into the mine development process. However, the location of mineral deposits is an unquestionably limiting factor on the location of mining operations. Reasonable balances must therefore be struck between competing and conflicting uses of lands with mineral deposits.

Depending upon the diversity and strength of a local economy, depletion of mineral deposits through extraction may lead to serious adverse long term economic consequences, particularly if the planned reclamation does not replace the direct economic contribution of the mining industry. The non-renewable nature of mineral resources must also be considered carefully in light of the uses of some of the mined minerals. For example, certain high quality silica sands, coupled with another non-renewable resource, natural gas, are used to make non-returnable glass bottles.

7:7E-7.9 Port Use Policies

(a) Definition

Port uses are concentrations of publicly utilized shoreside marine terminals and transfer facilities for the movement of waterborne cargo (including fluids), and including facilities for loading, unloading and temporary storage.

1. Policies

(i) Port related development and marine commerce is encouraged [acceptable only] in and adjacent to established port areas. Water dependent development shall not be preempted by non-water dependent development in these areas.

(ii) New port use outside of existing Ports (see definition, Section 7:7E-3.11) are acceptable only when there is a clear demonstration of need, and when sufficient land and water area is not available in or adjacent to an existing port.

[New major port facilities will only be permitted when there is a clear demonstration of the inadequacy of an existing port. In such cases, expansion may only occur adjacent to an existing built-up port.]

(iii) New or expanded ports must be compatible with surrounding land uses and provide for maximum open space and physical and visual access to the waterfront, provided that this access does not interfere with port operations or endanger public health and safety. New or expanded ports must also not interfere with national, state, county or municipal parks, recreation areas, or wildlife refuges.

(iv) New, expanded or redeveloped port facilities must have direct access to navigation channels of sufficient depth for anticipated vessel access with minimal dredge and fill requirements, adequate access to road, rail transportation, and adjacent land with sufficient load bearing capacity for structures.

(v) [Also,] Limited water-dependent, port-related activity, such as commercial fishing, support facilities and emergency oil spill clean up storage, is acceptable at the small commercial [ports of] harbors in the [Bay and Ocean Shore Region.] Atlantic Ocean and Delaware and Raritan Bay regions.

2. Rationale

New Jersey's port areas are a regional, national and international resource. The existing ports, located largely in the Delaware and Northern Waterfront Areas [north and west of the Bay and Ocean Shore Segment], contain unused and underused areas which can be refurbished to meet increases in demand. The state must nevertheless allow for possible unanticipated future needs for port areas.

As in the past, port activities will continue to be a vital part of the economy of New Jersey. However, changes in shipping technology have caused once thriving ports such as Jersey City and Hoboken to become the scene of dilapidated docks and piers and acres of vacant land.

The port policies recognize the changing ship technology and will encourage new or expanded needed modern facilities in areas where port facilities would be compatible with existing uses. The policies recognize modern facilities require large expanses of land to accommodate specialized equipment and host a full array of services. However, the policies seek to avoid construction of a modern facility which meets the needs of today but could become obsolete tomorrow. For this reason, facilities are encouraged not to overspecialize. At the same time, the policies recognize the need to have large bulk cargo facilities to avoid construction of numerous small port facilities.

Recognizing the value of the water as a public resource and the need for environmental controls, the policies require facilities to be designed with provision for minimum environmental degradation. The policies endorse the concept of multimodalism and encourage port facilities to make use of existing infrastructure. In addition, the policies encourage an integrated port system which uses container ships where ship channels are deep enough to accommodate these vessels, but provides for use of smaller barges to move goods to inland waterways or along shallower channels.

Recognizing the value of the waterfront to the public, the policies require port facilities to provide for the maximum public visual and physical access to the waterfront consistent with safety and security concerns. The policies accommodate port usage of the waterfront, where needed and appropriate, while encouraging redevelopment and other uses which would be in the best interest of the public.

7:7E-7.10 Commercial Facility Use Policies

(a) Hotels and Motels

NOTE: This policy replaces Section 7:7E-8.16, "Hotel-Motel Development".

1. Definition

Hotels and motels are commercial establishments, known to the public as hotels, motor-hotels, motels, or tourist courts, primarily engaged in providing lodging, or lodging and meals, for the general public. Also included are hotels and motels operated by membership organizations, whether open to the general public or not.

2. Policy

New, expanded or improved hotel-motel developments are conditionally acceptable [in existing resort-oriented areas] provided that the development: [(a)] (i) complies with [the high-rise housing policies, if appropriate, (b) promotes public recreational uses of the coast, and] all Location and Resource Policies and with the policy for high-rise housing, and [(c)] (ii) is compatible in scale, site design, and architecture with surrounding development.

Hotel and motel development is encouraged if it promotes revitalization of an urban area and meets all policy requirements.

Hotels and Motels are not water dependent, but they may be classified as water related if they propose to take full advantage of a water's edge location.

3. Rationale

Hotels and motels enable New Jersey residents and tourists to visit the coast. They support the tourist economy of the area. The buildings must be located, however, so they do not harm or threaten the resources which attract people to the coast.

(b) Casino Hotels

1. Definition

Casino hotels are hotels with casinos as provided for in the Casino Control Act of 1977, as amended.

2. Policy

Hotel-casino development in Atlantic City shall be located in the city's traditional resort area (along the Boardwalk), and in the State Marina area to the maximum extent practicable. Hotel-casino development is discouraged in existing residential areas and in areas where access by public transportation between the proposed hotel-casino and the Boardwalk is limited. Hotel-casino development is discouraged along the access highways to Atlantic City. Hotel-casino development shall comply with the high-rise housing policy.

Hotel-casino development and new residential development are encouraged in Atlantic City to ensure that the objectives of the 1976 constitutional referendum on casino gambling, including the stimulation of new construction and the revitalization of Atlantic City and its region, are achieved. The policies of the program shall be interpreted consistent with these objectives.

3. Rationale

This hotel-casino location policy serves several purposes: (1) protecting Atlantic City's existing diverse neighborhoods, (2) facilitating public transportation solutions (such as bus, jitney, park-and-ride, or rail) to the problem of increased access to and in Atlantic City, (3) promoting pedestrian movements, (4) reducing pressure on vehicular systems, and (5) preserving the historic and low-rise residential character of the Gardner's Basin and Inlet area.

(c) Retail Trade and Services

1. Definition

Retail trade and service is a broad category including establishments selling merchandise for personal and household consumption, such as food stores and clothing stores; service establishments such as banks and insurance agencies; establishments such as restaurants and night clubs; and establishments for participant sports such as bowling alleys and indoor tennis courts.

2. Policies

(i) In Special Urban Areas, new or expanded retail trade and service establishments are encouraged in Filled Water's Edge Areas as part of mixed use developments, provided that the development:

(a) is compatible in scale, site design and architecture with surrounding development

(b) promotes public use of the coast, and

(c) promotes revitalization of the urban area

(ii) Elsewhere in the coastal zone, new or expanded retail trade and service establishments are conditionally acceptable in Filled Water's Edge Areas, provided that the development:

(a) is water related, and

(b) adjacent to, and compatible with, existing Water's Edge Development

(iii) New or expanded retail trade facilities are prohibited in most Special Water's Edge Areas, other than the Filled Water's Edge.

3. Rationale

Commercial development in the urban waterfront area is consistent with the state's economic development policy to target loans and bond assistance for commercial and retail establishment to urban areas. Commercial development, however, must be situated so it does not harm or threaten the resources which attract people to the waterfront.

(d) Convention Centers and Arenas

1. Definition

Convention centers are facilities designed primarily for holding conventions. Arenas are commercial facilities designed primarily for spectator sporting events. Arenas do not include indoor tennis courts, bowling alleys and other facilities primarily designed for participant sports, nor arenas affiliated with schools and colleges.

2. Policy

New convention centers and arenas and cultural facilities are encouraged in Special Urban Areas, and conditionally acceptable in High Growth regions and the Barrier Island Region, provided that the development: (a) is compatible in scale, site design, and architecture with surrounding development, and (b) is accessible by public transportation. New convention centers and arenas are discouraged in Moderate and Low Growth regions.

3. Rationale

Convention centers and arenas would provide social and cultural benefit to residents and visitors to the waterfront areas. They would also support the economy of the area. However, they can also generate traffic and induce additional development. They must, therefore, be located so that such impacts can be easily absorbed. The buildings must be located, however, so they do not harm or threaten the resources which attract people to the coast.

(e) Parking Facilities

1. Definition

Parking facility policies apply to all parking facilities, in part or wholly within the area subject to the Waterfront Development Act, and to parking facilities for 300 or more cars elsewhere in the coastal zone.

2. Policy

[Major] Parking lots, [structures,] garages and large paved areas [serving industrial-commercial complexes] are conditionally acceptable, provided that they will not interfere with existing or planned mass transit services, the extent of paved surfaces is minimized,

the development [does not cause unacceptable air or water quality degradation] satisfies the Resource Policies for air, water, and runoff, and the development is compatible with its surroundings and satisfies the Location Policies.

3. Rationale

Parking facilities provide a necessary transportation facility, but one that may cause air and water impacts.

7:7E-7.11 Coastal Engineering

(a) Definition

Coastal Engineering includes a variety of structural and non-structural measures to manage water areas and the shoreline for natural effects of erosion, storms, and sediment and sand movement. Beach nourishment, sand fences, pedestrian control on dunes, stabilization of dunes, dune restoration projects, [and] dredged spoil disposal and the construction of retaining structures such as bulkheads, revetments and seawalls are all examples of coastal engineering.

The Location Policies on General Water Areas and Special Areas are directly relevant to most coastal engineering uses. These Coastal Engineering Use policies do not apply to uses associated with ports, commerce, and industry.

(b) Shore Protection Priorities

1. Policy

Non-structural solutions to shoreline erosion problems are preferred over structural solutions. The infeasibility and impracticality of a non-structural solution must be demonstrated before structural solutions may be deemed acceptable.

2. Rationale

Past reliance on costly structural shore protection measures, such as groins and jetties to retard the longshore transport of sand by the littoral drift, and seawalls, bulkheads and revetments to prevent waves from reaching erodible materials has proven to be an inadequate and incomplete solution. Bulkheads are deteriorating. Groins are starving the natural longshore transport of sand. Man has modified and destroyed dunes that provide natural protection against storm surges. Inlets frequently develop shoals which prevent safe navigation. The natural processes along the shoreline must be carefully evaluated over reaches or regions of the coast to determine the likely long term effects of shore protection measures. Non-structural measures realistically recognize the inevitability of the ocean's advancement and the migration of barrier islands. Yet this concern must be balanced against the short term benefits of structures to protect the present intense recreational use of the narrow strip of oceanfront land in New Jersey.

(c) Dune Management

1. Policy

Dune restoration and maintenance projects as a non-structural shore protection measure, including sand fencing, revegetation, additions of non-toxic appropriately sized material, control of pedestrian and vehicular traffic, are encouraged.

2. Rationale

A natural dune field provides a strong measure of natural protection for adjacent land uses.

(d) Beach Nourishment

1. Policy

Beach nourishment projects, as a non-structural shore protection measure, are encouraged, provided that: (i) the particle size of the fill material is compatible with the existing beach material to ensure that the new material will not be removed to a greater extent than the existing material would be by normal tidal fluctuations, (ii) the elevation, width, slope, and form of proposed beach nourishment project are compatible with the characteristics of the existing beach, and (iii) the sediment deposition will not cause unacceptable shoaling in downdrift inlets and navigation channels.

2. Rationale

Beach nourishment depends upon an adequate quantity and suitable quality of beach nourishment material, otherwise the material may quickly return to the ocean.

(e) Structural Shore Protection

Note: This policy replaces the Water Area Use policy for Retaining Structures (7:7E-4.8) and the Coastal Engineering Use Policy for Retaining Structures (7:7E-8.46).

1. Policy

(i) The construction of new shore protection structures including jetties, groins, seawalls, bulkheads, and other retaining structures to retard longshore transport and/or to prevent tidal waters [waves] from reaching erodible material [including jetties, groins, seawalls, and the modification, repair or removal of existing structures,] is acceptable only [under the following conditions:] if it meets all of the following six policies:

(1) The structure is essential to protect water dependent uses or heavily used public recreation beach areas in danger from tidal waters or erosion, [The structure is essential to protect coastal-dependent uses], or the structure is essential to protect existing structures and infrastructure in [built-up, urban] developed shorefront areas in danger from erosion[,].

(2) The structure is designed to eliminate or mitigate adverse impacts on local shoreline sand supply[,].

(3) The structure will not create net adverse shoreline sand movement conditions downdrift, including erosion or shoaling[,].

[The structure will protect and enhance public access to the shorefront, including fishing and other recreation opportunities,]

(4) The structure will cause minimum feasible adverse impact to living marine resources[, and].

(5) The structure is consistent with the State Shore Protection Master Plan. [essential element of a regional shoreline management plan.]

(6) If the proposed project requires filling of a Water Area it must also be consistent with the General Water Area Policy for Filling (Section 7:7E-4.10(i)).

(ii) A [small] new, short retaining structure that connects two existing lawful retaining structures [may be considered for acceptability if it would] is normally acceptable provided that extensive filling is not involved.

(iii) Maintenance or reconstruction of an existing retaining structure is conditionally acceptable, provided it does not result in extension of the structure by more than 18 inches in any direction. Maintenance or reconstruction of an existing retaining structure which results in extension by more than 18 inches shall be considered new construction.

(iv) Rip-rap is a preferred construction material for retaining structures as it provides a habitat for aquatic life and helps absorb wave energy.

2. Rationale

Structural solutions to shore protection are appropriate and essential at certain locations, given the existing pattern of urbanization of New Jersey's shoreline. However, the creation, repair, or removal of publicly-funded shore protection structures must serve clear and broad public purposes and must be undertaken only with a clear understanding of the regional consequences of natural shoreline sand systems.

Retaining structures are necessary in some cases to stabilize existing development or to allow limited appropriate infill or new development. This is particularly important in an area between two existing bulkheads where a connecting structure could halt the formation of a trap situation, which could trap debris, produce odors, and eliminate the opportunity for use of the land.

7:7E-7.12 Dredge[d] Spoil Disposal

(a) Definition

Dredge[d] spoil disposal is the discharge [on Land, Water's Edge, or Water Areas] of sediments, known as spoils, removed during dredging operations. The following policies govern Land and Water's Edge disposal only; the policies regulating dredge spoil disposal in Water Areas are found in Section 7:7E-4.10.

(b) Policy

[The acceptability of a site for dredged spoil disposal depends first upon the extent of contamination of the spoil material. If the dredge spoils are contaminated typically with heavy metals and other toxic materials, and not decontaminated, then the] Dredge spoil disposal is conditionally acceptable [at only approved and established land based disposal areas, new land sites or ocean sites,] under the following conditions: [(a) ocean sites may be used only if a land disposal site is not feasible, (b) sediments disposed in the ocean will not be carried by currents inland of the 18 foot contour, (c) the materials disposed in the ocean will cause minimal feasible interference with living marine resources, and (d)] (i) sediments [disposed on land, such as borrow pits] are covered with appropriate clean material that is similar in texture to surrounding soils[.], and (ii) the sediments will not pollute the groundwater table by seepage, degrade surface water quality, present an objectionable odor in the vicinity of the disposal area, or degrade the landscape.

Dredge spoil disposal is prohibited on natural undisturbed wetlands, and on formerly spoiled wetlands that have revegetated with wetland species.

[If the dredge spoils are not contaminated, or are decontaminated, then disposal in the deep ocean (depth greater than 18 foot) is conditionally acceptable provided that a land disposal site is not feasible.]

The use of uncontaminated dredge material of appropriate quality and particle size for beach nourishment is encouraged. Creation of useful materials such as bricks and light weight aggregate from the dredge material is encouraged.

The use of uncontaminated dredge material for purposes such as restoring landscape, enhancing farming areas, creating recreation oriented landfill sites including beach protection and general land reclamation, building islands, creating marshes, capping contaminated spoil areas, and making new wildlife habitats [will be evaluated on a case-by-case basis.] is encouraged.

Effects associated with the transfer of the dredged materials from the dredging site to the disposal site shall be minimized to the maximum extent feasible.

(c) Rationale

Dredge spoil disposal is an essential coastal land and water use that is linked inextricably to the coastal economy and has serious impacts on the coastal environment. Evolving state and federal policies on protection

of the marine and estuarine coastal environment have sharply limited the creation of new water area dredge spoil disposal areas in the past decade. Yet selective dredging must continue if inlets and navigation channels are to be maintained. The coastal policy recognizes the importance of this use of coastal resources[.] and the need for land disposal sites.

Use of inefficient equipment and methods in the movement of dredge spoils, and resulting spillage of fuels, emission of toxic or noxious gases, loss of dredged materials, and noise and vibrations produced by faulty or worn out equipment and machinery may cause water pollution, air pollution and discomfort both for the crews and for the human population along the disposal route and in nearby areas.

7:7E-7.13 National Defense Facilities Use Policy

(a) Definition

A national defense facility is any building, group of buildings, marine terminal, or land area owned or operated by a defense agency (Army, Navy, Air Force, Marines, Coast Guard) and used for training, research, material support, or any other defense-related use.

(b) Policy

National Defense facilities are conditionally acceptable, and will be approved if one of two findings can be made:

1. The proposed facility is consistent with all relevant Coastal Resource and Development Policies; or

2. The proposed facility is coastal dependent, will be constructed and operated with maximum possible consistency with Coastal Resource and Development Policies, and will result in minimal feasible degradation of the natural environment.

The construction of new facilities or expansion of existing facilities on land not owned by a defense agency is discouraged, unless it can be shown that the facility cannot feasibly be accommodated on an existing base.

(c) Rationale

Providing for the national defense is the responsibility of the federal government, and the New Jersey Coastal Management Program will not question the findings of a federal defense agency with respect to national security needs.

The requirements that a coastal dependent facility comply with the Coastal Resource and Development Policies only to the maximum extent feasible is in keeping with Section 306(c)(8) of the Federal CZMA, which requires consideration of the national interest in the siting of facilities necessary to meet requirements which are other than local in nature.

SUBCHAPTER 8 - RESOURCE POLICIES

7:7E-8.1 Purpose

The third step in the screening process of the Coastal Resource and Development Policies involves a review of a proposed development in terms of its effects on various resources of the built and natural environment of the coastal zone, both at the proposed site as well as in its surrounding region. These policies serve as standards to which proposed development must adhere.

7:7E-8.2 Marine Fish and Fisheries

(a) Policy

Coastal actions are conditionally acceptable to the extent that minimal feasible interference is caused to the natural functioning of marine fish and fisheries, including the reproductive and migratory patterns of estuarine and marine estuarine dependent species of finfish and shellfish.

(b) Rationale

Finfish (freshwater, estuarine, and marine) and shellfish resources provide significant recreation experiences for residents of New Jersey and interstate visitors. These resources also help the State's economy, by leading to expenditures of approximately $375.8 million per year, with fishing yielding approximately $217.2 million and shellfishing yielding $158.6 million. DEP also estimates that 1,868,000 people participated in marine/estuarine recreational fishing in 1976 in New Jersey. Commercial landings for all finfish and shellfish in New Jersey during 197[6]8 were [226,988,000] 163,603,000 lbs., valued at [$34.55] $44.35 million dockside and an estimated [$86.3] $110.9 million retail value, according to Department of Commerce statistics. The 1956 landings of 540 million pounds of all finfish and shellfish indicate the true potential of this industry.

Interference with fish resources includes blockage of anadromous finfish spawning runs, reduction in the critical capacity of estuaries to function as finfish nursery areas, reduction of summer dissolved oxygen level below 4 ppm stimulating [(leading to] anoxic phytoplankton blooms[)], introduction of heavy metals or other toxic agents into coastal water, rise in ambient water temperature regime especially during summer and fall periods, unacceptable increases in turbidity levels, siltation, or resuspension of toxic agents, and introduction of untreated effluents from domestic and industrial sources.

7:7E-8.3 Shellfisheries

(a) Definition

Shellfisheries are estuarine bay and river bottoms which are potentially productive for hard clams, soft clams, eastern oyster, bay scallops or blue mussels. Potentially productive areas are those which do not have a history of natural recruitment for any of the above species, but could be used as a shellfish culture planting area.

NOTE: Presently productive shellfish beds, and those with a history of natural recruitment, are addressed by Special Area policy 7:7E-3.2.

(b) Policy

(i) Any development which would result in the destruction of a potentially productive shellfish area is discouraged. (The term destruction is defined in 7:7E-3.2.)

(ii) Any development which would result in the contamination or condemnation of a potentially productive shellfish area is prohibited. Water dependent development which requires new dredging in these areas is discouraged. Maintenance dredging in these areas is conditionally acceptable.

(iii) Any project which would discharge untreated or improperly treated domestic or industrial waste waters or toxic or hazardous substances directly into waters so as to adversely affect a potentially productive shellfishing area is prohibited.

(c) Rationale

Estuarine shellfish are harvested by both commercial and recreational fishermen, with the sport group concentrating on hard clams. Oysters, bay scallops and soft clams are predominantly commercial species. Commercial dockside landing values in New Jersey for 1978 were $3.43 million for estuarine mollusks, with an estimated retail industry value of $8.7 million. The commercial harvest is estimated to support employment of 1,500 persons in fishing, distribution, processing, and retail. Sport clammers numbered 17,000 in 1976. In addition to direct human consumption, shellfish play an important role in the overall ecology of the estuary. Young clams are important forage foods for a variety of finfish such as winter flounder, and crabs and migratory waterfowl, especially the diving species.

Hard clams are widely distributed in New Jersey's coastal estuaries, inhabiting most waters where the salinity is about 15 parts per thousand or greater. Suitable bottom substrate and dissolved oxygen are also important determining factors. Hard clams usually recolonize areas that are dredged, provided that anoxic conditions are not present.

Water presently condemned for shellfishing may not be directly or immediately important to human economics. These areas, however, serve for restocking fishable areas through production of motile larvae. Shellfish in condemned waters also are not lost to estuarine ecological food-webs, but serve as a food source to other species of wildlife.

7:7E-8.4 Water Quality

(a) Definition

As required by Section 307(f) of the Federal Coastal Zone Management Act, federal, state and local water quality requirements established under the Clean Water Act shall be the water resource standards of the coastal

management program. In the Delaware River Area, water quality standards established by the Delaware River Basin Commission shall also be standards of the coastal management program. State [Coastal development shall conform with all applicable] surface and groundwater quality statutes, regulations and standards, [as] are established and administered by DEP's Division of Water Resources (see N.J.A.C. 7:9-4.0 et seq.).

(b) Policy

Coastal development which would prevent attainment of the defined standards for surface or groundwater is prohibited. Coastal development in conflict with any State certified Areawide Water Quality Management (208) Plan is also prohibited.

(c) Rationale

Most of the natural, commercial, recreational, industrial, and aesthetic resources of the coastal zone affect or are affected by surface and ground water quality. Specific coastal zone water quality problems include pollution by nutrients, pathogenic organisms, toxic and hazardous wastes, thermal discharges, suspended sediments, and saline intrusion into freshwater resources. These pollutants can lower water quality sufficiently to prevent desired water uses. This policy incorporates by reference New Jersey's water quality related statutes and regulations adopted as required by the federal Clean Water Act of 1977.

7:7E-8.5 Surface Water Use

(a) Definition

Surface water is the water in lakes, ponds, streams, rivers, bogs, wetlands, bays, and ocean that is visible on land.

(b) Policy

Coastal development shall demonstrate that the anticipated surface water demand of the facility will not exceed the capacity, including phased planned increases, of the local potable water supply system or reserve capacity and that construction of the facility will not cause unacceptable surface water disturbances, such as drawdown, bottom scour, or alteration of flow patterns. Coastal development which uses design processes and fixtures which minimize consumptive water use will be encouraged. Coastal development shall conform with all applicable DEP and, in the Delaware River Area, Delaware River Basin Commission, requirements for surface water diversions.

(c) Rationale

The surface waters of the New Jersey coastal zone are an invaluable natural resource. Fresh waters maintain the propagation of established and natural biota. They serve as commercial, recreational, industrial, agricultural, and aesthetic resources. Any development that affects surface water quantity and quality will have a negative impact on these uses.

7:7E-8.6 Groundwater Use

(a) Definition

Groundwater is all water within the soil and subsurface strata that is not at the surface of the land. It includes water that is within the earth that supplies wells and springs.

(b) Policy

Coastal development shall demonstrate, to the maximum extent practicable, that the anticipated groundwater withdrawal demand of the development will not cause salinity intrusions into [present potable] the groundwaters of the zone, will not degrade groundwater quality, will not [well fields,] significantly lower the water table or piezometric surface, or significantly decrease the base flow of adjacent water courses. Groundwater withdrawals shall not exceed the aquifer's safe yield.

Coastal developments which use design, processes and fixtures which minimize consumptive water use are encouraged. Development plans are also encouraged to incorporate aquifer recharge techniques.

Coastal development shall conform with all applicable DEP and, in the Delaware River Area, Delaware River Basin Commission, requirements for groundwater withdrawal and water diversion rights.

(c) Rationale

Groundwater[, defined as water beneath the land surface,] is a primary source of water for drinking and industrial use. In some areas of the coastal zone, especially areas in Essex, Middlesex, Monmouth, Salem, Camden, and Cape May Counties, excessive amounts of groundwater are being withdrawn. The problem stems from the overpumping of groundwater, industrial, agricultural and municipal landfill leakage into groundwater and reduction of aquifer recharge caused by increased development and population. This has led to a progressive lowering of the water table or piezometric surface, altered groundwater flow patterns, changed groundwater recharge/discharge relationships, is increasing salt water intrusion into the groundwaters, [that] may [change] damage the base flow conditions of streams, and may lead to well closings because of contamination. [or increase salt water intrusion into the groundwater.]

7:7E-8.7 Runoff

(a) Definition

Runoff is that portion of precipitation on the land, from rain, snow, or human activity, that ultimately reaches surface water bodies.

(b) Policy

(i) Coastal development shall use the best available technology to minimize off-site storm water runoff, increase on-site infiltration and simulate natural drainage systems.[, to the maximum extent practicable, depending upon the soil, land, vegetation, topography, existing drainage system and other site characteristics.]

Best available technology shall [Coastal development shall maximize the time of concentration of runoff and maximize the recharge of runoff onsite, to the maximum extent practicable, using] include measures such as retention or detention ponds, recharge trenches, porous paving, contour terraces, and swale-lagoon systems.

(ii) The goal of runoff control methods shall be to prevent the [quantity] rate of off-site storm water runoff[, both] during the construction and operation of a development under any storm conditions, [shall not] from exceeding the [quantity] rate of runoff that would occur under the existing pre-development conditions of the site.[, to the maximum extent practicable.] For some sites, with existing predevelopment conditions such as cultivated land, bare earth, or partial paving, the goal of runoff control methods shall be [requirement to reduce runoff to the maximum extent practicable means] to achieve the runoff standard for good condition pasture land (SCS TR-55 Curve Number 39), which may result in a greater quantity of on-site retention and infiltration than under the existing pre-development conditions.

[If the site is in a built-up urban area, or if the coastal runoff policy conflicts with runoff management requirements of local governmental agencies, then the acceptable quantity of off-site stormwater runoff may exceed the standard of existing pre-development site conditions, provided that DEP can determine, on a case-by-case basis, that the following requirements are met:

(i) the runoff policy of (a) and (b) of existing predevelopment site conditions has been met using the best available technology authorized by local regulations,]

(iii) the off-site stormwater sewers [do] may not discharge into sanitary sewer systems,

(iv) the amount of pollutants in the stormwater runoff discharge to surface water bodies [is] shall be minimized and the discharge shall satisfy[ies, to the maximum extent practicable,] the applicable DEP-established surface water quality standards of the receiving water body using measures such as sediment traps, oil skimmers and vacuum street cleaners, and

(v) the volume of stormwater discharged offsite will not cause significant adverse impacts to the receiving water body, and must conform with the requirements of the DEP Stream Encroachment Permit Program (N.J.S.A. 58:1-26 and rules).

(vi) Groundwater infiltration areas such as detention ponds or swales shall be sited as far horizontally from surface water and as far vertically from groundwater as is practicable, and [should] shall avoid soils with a seasonal high water table of less than 3 feet [with high percolation rates].

(vii) In designing the site plan, including detention and retention facilities, the stormwater runoff calculations shall be based on 24 hour storms of 25 years and 100 years (where appropriate) frequencies, using standard methods of calculation, such as the so-called "Rational Method" or the SCS Tabular Method of Determining Peak Discharge, as defined in U.S. Department of Agriculture, Soil Conservation Service, Urban Hydrology for Small Watersheds, Technical Release No. 55, January 1975.

(c) Rationale

Stormwater runoff is a natural process of surface hydrology. Development changes this process as the volume and rate of runoff increase as the natural landscape is modified and replaced by impervious surfaces. Unless managed properly, stormwater runoff [may] will adversely affect the coastal environment in several ways: increased erosion, increased storm surges in streams, destruction of flood plain vegetation, degraded water quality from contaminants in runoff from paving, increased turbidity, decreased aquatic productivity, lowered water tables, reduced groundwater quality and supply. The policies anticipate these concerns and treat a development site as a closed system within which drainage systems must be designed to contain runoff increases within the site and minimize offsite impacts. [interfere as little as possible with the natural process of surface and groundwater hydrology. The policies intentionally provide a measure of flexibility in stormwater runoff management that recognizes differences in both site conditions and approaches to runoff management by governmental agencies.] Examples of stormwater runoff management techniques may be found in two source books: J. Tourbier and R. Westmacott, Water Resources Protection Measures in Land Development - A Handbook (Newark, Delaware: University of Delaware, Water Resources Center, April 1974) and New Jersey State Soil Conservation Committee, Standards for Soil Erosion and Sediment Control in New Jersey (Trenton, New Jersey: State Soil Conservation Committee, [1972] revised 1975).

7:7E-8.8 Soil Erosion and Sedimentation

(a) Definition

Erosion is the detachment and movement of soil or rock particles by water, wind, ice or gravity, while sedimentation is the action or process of depositing soil or rock particles.

(b) Policy

Coastal development is required to restrict soil loss and control soil erosion and sedimentation during the construction of development to the standards specified in Standards for Soil Erosion and Sediment Control in New Jersey adopted by the State Soil Conservation Committee in 1972, revised in 1975 and any other soil conservation standards or plans adopted by State Soil Conservation Committee, local Soil Conservation Districts or municipalities pursuant to the Soil Erosion and Sediment Control Act (N.J.S.A. 4:24-39 et seq.). [the Soil Erosion and Sediment Control Act (Chapter 251, P.L. 1975), as administered by the State Conservation Committee and local Soil Conservation Districts under the joint authority of DEP and the N.J. Department of Agriculture.]

In addition, development on slopes between 8[10]-15 percent is discouraged, unless:

(i) limited stabilization structures and measures, such as terracing and paving, are consistent with the natural character of the site, to the maximum extent practicable,

(ii) The design of the development is compatible with the slope characteristics of the site in visual, physical, and engineering terms,

(iii) Minimal feasible site disturbance and maximum practicable revegetation take place.

(c) Rationale

Erosion is the detachment and movement of soil or rock particles by water, wind, ice or gravity. Erosion can be significantly increased by human activities including construction practices such as the clearance of vegetation, excavation, grading, and stockpiling, agricultural cultivation and silviculture (timber harvesting).

Erosion and sedimentation cause numerous adverse environmental impacts, such as loss of productive soils, destabilization of slopes, increased flooding due to reduced capacity of storm sewers and natural drainage channels, increased turbidity and siltation of streams, and decreased wetland productivity. By controlling the erosion generated on a site within the site boundary, these adverse impacts are contained and prevented from reaching and affecting coastal waters.

Many techniques are available to control sediment loss, including minimizing the area of soil exposed at one time, baling and contour terracing the edge of construction, mulching and using swale lagoon drainage systems, and building wet and dry detention basins. Other illustrative techniques are found in Standards for Soil Erosion and Sediment Control in New Jersey available from the State Soil Conservation Committee. See also the Special Area Policies on Steep Slopes and Coastal Bluffs.

7:7E-8.9 Vegetation

(a) Definition

Vegetation is the plant life or total plant cover that is found on a specific area, whether indigenous or introduced by humans.

(b) Policy

Coastal development shall preserve, to the maximum extent practicable, existing vegetation within a development site. Coastal development shall plant new vegetation, particularly appropriate native coastal species, to the maximum extent practicable.

(c) Rationale

The steady loss of vegetation is a nearly inevitable result of urbanization. Terrestrial vegetation stabilizes soil, retards erosion and runoff, promotes infiltration of surface water, reduces the force of

wind, provides foods, shelter and breeding sites for wildlife, and adds to aesthetic values for recreation and domestic life. Trees release life-giving oxygen, filter particulate pollutants, provide foods and fuel, with no energy input necessary by man. Because each site is unique, the degree of vegetative preservation required will depend upon the environmental conditions within and adjacent to the development site. In general, the greater the intensity of development permitted, the less vegetation preservation required.

"Appropriate native coastal species" means that species selection must reflect the natural physiological limitations of species to survive in distinct habitats, which include all environmental processes (natural and artificial) that operate within a site. Non-suitable species plantings will do poorly or die, or, if preserved through an intensive maintenance program of 'ph' adjustment fertilization and irrigation, will cause unacceptable ground and surface water impacts.

New vegetative plantings should reflect regional geophysical suitability. Illustrative appropriate species can be grouped into three categories:

(i) Barrier Beach Sites - Plants tolerant of salt spray and occasional saline flooding, such as American holly, red cedar, black cherry, beach plum, beach grass, bayberry, beach heather, etc.

(ii) Pine Barrens Sites - Plants tolerant of infertile sandy soils, frequent fires, and acidic water, such as pitch and short-leaf pines, Atlantic white-cedar, dogwood, American holly, oaks, blueberry, etc.

(iii) Inner Coastal Plain and Southern Outer Coastal Plain - Plants compatible with fertile, well drained soils; such as oaks, beach, hickory, dogwood, black cherry, white pine, gray birch, laurel, etc.

(iv) Piedmont Sites - Oak, hickory, beech, ash, elm, hemlock, dogwood and laurel cherry.

Within these regional groupings, the selection of individual species should take into consideration the depth to seasonal high groundwater table. Species which provide food for wildlife or other desirable traits are favored for new planting.

7:7E-8.10 Important Wildlife Habitat

(a) Definition

Important wildlife habitats are areas of general importance to the maintenance of a range of wildlife species, providing high primary productivity, good mixes of habitat types, surface water, cover, or movement corridors. These areas are not as critical as Critical Wildlife Habitats. If they were depleted the effect on wildlife population would not be as catastrophic as the loss of a Critical Habitat, but serious depletions of wildlife populations would occur. Definitions and maps of Important Wildlife Habitats are currently available from DEP-DCR only for Cape May County. Until additional maps are available, sites will be considered for importance on a case by case basis by the NJDEP Division of Fish, Game and Wildlife.

(b) Policy

(i) [The design of] Coastal development [shall] which does not incorporate management techniques which [favor or maintain native] minimize disturbance to important wildlife habitats, [diversity, and numbers, to the maximum extent practicable.] is discouraged.

(ii) Development that would significantly restrict the movement of wildlife through the site to adjacent habitats and open space areas is discouraged.

(c) Rationale

Important Wildlife Habitats are areas that provide primary productivity or primary habitat for a wide range of game and non-game species. Depletion of this resource would cause a general population decline of species that are not rare or endangered.

Wildlife is an important natural resource of the coast. Desirable on-site wildlife management techniques which could mitigate adverse impacts, and favor minimal feasible interference include preservation and dedication to open space of sensitive habitats of sufficient width, especially along drainageways and waterways, to preserve wildlife movement corridors, placement of nesting boxes, and planting of vegetative wildlife food species.

7:7E-8.11 Air Quality

(a) Definition

The protection of air resources refers to the attainment of State and federal air quality goals and the prevention of degradation of current levels of air quality.

(b) Policies

Coastal development shall conform to all applicable state and federal emissions regulations, ambient air quality standards, prevention of significant deterioration criteria, nonattainment criteria, any other policies of New Jersey's State Implementation Plan, and other regulations and guidelines established to meet requirements of the federal Clean Air Act as amended in 1977.

(c) Rationale

The attainment and maintenance of high air quality is vital for the health of and welfare of New Jersey's residents and visitors. The federal Clean Air Act Amendments of 1977 require almost all states to develop a State Implementation Plan (SIP) to attain National Ambient Air Quality Standards (NAAQS) for photochemical oxidants.

DEP's Division of Environmental Quality administers the State's air quality program and determines compliance with the coastal policy on air quality.

Furthermore, the federal Coastal Zone Management Act, Section 307(f) requires that the air resource standards of the coastal management program be the local, state and federal policies established in fulfillment of the Clean Air Act and its amendments.

Since the principal source of hydrocarbons and oxides of nitrogen, the precursors of oxidants, is the automobile, the strategies to attain the NAAQS must include, in addition to emission control on vehicles and industrial sources, measures to reduce vehicle miles travelled, by inducing a shift to car pools and other modes of transportation. The Coastal Program policies on transportation address these objectives, as do the policies concerning concentration of development.

Furthermore, new major stationary sources of hydrocarbons will continue to be subject to restrictions, such as the current requirement to offset emissions. Emission tradeoffs may allow for the siting of new facilities in non attainment areas of the coastal zone. The severity of the restrictions will depend on the progress made in reducing emissions during the next decade.

The problem of attainment and maintenance of carbon monoxide NAAQS in urban areas such as Atlantic City and Toms River is one primarily of traffic congestion.

Also, under the Clean Air Act Amendments of 1977, major wilderness areas of over 5,000 acres are mandatory Class I-Prevention of Significant Deterioration (PSD) or Pristine Areas. In New Jersey's Delaware Bay and Atlantic Ocean Shore areas [Segment], this designation applies to the wilderness areas of the Brigantine National Wildlife Refuge, and restricts industrial activities within the region that could significantly affect the air quality of the wilderness areas. This may pose conflicts in the future as the pace and intensity of the development of the Atlantic City region increases.

The entire proposed Northern Waterfront and Delaware River areas of the proposed coastal zone violates the NAAQS for carbon monoxide and ozone, and most of the area violates particulate standards. Such widespread nonattainment results from the area's density of residential, commercial and industrial development and the heavy amounts of traffic generated.

The State Implementation Plan does not suggest halting all further development. The Plan outlines policies which will serve to locate and control new development as well as regulate and minimize the emissions of existing pollution sources. Policies which will specifically apply to new development in the areas of the coastal zone which violate the NAAQS are: Emissions Offset, New Source Performance Standards, Prevention of Significant Deterioration for Class II areas, regulations for industrial emissions of particulates and organic substances which contribute to ozone production, and a series of strategies aimed at the control of emissions generated by motor vehicles.

The Prevention of Significant Deterioration (PSD) system allows development to generate incremental amounts of certain pollutants for which the area is in compliance. For the developed areas of the coastal zone, this means that moderate growth generating a limited increase in sulfer dioxide is sanctioned.

The Emissions Offset policy, allowing for emissions tradeoffs between proposed new and existing sources in nonattainment areas, can also be called upon to allow development that might not otherwise be permitted. Finally, a variance system exists which allows the Administrator of the EPA to waive requirements if it is determined that the State is making progress in achieving the NAAQS and other federal-mandated requirements.

7:7E-8.12 Public Services

(a) Definition

Public services include a variety of essential facilities provided by either public or private institutions. Health, education, welfare, fire, police and community facilities are principal examples. Others such as child care and home services for the elderly may be important for certain developments.

(b) Policy

Coastal development shall insure, to the maximum extent practicable, that adequate levels of public services will be provided to meet the additional demands for public services likely to be generated by the proposed development.

(c) Rationale

New development places additional demands on public services. Unless the existing supply can satisfy these demands or extensions to the supply can be available when development is complete, the deficiencies may adversely affect the health, safety, or welfare of the proposed new users.

In coastal areas there are special problems associated with the high seasonal population fluctuation and the relatively high percentage of senior citizens who typically make greater demands on health services. These coastal issues make the demonstration of adequate service supply during peak demand periods an especially critical issue.

7:7E-8.13 Public Access to the Shorefront

Note: This policy replaces the Use Policy on "Public Access", Section 7:7E-8.15.

(a) Definition

Public access to the shorefront is the ability of all members of the community at large to pass physically and visually to and from the ocean shore and other waterfronts.

(b) Policy

Coastal development adjacent to all coastal waters, including both natural [beach] and built-up waterfront areas, shall provide maximum practicable public access to the shorefront, [and] including both visual and physical access. Shorefront development that limits public access and the diversity of shorefront experiences is discouraged.

All development adjacent to water shall, to the maximum extent practicable, provide, within its site boundary, a linear waterfront strip accessible to the public. If the use, due to operation or security reasons, cannot provide a portion of the linked open space system described above, a pathway around the site must be designed that connects to the other parts, or potential parts of an open space system in adjacent parcels.

(c) Rationale

New Jersey's coastal waters and adjacent shorelands are valuable public resources which are limited in area. They are protected by New Jersey's Shore Protection and Waterway Maintenance Program and patrolled by the New Jersey Marine Police which are both financed by all state residents. Past developments have often blocked the waters from public view and/or made physical access to the waterfront difficult or impossible. In addition, some municipalities which own land immediately inland of the state-owned riparian land have enacted laws or regulations making waterfront access inconvenient, expensive or impossible for non-residents. These policies have served to limit the opportunity of inland residents for waterfront recreational activities.

Projects such as the experimental Beach Shuttle operated by DEP in the summer [of] since 1977 to Island Beach State Park from Toms River serve to carry out the policy of providing maximum practical public access to the shorefront.

The basis for the Shorefront Access policy came in part from the research in the report entitled Public Access to the Oceanfront Beaches: A Report to the Governor and the Legislature of New Jersey[.], April 1977, prepared in part by DEP-OCZM.

The developed waterfront, due to its past industrial utilization, has been closed to the people that live adjacent to the waterfront. DEP intends to promote a horizontal network of open space at the water which could be visualized as a narrow strip used for walking, jogging, bicycling, sitting, or viewing, which is continuous, even if the path must detour around existing or proposed industry due to security needs or the lack of pre-existing access. The path or strip will connect existing and intersect with future waterfront parks, open space areas, and commmercial activities. The goal of this policy is the piecing together of a system that will provide continuous linkages and access along the entire waterfront.

7:7E-8.14 Scenic Resources and Design

(a) Definition

Scenic resources include the view of the natural and/or man made landscape, while design is defined as the elements that compose the man-made landscape such as structures, including their geometry, texture and color.

(b) Policy

New coastal development that is visually compatible, in terms of scale, height, materials, color, texture, and geometry of building and site design, with surrounding development and coastal resources, to the maximum extent practicable, is encouraged. Coastal development that is significantly different in design and visual impact than existing development or adversely affects the scenic resources of the region is discouraged, unless the new development upgrades the scenic and aesthetic [attributes] resources of a site and its region.

(c) Rationale

Inappropriate design that ignores the coastal landscape and existing patterns and scale of development can degrade the visual environment and appearance of communities. New Jersey's coastal regions have strong architectural traditions which should be encouraged. The visual quality of diverse coastal locations is essential to maintaining a "sense of place".

7:7E-8.15 Buffers and Compatibility of Uses

(a) Definition

Buffers are natural or man made areas, structures, or objects that serve to separate two distinct uses, while compatibility is the ability for uses to exist together without aesthetic or functional conflicts.

(b) Policy

Development shall be compatible with adjacent land and water types, as defined in the Location Policies, to the maximum extent practicable. In particular, development that is likely to adversely affect adjacent or surrounding [Water's Edge Areas or] Special Areas is discouraged.

Developments that are incompatible with adjacent developments shall provide vegetated and other types of buffers at the site boundary of sufficient width to reduce the incompatibility, to the maximum extent practicable.

(c) Rationale

The juxtaposition of different uses may cause various problems. One activity may cause people to experience noise, dust, fumes, odors, or other undesirable effects. The most common incompatibility of this type in the Bay and Ocean Shore Segment are housing developments adjacent to industry, high speed roads or railroads. The juxtapositions of very different housing densities or of housing and agriculture also have potential for conflict. Vegetated buffer areas between uses can overcome, or at least ameliorate, many of these problems, especially if earth berms are included. Buffers can benefit users of both areas. Where farms operate near a residential area, for example, a buffer can protect the residents from the noise and smells of farming, while protecting the farmers from local regulations controlling the hours in which machinery can be used.

7:7E-8.16 Solid Waste

(a) Definition

"Solid Waste" shall mean garbage, refuse, and other discarded materials from industrial, commercial and agricultural operations and from domestic and community activities, and shall include all other waste materials including liquids except for liquids which are treated in public sewage treatment plants and except for solid animal and vegetable wastes collected by swine producers licensed by the State Department of Agriculture to collect, prepare and feed such wastes to swine on their own farms (N.J.S.A. 13:1E-1 et seq.).

(b) Policy

Coastal development shall recover material and energy from solid waste, to the maximum extent practicable, as required by the New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) and the federal Resource Conservation and Recovery Act (P.L. 94-580). If resource and energy recovery are impractical, solid waste, including litter, trash, refuse, and demolition debris shall be handled and disposed of in a manner acceptable to the standards of DEP's Solid Waste Administration.

(c) Rationale

Solid waste is a valuable resource to be recovered and managed on a district-wide basis. The review of individual projects in terms of solid waste will consider the waste type and volume expected, disposal method employed, and effects on disposal sites.

7:7E-8.17 Energy Conservation

(a) Definition

Energy Conservation is the use of techniques which minimize the amount of energy used by a facility and maximize the productivity of the energy that is used.

(b) Policy

Coastal development shall incorporate energy conservation techniques, including passive and active solar power, to the maximum extent practicable.

The technical and economic feasibility of employing such measures shall be evaluated in an energy plan. The plan shall specify the energy conservation techniques to be implemented as well as anticipated energy utilization for space heating, cooling, ventilation and lighting, industrial processes and other uses.

(c) Rationale

This policy assists the Department of Energy and Community Affairs in implementing New Jersey's Energy Conservation Plan, State Energy Master Plan, and the energy subcode of the Uniform Construction Code (N.J.S.A. 52:27D-119 et seq.). New Jersey's 1977 Energy Conservation Plan administered by the New Jersey Department of Energy derives from the federal Energy Policy and Conservation Act of 1975. The plan contains 22 measures to reduce the state's energy use by 6% by 1980. The measures

include thermal and lighting efficiency standards, provision of car and van pools, and waste oil recycling. These measures are intended to save New Jersey approximately 110 trillion British Thermal Units annually (or the equivalent of 5,000 barrels a day). The Department of Community Affairs is responsible for the implementation of the energy subcode of the state building code. Possible energy conservation techniques include the siting of buildings with an understanding of the micro-climate conditions of a site, use of clustering, provision of bicycle paths, and the location of housing close to public transportation.

7:7E-8.18 Neighborhoods and Special Communities

(a) Definition

Neighborhoods, small towns, and communities are discrete districts and areas [along the coast] with a degree of social stability as well as special architectural, ethnic, cultural, aesthetic, or historical qualities that distinguish these places from other areas along the coast.

(b) Policy

Coastal development that protects and enhances the physical coherence in neighborhoods and special communities is encouraged. Development that would adversely affect neighborhoods and special communities is discouraged.

(c) Rationale

The diversity of the coast is in part due to the existence and vitality of various small towns, communities, and neighborhoods within larger urban areas. These neighborhoods that display a strong sense of community should be valued, reinforced, and preserved.

7:7E-8.19 Traffic

(a) Definition

Traffic is the movement of vehicles, pedestrians and ships along a route.

(b) Policy

Coastal development that induces marine and/or land traffic is conditionally acceptable provided that it does not cause unacceptable congestion and safety problems.

(c) Rationale

The improper location of development may exacerbate existing traffic problems or produce new difficulties in the marine and/or land traffic system. Coastal development should be designed and located in a manner to cause the least possible disturbance to traffic systems, or be rejected.

7:7E-8.20 High Permeability Moist [Percolation Wet] Soils

(a) Definition

High Permeability Moist [Percolation Wet] Soils are soils contiguous with stream channels with a depth to seasonal high water table less than or equal to five feet, and with a loamy sand or coarser soil, as indicated in National Cooperative Soil Surveys prepared by the U.S. Department of Agriculture, Soil Conservation Service.[, and contiguous with stream channels.] These soils are distinguished from the High Permeability Wet Soils, with a depth to seasonal high water table less than or equal to three feet, which are discussed in the Location Policies.

(b) Policy

Coastal development shall avoid filling, building, paving, disturbing soil, or discharging effluent to groundwater on High [Percolation Wet] Permeability Moist Soils, to the maximum extent practicable. In particular, coastal development shall be designed such that onsite roads, parking lots, structures, subsurface sewage disposal areas, and discharge basins avoid High [Percolation Wet] Permeability Moist Soils, particularly in the proximity of surface water bodies and wells. Development that is determined by DEP to be acceptable in these areas shall conform to the [w]Wet [s]Soils policy (7:7E-8.21).

(c) Rationale

Soils with shallow seasonal high water tables and sandy or gravelly textures facilitate percolation, the vertical and horizontal movement of groundwater. Coarse sediments, however, have a limited capacity to trap and filter contaminants. Further, the high lateral transmissibility along the top of shallow seasonal high water tables aggravates the problems of water borne pollutants eventually reaching surface water bodies or wells. New Jersey's standards for subsurface sewage disposal systems (so-called Chapter 199, N.J.A.C. 7:9-2.1 et seq.) recognize this concern by requiring that the bottom of the trench or bed of disposal fields be at least four feet above the seasonal high groundwater table.

7:7E-8.21 Wet Soils

(a) Definition

Wet soils are soils with a depth to seasonal high water table less than, or equal to, three feet, as delineated by the U.S. Soil Conservation Service in a National Cooperative Soil Survey.

(b) Policy

Development in wet soils is discouraged unless the following conditions are met:

(i) Basements are prohibited.

(ii) Effective engineering techniques are used to ensure the stability of foundations and protect them from movement, including excavating organic substrates and backfilling with less compressible sediments, short-bore piles, special footings and floating slabs. Techniques that minimize interference with natural ground and surface water movement, such as short-bore pile and suspended slab techniques, are encouraged.

(iii) The air spaces beneath ground floor slabs are adequately ventilated, using mechnical ventilation, if necessary.

(iv) The stability of roads and paved areas assured, using techniques such as removal of compressible sediments and replacement with a firmer substrate and thicker than normal road base.

(v) Subsurface pipes are stable and waterproofed to avoid contamination of groundwater, using dewatering of trenches during construction, extra pipe base thickness, waterproof gaskets, sealed joints and other techniques as necessary.

(vi) Porous concrete is prohibited, although other porous pavements such as lattice concrete or gravel are acceptable.

(vii) The lowering of the water table by pumping that would disturb adapted vegetation is prohibited.

(viii) Detention basins, swales and other runoff recharge areas are prohibited in wet soils.

7:7E-8.22 Fertile Soils

(a) Definition

Fertile soils are soils that have Agricultural Capability Ratings, as defined by the U.S. Department of Agriculture, Soil Conservation Service in the National Cooperative Soil Surveys of I, II, IIIe and a K value of less than 0.20, and IIIw if well drained, or Woodland Suitability Rating of 1.

(b) Policy

Location Policies restrict development in Farmland Conservation Areas. Elsewhere, coastal development shall avoid disturbing fertile soils, to the maximum extent practicable, and shall carefully remove, stockpile and reuse the topsoil when onsite fertile soils cannot be preserved.

(c) Rationale

Fertile soils are the product of millenia of soil forming processes and, once paved, are irreperably lost. The Farm Conservation Special Area policy preserves large contiguous acreages of fertile soils for commercial production of food and fiber, but smaller areas of fertile soils in the open spaces between development are a natural resource of considerable value. The landscaping of development is promoted by fertile soils but, more importantly, the preservation of fertile soils near

development offers the opportunity of home gardens. Applicants shall show the distribution of fertile soils relative to proposed structures and paving in site plans. If these development elements are shown on fertile soils, applicants shall demonstrate why alternative positions are not feasible.

7:7E-8.23 Flood Hazard Areas

(a) Definition

Flood Hazard Areas around rivers, creeks and streams are being delineated by DEP under the Flood Hazard Area Control Act (N.J.S.A. 58:16A-50 et seq.), and by the Federal Emergency Management Agency. The Flood Hazard Area Control Act mandates DEP to "delineate as flood hazard areas, areas as in the judgment of the Department, the improper development and use of which would constitute a threat to the safety, health and general welfare from flooding" (N.J.S.A. 58:16A-52). Where Flood Hazard Areas have been delineated by both DEP and FEMA, the DEP delineations shall be used.

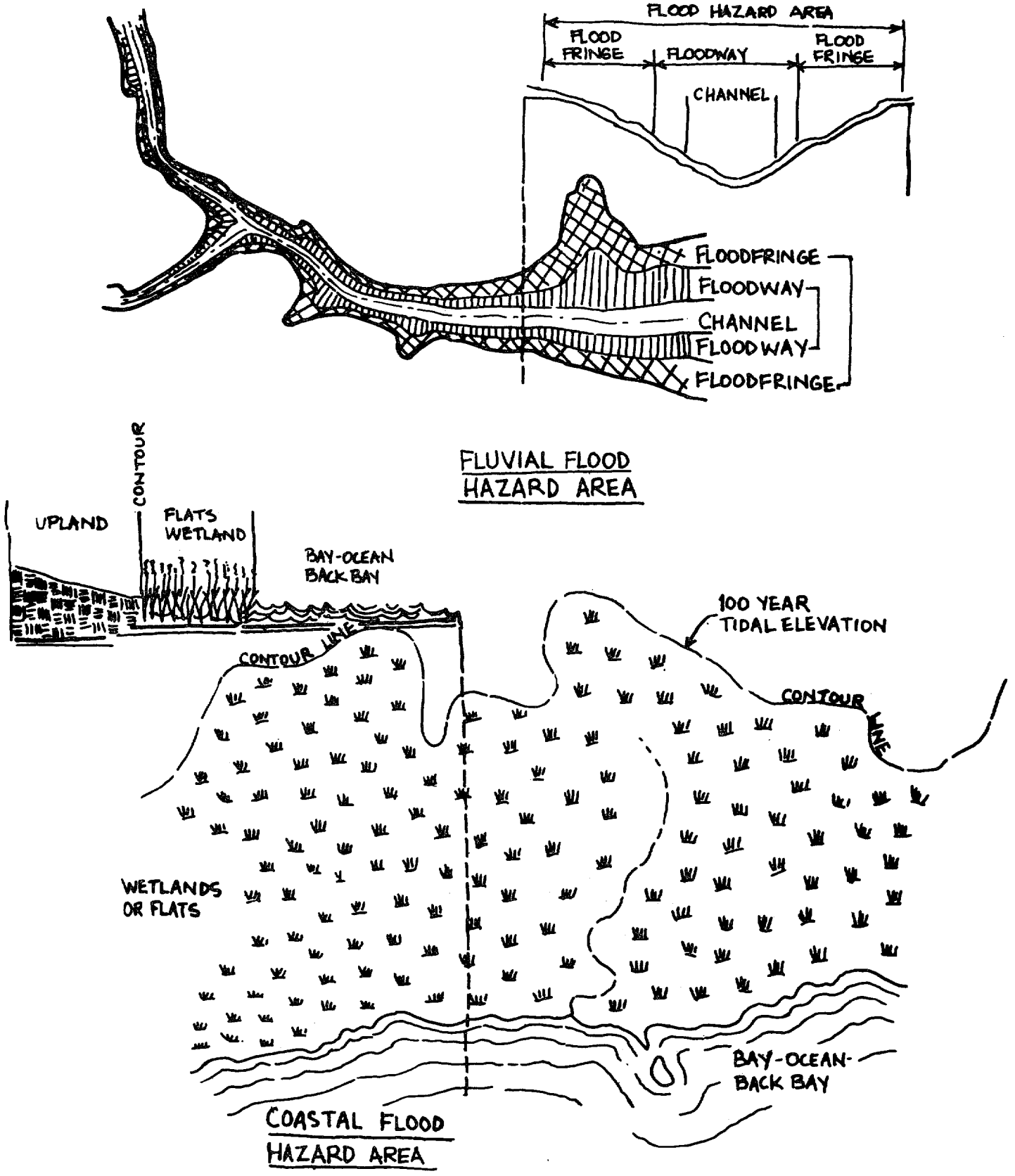
Flood Hazard Areas around water bodies other than rivers, creeks and streams are delineated only by FEMA. Where Flood Hazard Areas have been delineated by neither FEMA nor DEP, the 10-foot contour line shall be used as the inland boundary of the Floodplain. The seaward boundary shall be the mean high water line.

Floodway is defined as "the channel of natural stream and portions of the flood hazard area adjoining the channel, which are reasonably required to carry and discharge the flood water for flood flow of any natural stream (N.J.S.A. 58:16A-51). Floodways are being delineated by DEP (see Figure 27).

[Along rivers and streams, the flood hazard area (fluvial) consists of the floodway and any additional portions of the floodplain inundated during flood periods where the flow exceeds the capacity of the channel. The floodway consists of the stream channel and portions of the adjacent flood plain necessary to carry and discharge the flood water or flood flow of any natural stream. Floodways can carry waters of 100 year flood without increasing the water surface elevation by more than 0.2 feet at any point.]

[Fluvial flood hazard areas are delineated by DEP by a complex engineering method. The resulting water surface profile elevations are superimposed on topographic maps to identify areas of inundation. DEP is presently delineating all flood hazard areas. Delineations have been completed for the entire Raritan River Basin outside of the Bay and Ocean Shore Segment Of 6,500 mile of streams in New Jersey, 618 miles have been delineated and an additional 216 miles are scheduled for completion by the end of 1978.] The U.S. Army Corps of Engineers has defined, for certain streams, the water surface profiles which have been developed for both the floodway and the flood hazard area design floods. However, the delineation of the flood hazard area must be determined on a case by case basis due to lack of accurate elevation maps.] A complete list of streams where DEP has delineated the Flood Hazard Area

Figure 27



FLOOD HAZARD AREAS

[affected by this delineation] can be found in the N.J.A.C. 7:13-1.11 et seq. [In areas where the delineation of flood hazard areas using this engineering method is not complete, DEP determines the flood hazard areas on a case by case basis using detailed elevation and stream profile information submitted by the applicant as required by DEP. Where data gaps exist, flood hazard areas can be preliminarily identified by the use of U.S. Geological Survey Flood Prone Areas maps (scale of 1:24,000), supplemented with alluvial soil information for the small watersheds in the upland alluvial flood plains.]

In the tidal areas, 100 year tidal elevations have been identified for FEMA in most municipalities within the coastal zone [Bay and Ocean Shore Segment] by the U.S. Army Corps of Engineers, and are known as the Intermediate Regional Tidal Flood. The geographic extent of tidal flood hazard areas are indicated on USGS topographic maps as "flood prone" areas (there are no floodways in tidal flooding).

[Figure 14 depicts fluvial and tidal flood hazard areas.]

(b) Policy

[(a) In general, coastal development is discouraged in flood hazard areas.]

(i) Acquisition of undeveloped flood hazard areas for purposes of public open space is encouraged.

(ii) Certain land uses are prohibited, under State Flood Plain law and rules, in the floodway portion of fluvial flood hazard areas, including uses such as placing, depositing or dumping solid wastes on the delineated floodways; processing, storing or disposal of pesticides, domestic or industrial wastes, radioactive materials, petroleum products or hazardous materials; erection of structures for occupancy by humans or livestock or kennels for boarding of domestic pets; storage of materials or equipment or construction of septic tanks for residential or commercial use (see N.J.A.C. 7:13-1.2 et seq.). Not affected by this policy are hazard-free activities such as recreation, agriculture, soil conservation projects and similar uses which are not likely to cause obstructions, undue pollution, or intensify flooding. According to N.J.A.C. 7:13-1.4(c), any lawful, pre-existing prohibited uses may be maintained in a delineated floodway provided, that if expanded or enlarged, they do not increase the flood damage potential. Property owners in delineated floodways may rebuild damaged structures, providing that any expansion or enlargement will not increase the flood damage potential.

(iii) Most land uses are also regulated, under State Flood Plain law and rules, in the flood fringe. Structures for occupancy by humans are conditionally acceptable provided that: the first habitable elevation is one foot above the 100 year flood prone line established by HUD Flood Insurance Maps, and the structure will not increase flood damage potential, by obstructing flood waters.

(iv) Construction acceptable in flood hazard areas must conform with applicable flood hazard reduction standards, as adopted by the Federal Insurance Administration in HUD (Federal Register, Vol. 41, No. 207, Part II, October 26, 1976), as amended.

(c) Rationale

Past development of lands susceptible to flooding in New Jersey has led to flood damages, with sometimes tragic social, economic and ecological consequences. Intensive development of [flood plains] Flood Hazard Areas leads to increased runoff, reduction in flood storage capacity, increased size and frequency of downstream flooding, erosion of stream banks and downstream deposition of sediments with consequent reduction in estuarine productivity. Flood plains serve as important wildlife habitat for endangered and threatened species, game and fur-bearing species, and rare species of vegetation. Flood Hazard Areas can also be key elements in the creation of stream corridor-oriented open space, hiking or cycling trails, and passive recreation areas.

7:7E-8.24 Decomissioning of Projects

(a) Definition

Decommissioning is the shutdown of a development and the return of the site to a state suitable for future use.

(b) Policy

Coastal development applications must state the anticipated life of the proposed project and address the steps necessary to adapt the site to another use once the proposed project is no longer functional. Development proposals in which the applicant takes the long-term responsibility for making the site available for another use are encouraged.

(c) Rationale

The coast, particularly in urban areas, is littered with the remains of projects which outlived their usefulness and were abandoned. These derelict piers, deserted warehouses and crumbling buildings depress the immediate surrounding areas and make more difficult the task of rehabilitating the urban waterfront.

This policy is intended to make the long-term future use of a site one of the factors considered when evaluating a current proposal. Applicants should bear at least some of the responsibility for insuring that their use of a site does not eventually render it a hazard to health or the local or regional economy.

7:7E-8.25 Noise Abatement

(a) Definition

Noise is any sound of such level to be injurious to human health or welfare, or which would unreasonably interfere with the enjoyment of life or property throughout the State or in any portion thereof, but excludes all aspects of the employer-employee relationship concerning health and safety hazards within the confines of a place of employment (N.J.S.A. 13:1G-3).

(b) Policy

Noise levels must conform with the standards established in N.J.A.C. 7:29-1.1 et seq. and administered by the Office of Noise Control in the Division of Environmental Quality.

(c) Rationale

Noise can be detrimental to the health, safety and welfare of people who live or work in the coastal zone. It can also diminish the enjoyment of people who visit the coast.

7:7E-8.26 Barrier Free Design

Note: This policy replaces the Use Policy on Barrier Free Design, Section 7:7E-8.7.

(a) Definition

Barrier free design is a plan for a project which would permit a handicapped person to operate independently with comparative ease.

(b) Policy

All development without barrier free design in public areas is prohibited, and multi-family residential developments of more than 250 units without barrier free design in some of the units are discouraged. Further, barrier free design must be included in all buildings and spaces used by the general public according to State Law (N.J.S.A. 52:32-4). Barrier free design is encouraged in units of private residential developments, especially at grade changes in public space within those private developments.

(c) Rationale

Activities in the coastal zone should be available to all people, including those whose physical handicaps have precluded such accommodation in the past. "Barrier Free Design Regulation", published by the State of New Jersey, Department of the Treasury, Division of Building and Construction on July 15, 1977, defines the barrier free design requirements of public buildings.

7:7E-8.27 Aquifer Recharge Areas

(a) Definition

Aquifer Recharge Areas are land areas that make prime contributions to the replenishment of groundwater. They are divided into Artesian Aquifer Recharge Areas and Surface Aquifer Recharge Areas. Artesian Aquifer Recharge Areas are those areas of the land surface where dipping, water bearing geological strata outcrop and where surface and substrate conditions do not prevent percolation of water into the ground. Such conditions are found where there are soils equal to or coarser than silt loam in most of their horizons and depths to seasonally high water table are equal to or greater than 3 feet. The approximate geographic extent of Artesian Aquifer outcrop areas are mapped in a series of special reports titled "Groundwater Resources of (name of County)" by the Department of Environmental Protection in conjunction with the U.S. Department of Interior, Geological Survey.

Surface aquifer recharge areas are uplands where surface and substrate conditions promote high recharge rates. Uplands are mainland areas at or above 20 feet above mean sea level. Surface and substrate conditions that promote rapid percolation are soils with a texture of loamy sand or coarser in most of their horizons, and depths to seasonal high water table equal to or greater than five feet.

(b) Policy

Development of Aquifer Recharge Areas is conditionally acceptable provided that:

1. The total amount and rate of flow of runoff across the site boundary after completion of development either does not exceed that which would occur if the site were forested, or is the minimum possible using best available technology. (The runoff curve for "Fair Woods" shall be used to demonstrate this.) Runoff retention may be accomplished through use of wet or dry retention basins and vegetated swales provided that other coastal policies are satisfied. Forested swales are preferred to herbaceous,

2. Impervious paving is minimized and porous pavement is used wherever possible,

3. Runoff from impervious surfaces is filtered by mechanical or physical techniques before being discharged to the ground, and

4. Runoff is recharged as close to the source as possible. Drip lines under roofs and frequent small swales and detention areas are recommended.

(c) Rationale

The underground reservoir of fresh water contained in the aquifers of the coastal zone is a critical coastal resource, providing fresh water for wells, maintaining stream flows and freshwater flows into estuaries, providing a head of fresh water to prevent saline intrusion into ground waters, and supporting many of the other Special Areas through groundwater provision to vegetation. Depletion of this resource from loss of recharge would cause drying and saline intrusion of wells, drying of streams, disturbance of estuarine habitats and destruction of vegetation through altering of salinity regimes and lowering of water tables. The critical function of Aquifer Recharge Areas is the rapid passage of unpolluted surface water to the water bearing strata below. Development is acceptable with special mitigation technology to ensure the rate and quality of groundwater recharge. The policies address this mitigation and set standards on offsite runoff which ensure that most runoff enters the ground. The policies do not permit extensive impervious paving. Some high intensity uses will not be able to meet these standards. The intention of the standards is to contain the intensity of development below the level that would diminish ground recharge and generate offsite runoff, without dictating the exact nature or layout of development. The ability of particular drainage layouts to meet these standards is, therefore, the principle measure of acceptability.

Chapter 5: Special Requirements of the federal Coastal Zone Management Act

Chapter 6: Next Steps in Coastal Management in New Jersey

CHAPTER FIVE - SPECIAL REQUIREMENTS OF THE FEDERAL COASTAL ZONE MANAGEMENT ACT

Introduction
Federal Consistency
National Interests
Regional Benefit Decisions
Geographic Areas of Particular Concern
  Hackensack Meadowlands Development Commission District
Areas for Preservation and Restoration
Special Coastal Planning Elements
  Energy Facility Planning Process
  Shorefront Access and Protection Planning Process
  Shoreline Erosion/Mitigation Planning

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INTRODUCTION

This Chapter addresses the special federal requirements which must be part of a state's coastal management program under the federal Coastal Zone Management Act. The Chapter describes the involvement and consideration of national interests in the development and implementation of the program. It discusses the process of assuring that federal actions are consistent with the Coastal Program to the maximum extent practicable. It then describes how various conflicts between the national interests are balanced in the program and the process to assure adequate consideration of such issues. In addition, this Chapter describes how the New Jersey Coastal Program ensures that uses of regional benefit are not excluded from the coastal zone.

Because some areas in the coastal zone have significant coastal value or face exceptional environmental pressures, they demand special management attention. This chapter describes the areas New Jersey has designated to receive special management consideration as geographic areas of particular concern, including the Hackensack Meadowlands Development Commission District, and areas for preservation or restoration.

In addition, this chapter includes the three special coastal planning elements the 1976 amendments to the Federal Coastal Zone Management Act mandate be included in each State's coastal program. The special planning processes are the energy facility planning process, the shorefront access and protection planning process, and the shoreline erosion/mitigation planning process.

FEDERAL CONSISTENCY

Federal agencies play a significant role in the coastal zone. They issue permits and licenses for activities such as dredging and the construction and operation of nuclear power plants, as well as activities associated with exploration and development of the Outer Continental Shelf. They also provide financial assistance such as grants for watershed protection and flood prevention, and undertake direct activities and development projects such as national parks and highway construction.

The federal consistency provisions of the Coastal Zone Management Act, Section 307(c)(1) and (2), require that federal activities and development projects in or directly affecting the coastal zone be consistent (in some cases to the maximum extent practicable) with the State Coastal Zone Management Program. Section 307(c)(3)(A), 307(c)(B) and 307(d) require federally licensed and permitted activities, federally licensed and permitted activities described in detail in OCS plans and Federal assistance to State and local governments to be consistent with the State coastal program.

New Jersey will use the goals, objectives and policies of the New Jersey Coastal Management Program as the basis for making consistency determinations. Specifically, New Jersey will consider a federal action consistent if it does not conflict with the Coastal Resource and Development Policies as stated in Chapter Three, and is the available alternative most supportive of the New Jersey Coastal Program.

General Procedural Requirements

The Federal consistency requirements outlined in this chapter describe the procedures that will be followed by DEP's Division of Coastal Resources in determining the consistency of federal activities with the Coastal Management Program. These procedures incorporate the mandatory requirements of the federal consistency regulations (15 CFR Part 530) into a review process that is modelled on existing state permit review processes.

In most cases, an activity subject to the requirements of Section 307 of the Federal CZMA will also require a coastal permit. Consistency for these activities may be demonstrated by receipt of an approved State coastal permit (either a CAFRA, Waterfront Development or Wetlands Permit).

The appropriate state permit application should, therefore, be submitted to DEP prior to or concurrent with the Federal review process. Should the Division of Coastal Resources receive a consistency certification for an activity which requires a state permit but for which no application has been submitted, the agency or person proposing to conduct the activity shall be advised that such a permit is required. Such activities will thereafter be reviewed under the State's regulatory authority, and not under Section 307. The Division shall issue, within the time limit relevant to the category of federal activity, a determination stating that the decision to grant or deny the State coastal permit shall constitute a consistency determinaiton. Review of applications for State coastal permits will follow the relevant State procedures.

Activities which would directly affect the coastal zone but are not regulated by a state permit program, activities on federal lands having "spillover impacts" on the coastal zone (see discussion of geographic scope below) and activities described in OCS plans will require reviews independent of any existing permit program.

Geographic Scope

The geographic scope of the consistency review process includes the entire coastal zone and, in some cases, areas outside the coastal boundary. 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 (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 Division of Coastal Resources 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 activity in a riverine area upstream of the coastal zone which reduces or otherwise alters flow, for example, is likely to significantly affect downstream areas. This is particularly true where the water body is directly affected by the activity, as with damming, dredging, filling, or construction within the natural high water mark. If the affected downstream areas encompass Wetlands, Floodplains, or any of the other Special Areas listed in the Rules on Coastal Resource and Development Policies then it may be assumed that such activities will significantly affect the coastal zone.

Contents of a Consistency Determination or Certification

Federal activities that require a coastal permit are subject to the information requirements of the particular permit program.

When reviewing activities that do not require a coastal permit (e.g. activities directly affecting the coastal zone but not regulated by the state, activities on federal lands and OCS activities), DEP will attempt to base its decision on the document or documents required for compliance with Federal laws and regulations.

Notice of the receipt of Federal consistency determinations, certifications, and notifications, and the subsequent status of each consistency review will be published in the DEP Bulletin in accordance with the 90 Day Construction Permit Rules, N.J.A.C. 7:1C-1.6. A free subscription to the DEP Bulletin may be obtained by writing to the New Jersey Department of Environmental Protection, Documents Distribution Center, P. O. Box 1390, Trenton, New Jersey 08625.

In addition, a public hearing will be held in the local area concerned on all projects requiring a CAFRA permit and on major projects requiring a Wetlands or Waterfront Development Permit. A public hearing will also be held in the event of a serious disagreement between DEP and a federal agency concerning a federally licensed or permitted activity described in OCS oil and gas production and development plans.

DEP will work with each Federal agency to provide joint written notices and public hearings on proposals whenever possible.

Both DEP and the New Jersey Department of Energy (DOE) will participate in the decision of the State of New Jersey to issue a determination of consistency on coastal energy facilities. As required by federal regulations (15 CFR 930.18), DEP shall receive, and forward promptly to DOE, all materials necessary for a consistency determination on coastal energy facilities. In the event of a disagreement, the Energy Facility Review Board will be convened to make a recommendation to the Governor, who shall make the final determination within the applicable time limits as required by the federal consistency determination to the appropriate federal agency.

Preliminary Conferences

The Federal consistency regulations encourage early consultation and coordination between state and Federal agencies or applicants. An agency or applicant may request a preliminary conference in writing or by telephone, advising DEP that the agency has identified an activity as one requiring, or possibly requiring, a consistency review that it wishes to discuss. This request should come at the earliest possible time and should be addressed to the Federal Coordinator, Bureau of Coastal Planning and Development, Division of Coastal Resources.

Below are lists of federal activities and development projects, federally licensed and permitted activities, federally licensed and permitted activities described in OCS Plans, and federal programs providing assistance to state and local governments likely to occur in, or affect, New Jersey's coastal zone.

Direct Federal Activities and Development Projects

Federal activities and development projects which are located in or directly affect the coastal zone must be consistent to the maximum extent practicable with the New Jersey Coastal Management Program. New Jersey will consider an activity consistent to the maximum extent practicable if it does not conflict with the Coastal Resource and Development Policies and is the available alternative most supportive of New Jersey's coastal program, unless compliance with New Jersey's program is prohibited based on existing law applicable to the Federal agency's operations.

Agencies and Activities Covered By This Section

Direct activities and development projects include the planning, construction, modification, or removal of Federally owned public works, facilities, or structures, including military facilities; the acquisition, utilization or disposal of land and water resources; Federal agency activities requiring a Federal permit; and Federal assistance to entities other than state and local governments.

Examples of activities in New Jersey's coastal zone that were not previously subject to State review are the housing units presently under construction by the Coast Guard on federally-owned land in Cape May (because of their potential spillover impacts) and the proposed expansion of the Earle Naval Supply depot in Monmouth County.

The following Federal activities and development projects, when conducted in whole or in part within the coastal zone, are likely to directly affect the coastal zone, and shall be reviewed for consistency.

GENERAL SERVICES ADMINISTRATION - Location and design of proposed government property acquisition and building construction.

- Disposal and transfer of surplus Federal lands.

DEPARTMENT OF DEFENSE

Army Corps of Engineers - Proposed projects authorization for dredging, channelworks, breakwaters, other navigation works, erosion control structures, reservoirs, dams, beach nourishment, and other public works projects in the coastal zone or with the potential to impact coastal lands and waters.

Air Force, Army and Navy - Location, acquisition and design of new or enlarged defense installations. Actions conducted on Federal lands with potential impact on non-Federal coastal lands and waters.

DEPARTMENT OF THE INTERIOR

Bureau of Land Management - OCS Leases and pre-leasing activities.

Fish and Wildlife Service - Management of national wildlife refuges and proposed acquisition.

National Park Service - National Park and seashore management and proposed acquisition.

DEPARTMENT OF TRANSPORTATION

Coast Guard - Location, acquisition and design of new or enlarged installations.

Federal Highway Administration - Highway construction.

Federally Licensed and Permitted Activities

Applicants for Federal licenses or permits for activities directly affecting the coastal zone or for renewals or amendments to such licenses or permits shall provide DEP with a certification that the proposed activity is consistent with the coastal policies. Federal agencies may not issue a license or permit if the State objects unless the U.S. Secretary of Commerce finds that a proposal is consistent with the purpose of the Federal CZMA or is necessary in the interest of national security.

New Jersey will consider an activity consistent if it does not conflict with the Coastal Resource and Development Policies and is the available alternative most supportive of New Jersey's coastal program.

In approving the New Jersey Coastal Management Program - Bay and Ocean Shore Segment, the Assistant Administrator for Coastal Zone Management, NOAA, made the following finding:

"With respect to any Federal license or permit, the State's review of the application for that license or permit, for Federal consistency purposes, will be limited to the scope of the review of that application as established under State and Federal law."*

In order to comply with this finding, DEP examined the legislation and regulations governing the Federal regulatory programs listed in this section and found that Federal agencies are required to examine the potential environmental impacts of their actions, regardless of the scope of review established for the particular permit or license involved. These requirements stem from the National Environmental Policy Act of 1969 (NEPA), the Environmental Quality Improvement Act of 1970, the Fish and Wildlife Coordination Act of 1966, Executive Order 11514 (Protection and Enhancement of Environmental Quality), Executive Order 11990 (Wetlands), and Executive Order 11988 (Floodplains).

The fact that every Federal action is assessed for the significance of its impacts on the environment within the meaning of NEPA (including NPDES permits for new point source discharges), and for its impact on floodplains, wetlands, fish, and wildlife means that the issuance of Federal licenses and permits listed in this section, with two exceptions, will be reviewed with reference to the full range of coastal policies contained in Chapter Four. The two exceptions are NPDES permits for existing point source discharges, which are subject only to Resource Policy 7:7E-8.4 (Water Quality); and decisions under prevention of significant deterioration (PSD) regulations of the Clean Air Act, which are subject only to Resource Policy 7:7E-8.11 (Air Quality).

Licenses and Permits Covered by this Section

Licenses and permits include any authorization, certification, approval, or other form of permission which a Federal agency is empowered to issue to an applicant, including amendments to or renewals of such permits.

Activities under the following Federal permits and licenses, when conducted by an applicant in whole or in part within the coastal zone, are likely to significantly affect the coastal zone and will be subject to a consistency review:

Army Corps of Engineers

Permits to regulate construction of any dam or dike across any navigable water of the U.S. under Section 9 of the Rivers and Harbor Act of 1899.

Permits to regulate the obstruction or alteration of, the construction of any structure in or over, and the excavation from or depositing of material in any navigable water of the U.S. under Section 10 of the Rivers and Harbor Act of 1899. (Exception: placement of bulkheads and other retaining structures, construction of docks, piers and boat ramps, or excavation from or depositing material within a man-made lagoon).

Permits and licenses to regulate transportation of dredged material for the purpose of dumping it in ocean waters under Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972.

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*Findings of Robert W. Knecht, Assistant Administrator for Coastal Zone Management. Approval of the New Jersey Coastal Management Program - Bay and Ocean Shore Segment, September 29, 1978, p. 47.

Permits and licenses for the discharge of dredged or fill materials into the waters and adjacent wetlands of the United States at specified disposal sites under Section 404 of the Federal Water Pollution Control Act of 1972 and amendments unless such permitting activity has been delegated to the State.

Federal Energy Regulatory Commission

Licenses required for non-Federal hydroelectric projects and associated transmission lines under Section 4(e) of the Federal Power Act.

Certificates required for the construction and operation of natural gas pipeline facilities, defined to include both interstate pipeline and terminal facilities under Section 7(c) of the Natural Gas Act.

Permission and approval required for the abandonment of natural gas pipelines under Section 4(b) of the Natural Gas Act.

U. S. Coast Guard

Permits for construction and operation of deepwater ports under the Deepwater Port Act of 1974.

Permits for construction of bridges under 33 USC 401, 491, 525.

Federal Aviation Administration

Permits and licenses for the construction, operation, or alteration of airports.

Environmental Protection Agency

National Pollutant Discharge Elimination System (NPDES) permits under the Federal Water Pollution Control Act of 1972, unless such permitting authority is delegated to the State.

Decisions under Prevention of Significant Deterioration (PSD) regulations under the Clean Air Act of 1976.

Nuclear Regulatory Commission

Permits and licenses required for the construction and operation of nuclear facilities under the Atomic Energy Act of 1954, Sections 6, 7, 8 and 10.

Economic Regulatory Administration

Opinions and orders for permission for delivery of imported LNG.

Licensed and Permitted Activities Described in OCS Plans

The 1976 Amendments to the Federal Coastal Zone Management Act added Section 307 (c)(3)(B), stating in part that:

"...any person who submits to the Secretary of the Interior any plan for the exploration or development of, or production from any area which has been leased under the Outer Continental Shelf Lands Act ... and regulations under

such Act shall attach to such plan a certification that each activity which is described in detail in the plan complies with such state's approved management program and will be carried out in a manner consistent with such program".

Applicants for Federal licenses or permits described in detail in OCS exploration or development plans which significantly affect the coastal zone must supply DEP with a detailed description of all proposed Federally licensed or permitted activities and facilities for OCS activities.

Federal Agencies may not issue a license or permit if the state objects, unless the U.S. Secretary of Commerce finds the proposal meets the objectives of the Federal CZMA or is necessary in the interest of national security.

New Jersey will consider an activity consistent if it does not conflict with the Coastal Resource and Development Policies and is the available alternative most supportive of New Jersey's coastal program.

Permits and Licenses Covered by this Section

Any Federally licensed or permitted activity described in any OCS plan for all lease sales on the Outer Continental Shelf of the United States under which New Jersey is identified as an "affected state".

Federal Assistance to State and Local Governments

Federal assistance to state and local governments for projects directly affecting the coastal zone may not be granted until DEP certifies that the activity will be consistent with the New Jersey Coastal Management Program unless the Secretary of Commerce finds that the proposal meets the objectives of the Federal CZMA or is necessary in the interest of national security. DEP will use the A-95 Project Notification and Review Process to monitor proposed Federal assistance projects in the coastal zone. The State also reserves the right to comment on other Federal assistance projects brought to its attention through the media and other avenues.

New Jersey will consider an activity consistent if it does not conflict with the Coastal Resource and Development Policies and is the available alternative most supportive of New Jersey's coastal program.

Activities and Agencies Covered by this Section

The term Federal assistance includes grants, contractual arrangements, loans, subsidies, guarantees, insurance, or other forms of financial aid. The term "state or local government" includes public entities such as special purpose districts.

(Note: It is not clear at this time whether Community Development Block Grant and Urban Development Action Grant Program applications fall within the coverage of this section. Such applications often do not provide, nor are they required to provide, a level of detail adequate to enable a consistency determination to be made. DEP, therefore, shall review such applications, but it shall not issue a negative determination for lack of information for these two categories of grant programs. It shall, by letter and by A-95 comment, assess the applicant's consistency with the Coastal Management Program to the fullest extent possible.)

DEP will monitor state and local Federal assistance applications affecting the coastal zone including, but not limited to the following programs (Reference numbers are those used by the Federal Office of Management and Budget). Activities under these grant programs, when conducted in whole or in part in the coastal zone, are likely to significantly affect the coastal zone, and will be reviewed for consistency.

Federal Regulations (15 CFR 930.94) requires that states list the specific Federal assistance programs subject to consistency review in their coastal management programs.

Department of Agriculture

Irrigation, Drainage, and Other Soil and Water Conservation Loans (10.409)

Resource Conservation and Development Loans (10.414)
(Exception: small projects costing under $7500 for erosion and sediment control and land stabilization for rehabilitation and coordination of existing irrigation systems).

Water and Waste Disposal Systems for Rural Communities (10.418)

Watershed Protection and Flood Prevention Loans (10.419)

Community Facilities Loans (10.423)

Department of Commerce

Economic Development: Grants and Loans for Public Works and Development Facilities (11.300)

Economic Development: Public Works Impact Projects (11.304)

Grants to States for Supplemental and Basic Funding of Title I, II, and IV Activities (basic grants only) (11.308)

National Oceanic and Atmospheric Administration - Se Grants

Department of Energy

State Energy Conservation Program

Department of the Interior

Heritage Conservation and Recreation Service

Outdoor Recreation - Acquisition, Development, and Planning Grants (15.400)

U. S. Fish and Wildlife Service

Rare and Endangered Species Conservation (15.612)

Department of Transportation

Federal Aviation Adminstration

Airport Development Aid Program (20.102)

Federal Highway Administration

Highway Research, Planning, and Construction (20.205)

Urban Mass Transportation Administration

Urban Mass Transportation Capital Improvement Grants (planning and construction only) (20.500)

Urban Mass Transportation Capital Improvement Loans (planning and construction only) (20.501)

Urban Mass Transportation Demonstration Grants (50.506)

Urban Mass Transportation Capital and Operating Assistance Formula Grants (20.507)

Environmental Protection Agency

Construction Grants for Wastewater Treatment Works (66.418)
(Note: Public water treatment facilities in the Bay and Ocean Shore Segment are subject to CAFRA).

NATIONAL INTERESTS

The federal Coastal Zone Management Act requires that the State's program provide "for adequate consideration of the national interest involved in planning for, and in the siting of, facilities ... which are necessary to meet requirements which are other than local in nature." [Subsection (306) (c)]

The "national interest" is a collection of the diverse, and occasionally conflicting, interests of the 13 United States departments, councils, and commissions with involvement in the preservation or development of New Jersey coastal lands and waters. To determine and balance the national interests, New Jersey has met with representatives of the federal agencies with responsibilities affecting the coastal zone. The comments of those agencies choosing to submit written statements and comments or testimony at public meetings on New Jersey's evolving coastal program have contributed to New Jersey's understanding of the national interests. Contacts with federal agencies are summarized in Appendix A. In addition to the comments of federal agencies, the New Jersey program used Presidential statements, federal legislation, and federal, state, and interstate agency reports to aid its consideration of the national interests.

The New Jersey program recognizes that national, as well as state, interests and priorities may shift in response to new and/or unforseen circumstances. Under an approved program, New Jersey will, therefore, continue to seek and evaluate information from the same sources. Changes in the national interests will be reflected in the Coastal Program through administrative action including amendments to the substantive rules and regulations which incorporate the Coastal Resources and Development Policies.

The Process for Continued Consideration of National Interest Issues

The process for balancing the national interests in the coastal zone will be the employment of the three-step decision-making process of the Location Policies, Use Policies, and Resource Policies described in Chapter Four, which will be used to guide actions in or affecting the coastal zone. These policies provide for wise management of the coastal zone and represent the State's effort to fulfill the federal mandate to give full consideration to ecological, cultural, historic, and aesthetic values as well as to needs for economic development. In so doing, the State has considered its responsibility to fulfill national needs for national defense, energy production and transmission, recreation and transportation. All decisions made under the program will follow the Coastal Resource and Development Policies described in Chapter Four.

An annual review of the Coastal Resource and Development Policies and the coastal permit application procedures described in Chapter Three will serve as the processes for assuring continued consideration of the national interests in the planning for and siting of facilities which are necessary to meet requirements which are other than local in nature.

All of the facilities identified below (national defense, energy production and transmission, recreation and transportation) are of sufficient size to require a coastal permit if they occur on non-federally controlled land. Furthermore, these facilities and any other development which would significantly affect the eleven resources described below as in the national interest, (e.g. water, air, etc.) are required to receive a coastal permit. Although other state permits would

be needed in some resource areas such as flood plains, the coastal permit would cover all these issues and thus has been identified as the single process during implementation of the Coastal Management Program for assuring the continued consideration of identified national interests.

The CAFRA law and the Wetlands Act state that the Commissioner of DEP "shall issue a permit only if he finds that the proposed facility...is located or constructed so as to neither endanger human life or property nor otherwise impair the public health, safety and welfare." (N.J.S.A. 13:19-10f) The Commissioner has interpreted "public welfare" and the jurisdiction of the State's Waterfront Development Permit Law (N.J.S.A. 12:5-3) to include a full consideration of national interests as described in this program. This interpretation is contained in Chapter Three of this document (Section 1.3.4) which is proposed as amendments to adopted rules. In addition, the Department of Energy will interpret its mandate "... to contribute to the proper siting of energy facilities necessary to serve the public interest ..." (N.J.S.A. 25:27f.2) as sufficient authority to consider the national interest in the siting of coastal energy facilities.

The following have been defined as facilities or resources which may be in the national interest. Greater specificity on the policies described below can be found in Chapter Four.

National Defense

National defense is of obvious importance to all states. To define the national interest in national defense, DEP shared reports, received comments from, and met with the designated representatives of the U.S. Air Force, U.S. Navy, U.S. Army, and U.S. Army Corps of Engineers.

The New Jersey Coastal Program excludes from the coastal zone all federally owned or leased lands, where defense operations are concentrated. The Coastal Program will actively consider defense activities only when agencies of the Department of Defense propose to buy additional land or to build new facilities with potential impacts beyond the borders of the federally owned land. The New Jersey program will not question the national security justification for such proposals. Rather, DEP will review the proposal for consistency with the Coastal Program, and will approve it if it can make one of two findings:

1. The proposal is consistent with the Coastal Resource and Development Policies, or

2. The proposed facility is coastal dependent and will be constructed with maximum possible consistency with the Coastal Resource and Development Policies.

In addition, the New Jersey program will seek to involve local Department of Defense representatives in planning the use of lands and waters surrounding military installations. The only current or projected defense activity in the area addressed by the Coastal Program is the possible purchase of land by the U.S. Navy in the vicinity of the Leonardo-Earle Naval Ammunition Depot. DEP has reviewed the proposed expansion of this site and has made a determination (in September 1979) that it would be conditionally acceptable under the Department's Rules on Coastal Resource and Development Policies.

Energy Production and Transmission

In determining the national interest in energy production and transmission, the following plans and federal agencies were consulted:

- The National Energy Plan, April 29, 1977
- U.S.Department of Energy (formerly ERDA and FEA)
- Federal Energy Regulatory Commission (formerly Federal Power Commission)
- Nuclear Regulatory Commission
- U.S. Department of Interior
  - Bureau of Land Management
  - U.S. Geological Survey
- U.S. Department of Transportation
  - U.S. Coast Guard
  - Office of Pipeline Safety
- Department of Defense
  - U.S. Army Corps of Engineers
- Maritime Administration
- Environmental Protection Agency

The most useful articulation of the national interest in energy is found in the National Energy Plan, which has three overriding objectives:

- as an immediate objective that will become even more important in the future, to reduce dependence on foreign oil and vulnerability to supply interruptions;
- in the medium term, to keep U.S. imports sufficiently low to weather the period when world oil production approaches its capacity limitation; and
- in the long term, to have renewable and essentially inexhaustible sources of energy for sustained economic growth. (Plan Overview, page IX)

The salient features of the National Energy Plan are:

- conservation and fuel efficiency,
- national pricing and production policies,
- reasonable certainty and stability in Government policies,
- substitution of abundant energy resources for those in short supply; and
- development of nonconventional technologies for the future (Plan Overview, page IX-X)

The National Energy Plan also notes that its "cornerstones" are "conservation" (page 35 of the Plan). New Jersey's recognition of the need for energy conservation was one factor leading to the second Basic Coastal Policy which states: "Concentrate rather than disperse the pattern of coastal residential, commercial, industrial, and resort-oriented development, and encourage the preservation of open space". Specifically, the Coastal Program encourages the clustering of development within a site, the use of renewable and recoverable sources of energy, mass transportation, and the incorporation of energy conservation techniques into all proposed coastal development in accordance with the Energy Conservation Plan being administered by the N.J. Department of Energy pursuant to the Energy Policy and Conservation Act of 1975.

Oil and Gas Facilities

New Jersey recognizes its role as a key location for the transportation, transfer, treatment and storage of national oil and gas supplies. In addition, the exploration for crude oil and natural gas in the Baltimore Canyon has presented New Jersey with the propect of new offshore and onshore OCS related activities. Given the national interest in recreational and resource protection in the coastal zone, pipelines and pumping and compressor stations will be permitted in the entire coastal zone to the extent they can meet existing federal and state requirements. Oil and gas facilities, other than pipelines, are encouraged to locate in the developed areas of the state where the infrastructure and labor market already exist to absorb such activity. The decision to encourage oil and gas facilities including certain OCS related activities in areas of the state which already house many oil and gas production facilities has been reached as a result of weighing the competing and conflicting national interest in recreation and resource protection as called for in the CZMA. A study undertaken for DEP by Rutgers University Center for Coastal and Environmental Studies (Onshore Support Bases for OCS Oil and Gas Development: Implications for New Jersey, 1977) as well as a study done by the Port Authority of New York and New Jersey to identify the New York Harbor's potential for OCS support bases contributed to this decision by indicating that sites which may be acceptable for oil and gas facilities exist along the Raritan Bay and River and Hudson River.

Electric Power

The Coastal Program directs additional fossil fueled generating stations away from particularly scenic or natural areas that are important for recreation and open space purposes, and directs that they be built consistent with applicable air and water quality standards. (See Chapter Four, Section 7:7E-7.4(m).

In considering the national interest in the development of nuclear power, New Jersey finds applicable the following quote from The National Energy Plan:

> "... the President is requesting that the (Nuclear Regulatory) Commission develop firm siting criteria with clear guidelines to prevent siting of future nuclear plants in densely populated locations, in valuable natural areas, or in potentially hazardous locations." (page 72)

New Jersey was one of the first states to recognize the potential of nuclear power to meet U. S. energy needs. The State has six operating or fully approved nuclear plants, including the Hope Creek I and II Generating Stations which received a CAFRA permit from DEP in 1975. The only other recent application for a nuclear facility filed in New Jersey was a 1974 application to construct two floating plants, which has since been cancelled by the applicant.

The New Jersey Coastal program energy policies considering electric generating stations can be found in Chapter Four, Section 7:7E-7.4(m).

Liquified Natural Gas - The National Energy Plan contains the following statements applicable to New Jersey:

> "Due to its extremely high costs and safety problems, LNG is not a long-term secure substitute for domestic natural gas. It can, however, be an important supply option through the mid-1980s and beyond, until additional gas supplies

may become available...The previous Energy Resources Council guidelines are being replaced with a more flexible policy that sets up no upper limit on LNG imports. Under the new policy, the Federal Government would review each application to import LNG so as to provide for its availability at a reasonable price without undue risks of dependence on foreign supplies. This assessment would take into account the reliability of the selling country, the degree of American dependence such sales would create, the safety conditions associated with any specific installation, and all costs involved." (p. 57)

LNG facilities have been proposed in recent years for West Deptford and Logan Townships in Gloucester County, and on Staten Island, New York from where the LNG would be pipelined to New Jersey. The New Jersey Coastal Program states that LNG terminals are discouraged unless they are constructed so as to neither unduly endanger human life nor property nor otherwise impair the public health, safety and welfare, and comply with the Coastal Resource and Development Policies. Because the tankering of LNG could pose potential risk to life and property adjacent to New Jersey's waterways which also serve as boundaries with the states of Pennsylvania and Delaware along the Delaware River and the state of New York in the Port of New York and New Jersey, the state considers decisions concerning the siting of LNG terminals to be an interstate matter. New Jersey is still awaiting a response in this regard to the petition (RM 76-13) it filed, along with its neighboring states, to the Federal Energy Regulatory Administration (former Federal Power Commission) in May 1976 (See Section 7:7E-7.4(n) of Chapter Four).

Recreation

The New Jersey coast is a national recreational resource. In considering the national interest in recreation, New Jersey reviewed the Nation-wide Outdoor Recreation Plan, the New Jersey State Comprehensive Outdoor Recreation Plan (SCORP), the Land and Water Conservation Fund Act, and the Historic Preservation Act of 1966 as amended. In addition, New Jersey has offered draft coastal documents for review to the National Marine Fisheries Service, Bureau of Outdoor Recreation and its successor Heritage Conservation and Recreation Service, U.S. Fish and Wildlife Service, National Park Service and staff of Gateway National Recreational Area-Sandy Hook, and the Advisory Council on Historic Preservation.

Major objectives of the national interest in recreation are:

- To consider recreation as an equal among competing uses of the coastal region.
- To provide high quality recreational opportunities to all people of the United States, while protecting the coastal environment.
- To increase public recreation in high density areas
- To improve coordination and management of recreation areas.
- To protect existing recreation areas from adverse contiguous uses.
- To accelerate the identification and no-cost transfer of surplus and underutilized federal property.

New Jersey will consider the recreational potential of a site in each decision under the Coastal Program. The Basic Coastal Policies require each waterfront municipality to provide or plan for at least one waterfront park. Residential, commercial and industrial projects are to be designed to include recreation areas, and public access to the water is to be part of waterfront development, whenever it is feasible. The Policies are consistent with the New Jersey State Comprehensive Outdoor Recreation Plan (SCORP), which was also prepared by DEP.

Recreation is particularly important in New Jersey where tourism is the state's second largest industry. The recreational use of the ocean waterfront has long been recognized, while the use of bay and river waterfront, particularly in urban areas is of growing importance in New Jersey. DEP provides for the national interest in recreation through its ability to acquire and manage state parkland and recreation areas and through the state Green Acres program which makes funds available to local governments for acquisition and development of recreation and open space. The federal government, which owns and operates a public beach and open space area at Gateway National Recreation Area (Sandy Hook), further provides for the national interest in recreation in New Jersey.

Transportation and Ports

The need for adequate transportation both to, and within, the coastal zone is an important national interest. To determine the national interest in transportation, and ports, New Jersey consulted the U.S. Department of Transportation, U.S. Coast Guard, Federal Aviation Administration, Federal Highway Administration, Federal Railroad Administration, Urban Mass Transit Administration, Maritime Administration and U.S. Army Corps of Engineers and the regional Port Authorities. The maintenance of existing transportation facilities is unaffected by the New Jersey Coastal Program. New public transportation facilities will be encouraged while additional roads will be permitted only if a need for them is demonstrated and alternative solutions are not feasible. In addition, other types of proposals, such as residential projects and development in Atlantic City, will be evaluated in terms of their potential impact on transportation.

New Jersey's ports also contribute to the national transportation interest. Ports will be encouraged only in established port areas. New facilities will be permitted when there is a clear demonstration of the inadequacy of an existing port. In New Jersey, the existing ports contain unused and under-used areas which can be refurbished to meet increases in demand. The Coastal Policies nevertheless allow for possible unanticipated future needs for port areas. (See Chapter Four, Sections 7:7E-7.4(i), 7:7E-7.5, 7:7E-7.8 and 7:7E-8.19).

Water

The New Jersey Coastal Program has been designed to support the attainment of national water quality goals. New Jersey has considered the national interest in water quality by review of the Clean Water Act, which provides the water resource standards of the Coastal Program and in consultation with the Environmental Protection Agency, Fish and Wildlife Service, National Marine Fisheries Service and the Council on Environmental Quality. In addition, all coastal development must conform with any state certified areawide water quality management (208) plan. These goals, and the other resources in which there is a national interest which follow in this section, are recognized by the first Basic Coastal Policy which states "Protect and enhance the coastal ecosystem", as well as by other more specific policies. Water quality is addressed by the Location Policies on General Water Areas and Special Areas, by Use Policies on Wastewater Treatment, and by Resources Policies on Soil Erosion, Runoff, Ground and Surface Water Use, Water Quality, and Marine Fish and Fisheries. DEP's Division of Coastal Resources has a close working relationship with DEP's Division of Water Resources. The former has responsibility for the Coastal Zone Management Act in New Jersey and the latter administers New Jersey's participation under the Federal Water Pollution Control Act of 1977, as amended (Clean Water Act). (See Chapter Four).

Air

The New Jersey Coastal Program supports the attainment and maintenance of clean air. The State has considered this national interest through review of the federal Clean Air Act and consultation with the Environmental Protection Agency and the Council on Environmental Quality. A policy on Air in the Resources Policies section of the Coastal Resource and Development Policies requires that all development subject to the Coastal Program must conform with the Clean Air Act, the State Implementation Plan and any other applicable air regulations and standards. DEP's Division of Environmental Quality is responsible for improving and maintaining air quality in New Jersey. (See Chapter Four, Section 7:7E-8.11)

Wetlands

The New Jersey Coastal Program has considered the national interest in wetlands through review of the President's Executive Order 11990 on Protection of Wetlands of May 24, 1977, Section 404 of the Federal Water Pollution Control Act, and the National Environmental Policy Act, as well as through consultation with the Soil Conservation Service, U.S. Army Corps of Engineers, Fish and Wildlife Service, Environmental Protection Agency, National Marine Fisheries Service, and the Council on Environmental Quality.

The major objectives of the national interest in wetlands are:

- To protect basic values of wetlands as habitat and food sources for waterfowl and aquatic life;
- To protect the functioning of wetlands for flood prevention, storm buffering, water supply, and nutrient exchange, and as a recreational resource.
- To regulate alteration of wetlands and the disposal of dredged materials in U.S. waters and associated wetlands.

The New Jersey Coastal Program addresses the national interest in protection of coastal wetlands through their designation as a Geographic Area of Particular Concern. Wetlands are also addressed in a Use Policy on Housing discouraging lagoon development, a Resource Policy on "Buffers" which states that adjacent development must allow a buffer to protect sensitive areas such as wetlands, and the Location Policy which specifically identifies coastal and freshwater wetlands as areas where development proposals must meet very high standards. The use of New Jersey's Wetlands Act of 1970 in the Coastal Program will allow enforcement of these policies. In New Jersey, considerable wetlands acreage was being lost to development each year until the Wetlands Act was passed. (See Chapter Four, Sections 7:7E-3.20, 7:7E-7.2 and 7:7E-8.15).

Endangered Flora and Fauna, and Wildlife Refuges and Reserves

New Jersey has addressed the national interest in endangered flora and fauna, and wildlife refuges and reserves by reviewing the Endangered Species Act of 1973, and the Federal Aid to Wildlife Restoration Act of 1938 (Pittman-Robinson), and by seeking the advice and comments of the U.S. Forest Service, Environmental Protection Agency, Fish and Wildlife Service and the Council on Environmental Quality.

The major objectives of the national interest in endangered flora and fauna are:

- To provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved.
- To provide a program for the conservation of such endangered and threatened species.
- To take steps as may be appropriate to achieve the purposes of treaties and conventions in which the United States has pledged its support for the worldwide conservation of wild flora and fauna.

The national importance of wildlife is addressed in the Coastal Program by the Special Areas Policies on "White Cedar Stands", "Endangered or Threatened Wildlife or Vegetation Species Habitats" and "Critical Wildlife Habitats" and by Resource Policies on "Vegetation", "Important Wildlife Habitat", and "Buffers" which state that development must protect and preserve vegetation and wildlife by use of buffers and other techniques to the maximum extent practicable. The Coastal Program also discourages development of sites with endangered species. (See Chapter Four, Sections 7:7E-3.33, 7:7E-3.34, 7:7E-8.9, 7:7E-8.10 and 7:7E-8.15) New Jersey has four National Wildlife Refuges located on excluded federal land in the coastal zone. In addition, the State operates several fish and wildlife management areas within the coastal zone.

Living Marine Resources

In determining the national interest in living marine resources, the following documents, specific legislation, and agencies were consulted:

- Fishery Conservation and Management Act of 1976.
- A Compilation of Federal Laws relating to Conservation and Development of our Nation's Fish and Wildlife Resources, Environmental Quality, and Oceanography. The Library of Congress, Congressional Research Service. January, 1975.
- Living Coastal Resources; A Marine Fisheries Program for the Nation. U.S. Department of Commerce/NOAA, National Marine Fisheries Service and U.S. Department of Interior, Fish and Wildlife Service; July, 1976.
- U.S. Fish and Wildlife Service.
- U.S. Army Corps of Engineers
- National Marine Fisheries Service
- Marine Mammal Commission

The major objectives of the national interest in living marine resources are expressed as follows:

- To conserve, enhance and manage in a rational manner commercial fishing which constitutes a major source of employment and contributes significantly to the food supply, economy and health of the nation.
- To strengthen the contribution of marine resources to recreation and other social needs.
- To develop and protect all species of wildlife and their habitat, and to control losses by damage to habitat areas through coordination with other features of water resource development programs.

The key features of the national interest in living marine resources are, therefore:

- emphasis on commercial fisheries
- relationship of marine resources to recreation
- protection of marine resources
- protection of wildlife habitat

The Coastal Program addresses these issues in the Location Policies and Resource Policies in Chapter Four. Development will be discouraged in shellfish beds, submerged vegetation, surf clam areas, navigation channels, finfish migration pathways, and prime fishing areas. In addition, development will be required to cause minimal feasible interference with marine fish and fisheries. In addition to continuing coordination with the appropriate federal agencies, DEP is working with NOAA to identify and plan for the management of marine sanctuaries in the state.

Floodplain and Erosion Hazard Areas

New Jersey has considered the national interest in floodplains and erosion hazard areas through review of the Flood Disaster Protection Act (P.L. 93-234), National Flood Insurance Act of 1968 and the President's Executive Order of May 24, 1977 on Floodplain Management, and through consultation with the Federal Insurance Administration, U.S. Army Corps of Engineers, U.S. Geological Survey, Federal Disaster Assistance Administration and the National Heritage Program. The major objectives of the national interest in these areas is to avoid the long and short term adverse impacts associated with the occupancy and modification of floodplains and high risk erosion areas.

The national interest in flood control is reflected in the Coastal Program's designation of floodplains as a Special Area in the Location Policies in Chapter Four, Section 7:7E-3.21. Floodplain protection is also addressed by the Resource Policy on Flood Hazard Areas. (See Chapter Four, Section 7:7E-8.23) Development in High Risk Beach Erosion Areas is addressed in Chapter Four, Section 7:7E-3.19.

Barrier Islands

The national interest in barrier islands was considered through consultation of the same sources noted under "Floodplain and Erosion Hazard Areas" as well as participation in the efforts of the national Barrier Island Task Force. This national interest is directly reflected in the Coastal Program through the Special Areas designated as the Beach and Dune System and the Central Barrier Island Corridor which restrict or prohibit major development, and through the Use Policy on "Coastal Engineering" which gives preference to non-structural over structural approaches to shore protection. The protection of barrier islands is particularly crucial in New Jersey after the damaging winter storms of 1977-78. (See Chapter Four, Sections 7:7E-3.19, 7:7E-3.22, and 7:7E-7.11)

Historic Sites and Districts and Areas of Unique Cultural Significance

The national interest in historic sites and districts and areas of unique cultural significance, including shipwrecks, was considered through review of the Archaeological and Historical Preservation Act of 1974 (P.L. 93-291) and National Historic Preservation Act of 1966, and consultation with the National Park Service, the Heritage Conservation and Recreation Service and the Advisory Council on Historic Preservation.

The major objectives of the national, state and local interests in archaeological historic sites and districts are:

- To afford protection from adverse impacts to designated historic and archaeological sites.
- To consider cultural resources in assessing the environmental impacts of proposed activities.

The New Jersey Coastal Program recognizes the national interest of preserving representative and unique archaeological, historical and cultural resources of the coast. The Program reflects this recognition, through the designation of Historic and Archaeological Resource sites as a Special Area which encourages the protection of historic and cultural resources. (See Chapter Four, Sections 7:7E-3.13, 7:7E-3.31 and 7:7E-8.18)

Minerals

New Jersey has considered the national interest in minerals through consultation with the U.S. Bureau of Mines and the U.S. Geological Survey. Although mining is not a major industry in New Jersey, its national importance is reflected by the Use Policy on "Mining" which spells out conditions on the acceptability of mining. DEP will continue to coordinate with U.S. Bureau of Mines on the Coastal Management Program. (See Chapter Four, Section 7:7E-7.8)

Prime Agricultural Lands

New Jersey has considered the national interest in agriculture through consultation with the Soil Conservation Service and the Fish and Wildlife Service. The national importance of prime and unique agricultural lands is reflected in the Coastal Program by the Location Policy on Farmland Conservation Areas in Chapter Four which discourages development of prime farmland unless continued farming is infeasible or incompatible with surrounding land uses. The Location Policies also consider soil fertility as an important variable in determining the acceptability for development of a site, and there is a Resource Policy to protect fertile soils. (See Chapter Four, Sections 7:7E-3.28 and 7:7E-8.22)

Forests

New Jersey has considered the national interest in forests through consultation with the National Forest Service. The state's major forest -- the Pine Barrens -- is located in the south-central portion of New Jersey. A small part of this area overlaps with the coastal zone. The Coastal Program, through a Pinelands Special Area Policy, General Land Area Policies and the General Location Policy on Secondary Impacts, encourages the protection of the Pine Barrens and the State's other prime forest areas. (See Chapter Four, Sections 7:7E-3.39, 7:7E-5.3 and 7:7E-6.3)

REGIONAL BENEFIT DECISIONS

The federal Coastal Zone Management Act requires that states provide a "method of assuring that local land and water use regulations within the coastal zone do not unreasonably restrict or exclude land and water uses of regional benefit." (Subsection 306(e)(2)). This method should include: (1) a definition of what constitutes unreasonable restrictions or exclusions, and (2) an identification of the methods that will be employed to isnure that such unreasonable restrictions or exclusions do not occur (15 CFR 923.12, comment).

The comment to this regulation describes "use of regional benefit" as those which have a direct and significant impact on coastal waters and also affect more than one unit of local, county, or intrastate government. Using these criteria, the comment lists electric utilities, regional waste treatment plants, multi-county garbage disposal sites or landfills, state highways, or multi-county parks and beaches as uses of regional benefit.

New Jersey agrees with both the criteria and the list as an accurate description of uses that are of regional benefit, with the addition of beaches located entirely within one municipality. Many, if not most of the visitors to New Jersey's beaches come from non-coastal communities, yet many of these beaches lie entirely within one municipality. The beaches offer important recreational opportunities for a wide geographic area, and are therefore considered as uses of regional benefit.

In New Jersey, therefore, uses of regional benefit include energy generating and distribution facilities operated by public utilities (not refineries and tank farms), water and sewer facilities, solid waste collection and disposal systems, roads and highways, ports, parks, housing for people with low or moderate incomes, facilities necessary for state or national defense, and the use of wetlands and wet beach areas.

Three methods exist through which local governments are prevented from unreasonably excluding these uses. The most significant of these is the State's power to overrule local decisions which seek to deny approval to any public utility or solid waste facility.

The Board of Public Utilities in the Department of Energy has broad regulatory authority over public utilities, which comprise the bulk of the defined uses of regional benefit. This authority includes the power to supercede local zoning laws when necessary if the service conveniences the welfare of the public (N.J.S.A. 40:55D-19). The standard of necessity has been defined by the courts as that service "reasonably requisite to service public convenience" (Petition of Public Service Coordination Transport, 103 N.J. Super 505, 1968). The term public utility includes roads, street railway, traction railway, autobus, canal, express subway, pipeline, gas, electric light, heat power, water, oil, sewer, solid waste collection, solid waste disposal, telephone or telegraphic system, or plant or equipment for public use (N.J.S.A. 48:2-13). This override authority can be applied only to projects that have received all required State approvals.

The authority of the Board of Public Utilities to override local siting decisions can be invoked at the request of the aggrieved utility whenever "reasonably requisite to service public convenience". This is an effective method of protecting uses of regional benefit from reasonable restriction or exclusion by local governments. The agreement between NJDEP and NJDOE on the energy siting policies and processes for resolving conflicts ensures that the coastal management program's policies concerning uses of regional benefit will be recognized by the Board, because the NJDOE intervention authority may be used in proceedings before the Board.

Under the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.), DEP also has authority to override the local exclusion of a solid waste facility.

In addition to these authorities, the State of New Jersey has the power of eminent domain for any facilities necessary for state or national defense (N.J.S.A. 20:1-3.1), airports (N.J.S.A. 20:1-3.1), State highways (N.J.S.A. 27:7-44.6) and parks and open space under the Green Acres Program (N.J.S.A. 13:8A-24).

Third, recent judicial rulings have held that low and moderate income housing is a use of regional benefit which municipalities must recognize through their zoning authority. The New Jersey Supreme Court has established in Southern Burlington County NAACP v. Township of Mt. Laurel, 67 N.J. 151 (1975) that municipalities must "presumptively make realistically possible an appropriate variety and choice of housing ... at least to the extent of the municipality's fair share of the present and prospective regional need ...". The State is developing guidelines to implement this ruling. A developer whose application is denied local permits to build such housing has legal standing to appeal the denial on the grounds that the municipality has not provided its fair share of low cost housing.

GEOGRAPHIC AREAS OF PARTICULAR CONCERN

Section 305 (b)(3) of the federal Coastal Zone Management Act requires that the state provide "an inventory and designation of areas of particular concern within the coastal zone." A draft paper prepared by NOAA-OCZM (May 24, 1976) indicates that the designation must lead to "specific recognition and action within the framework of the management program".

New Jersey has designated Geographic Areas of Particular Concern (GAPC) on the basis of the following three criteria:

A. Regional or state-wide significance of the area;

B. Need for special attention based on threat to the preservation of the area or obstacles to its development consistent with the policies of the New Jersey Coastal Program, and

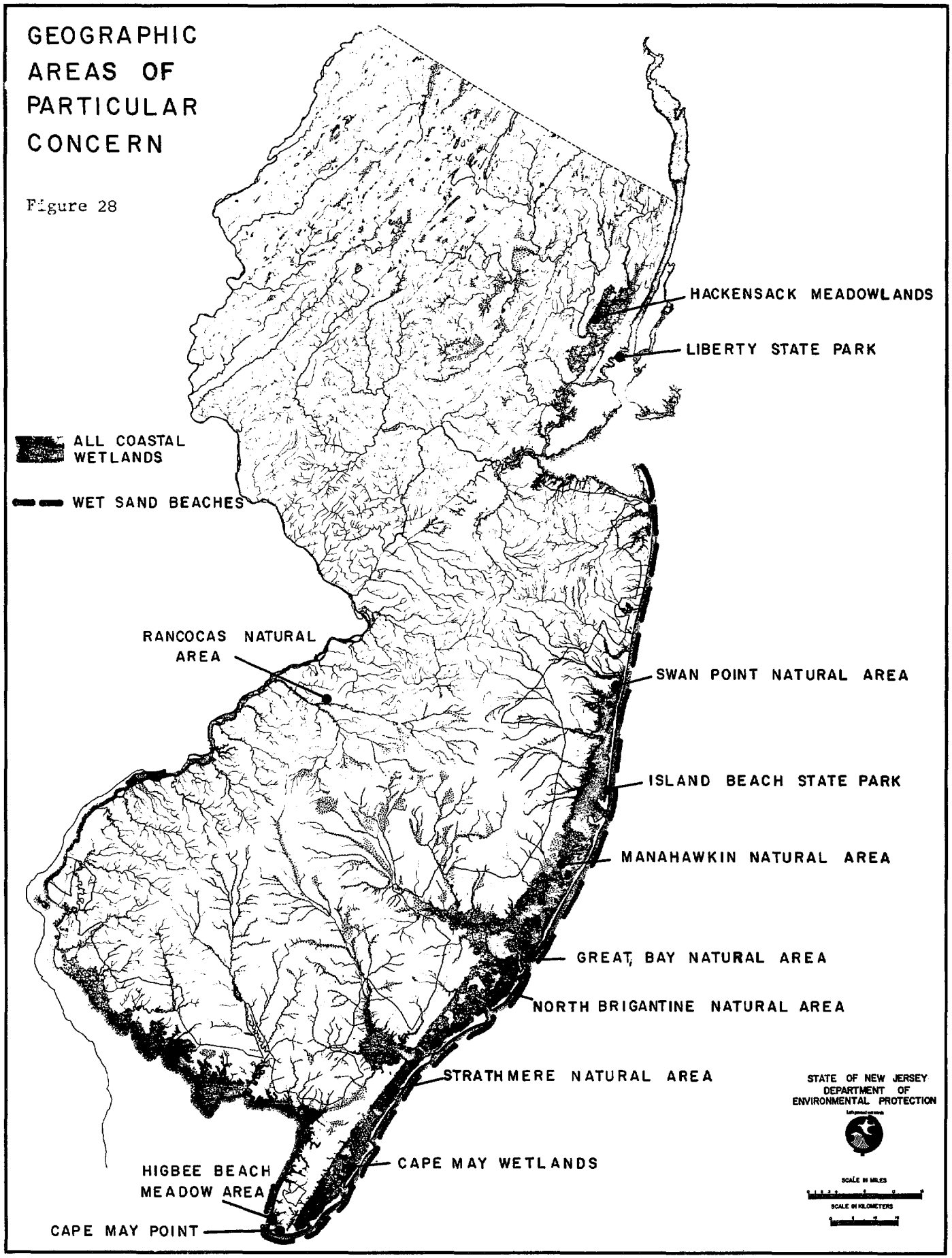
C. Availability of State legal authorities to promote desired uses of the areas.

Using these criteria, New Jersey proposes two generic GAPC's and thirteen specific GAPC's (see Figure 28). Clearly, many other areas in the coastal zone are important, but designation of them as GAPC's would not be meaningful or feasible, due to criterion C above. The New Jersey Coastal Management Program, therefore, relies primarily upon the Coastal Resource and Development Policies in Chapter Four and the Management System in Chapter Three to promote the wise use of each site in the Coastal Zone.

When DEP asked the public in 1977 to nominate areas of particular concern, virtually every possible site in the potential coastal zone was mentioned. The Department used the public nominations to confirm, develop, and refine the Coastal Resource and Development Policies. In addition, the Department distributed a report entitled Nominated Areas of Public Concern in the New Jersey Coastal Zone (December 1977) to other State, municipal, county and federal agencies. The Department prepared a supplement to this report describing how each nominated area was addressed by the Coastal Management Program - Bay and Ocean Shore Segment. Copies of both the report and the supplement Nominated Areas of Public Concern and the New Jersey Coastal Management Program - Bay and Ocean Shore Segment (December 1978) are available from DEP.

New Jersey's Geographic Areas of Particular Concern are the following: all coastal wetlands, Higbee Beach, Pond Creek Meadow Area, wet sand beaches, ten state owned natural areas, and the Hackensack Meadowlands. Because management of the Meadowlands is more complex than management of the other areas, it is discussed under a separate heading at the end of this Section.

1. All Coastal Wetlands - Wetlands are valuable to New Jersey because they serve as natural flood controls, water purifiers, and essential nurseries for marine creatures. (See also the rationale for the Wetlands policies in Chapter Three). The threat to wetlands posed by development was recognized by the Governor and Legislature in 1970 when they enacted the Wetlands Act. This Act has effectively reduced the average annual loss of wetlands to development from 1900 acres to 57 acres, with only 0.7 acres destroyed in 1979. Under the Coastal Program, New Jersey will continue to use the Wetlands Act to preserve coastal wetlands.


GEOGRAPHIC AREAS OF PARTICULAR CONCERN
Figure 28
ALL COASTAL WETLANDS
WET SAND BEACHES
HACKENSACK MEADOWLANDS
LIBERTY STATE PARK
RANCOCAS NATURAL AREA
SWAN POINT NATURAL AREA
ISLAND BEACH STATE PARK
MANAHAWKIN NATURAL AREA
GREAT BAY NATURAL AREA
NORTH BRIGANTINE NATURAL AREA
STRATHMERE NATURAL AREA
CAPE MAY WETLANDS
HIGBEE BEACH MEADOW AREA
CAPE MAY POINT
STATE OF NEW JERSEY
DEPARTMENT OF
ENVIRONMENTAL PROTECTION
SCALE IN MILES
SCALE IN KILOMETERS

The priority of uses in coastal wetlands is as follows:

(a) Open Space (No development or disturbance).

(b) Development which (1) requires water access or is water oriented as a central purpose of the basic function of the activity, (2) has no prudent or feasible alternative on a non-wetland site, (3) will result in minimum feasible alteration or impairment of natural tidal circulation, and (4) will result in minimum feasible alteration or impairment of the natural contour of the natural vegetation of the wetlands.

(c) Other development has lowest priority.

2. Higbee Beach - Pond Creek Meadow Area - This unique area of 424 acres, in Lower Township in Cape May, includes five mini-ecosystems of bayshore beaches, dunes, wooded uplands, fields, and freshwater and tidal meadows (Figure 29). The area is valued by residents of, and visitors to southern New Jersey as a place to sunbathe and swim, and to observe wildlife. Over 200 species of birds have been recorded in the area. The area has been threatened by repeated efforts to build a campground within it. New Jersey has used the CAFRA permit program and funding from the Green Acres Program and the Endangered Species Act administered by the Division of Fish, Game and Shellfisheries described in Chapter Three, to protect the area exclusively for recreation and wildlife.

The set of uses with priority in the Higbee Beach-Pond Creek Area includes only recreation compatible with protection of the area's wildlife. All other uses have lowest priority.

3. Wet Sand Beaches - New Jersey's 126 miles of ocean shorefront form a natural resource which is valued directly by residents and indirectly as the mainstay of the state's tourism industry. The wet sand beach area seaward of the mean high water line is known as Public Trust Land and is a Geographic Area of Particular Concern. This area is owned by the State of New Jersey unless the State has conveyed a "riparian grant" for the tide-flowed land. In all parts of the area, whether or not it is owned by the State, public access must be provided for navigation, commerce and recreation, and any new development requires a Waterfront Development Permit, as described in Chapter Two.

The priority of uses in the wet sand beaches areas is:

(a) recreation

(b) navigation and commerce

(c) development with no prudent or feasible location on a non-beach (wet sand) location

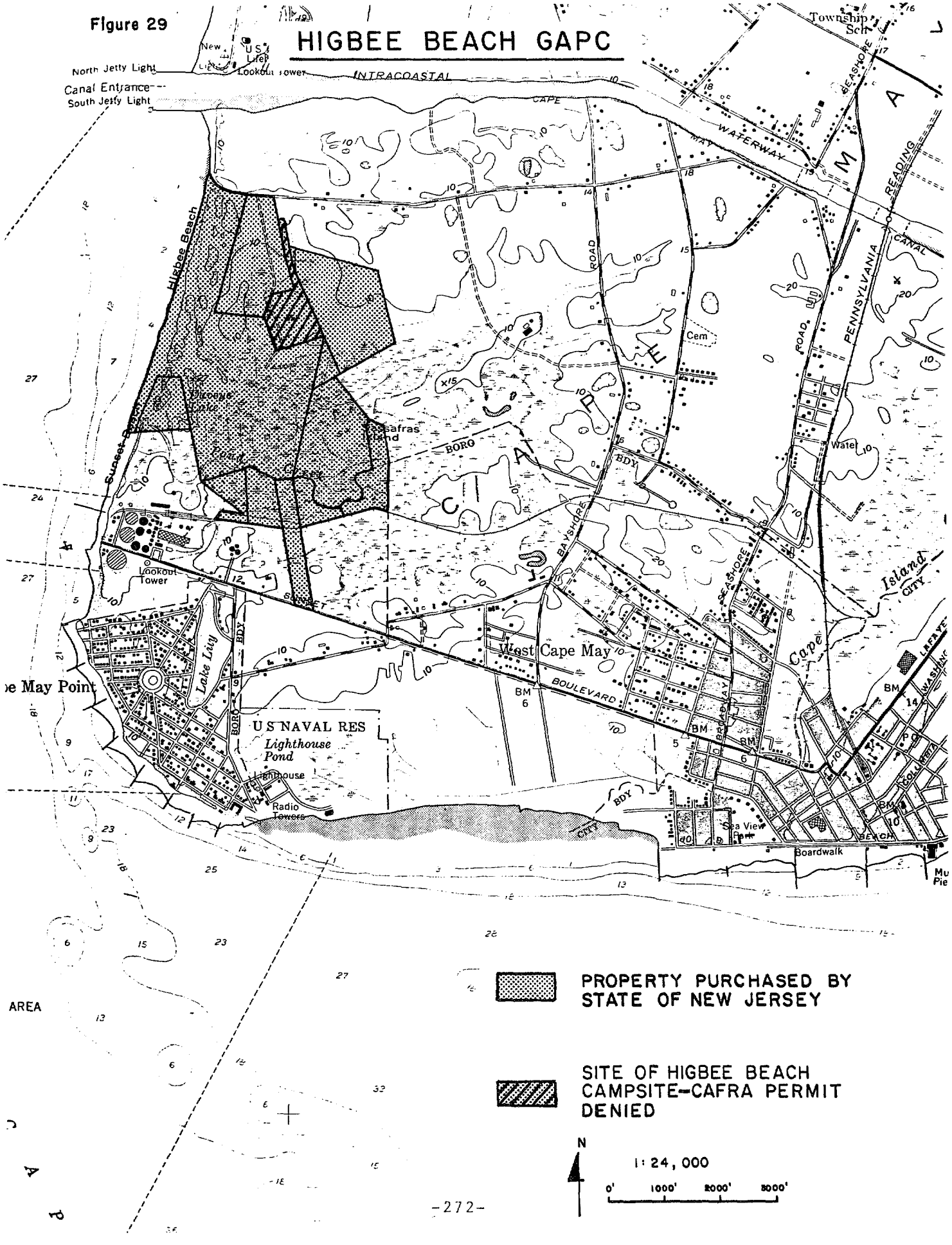
(d) all other uses have lowest priority.

Natural Areas

In addition to the three GAPCs listed above and the Hackensack Meadowlands, ten specific state-owned areas in the coastal zone have been labelled "natural areas" under the Natural Areas System Act of 1976, N.J.S.A. 13:1B-15.12(a) et seq., and its regulations (N.J.A.C. 7:2-11.1 et seq.). A natural area is defined as "an

Figure 29

HIGBEE BEACH GAPC



PROPERTY PURCHASED BY STATE OF NEW JERSEY

SITE OF HIGBEE BEACH CAMPSITE–CAFRA PERMIT DENIED

N

1:24,000

0' 1000' 2000' 3000'

area of land or water which has retained its natural character, although not necessarily completely undisturbed, or having rare or vanishing species of plant and animal life or have similar features of interest which are worthy of preservation for the use of present and future residents of the State." N.J.A.C. 7:2-11.2(A).

The Department of Environmental Protection, Green Acres Program, on July 13, 1978, designated 38 State owned areas to be preserved and managed as natural environments. The ten areas which are in the coastal zone are also designated GAPCs under the federal Coastal Zone Management Act. Two of the areas are parts of Island Beach State Park, an oceanfront natural barrier island.

The Natural Areas system regulations divide the areas into three types for management purposes (7:2-11.5.B):

> Class I Natural Areas: (a) The Department shall manage such areas for ecological research and study. When compatible with other uses they may be used for guided nature tours; and (b) All of Class I natural areas shall be restricted to entry by permit or with a designated Department employee.
>
> Class II Natural Areas: (a) The Department shall manage Class II areas for the specific purpose of interpretation of natural processes, flora and fauna of this State. Class II areas may be used for ecological research and study; and (b) Use of Class II areas shall be limited to interpretive purposes or shall be restricted to entry by permit for research purposes.
>
> Class III Natural Areas: (a) The Department shall manage Class III areas for recreational use, interpretive study, wildlife propagation, and succession control; and (b) Use of Class III shall be limited to interpretative purposes, swimming, canoeing, rowboating, hiking, trailside camping, and recreational hunting, fishing and trapping as provided in the natural areas system rules and regulations.

The ten geographic areas of particular concern in the coastal zone and descriptions from the Natural Areas regulations are listed below:

4. Cape May Point Natural Area: An area of 100 acres in Cape May State Park, it demonstrates typical southern New Jersey sand dune and freshwater marsh habitats, and is a bird sanctuary. The beach area is classified type III, the rest type II.

5. Cape May Wetlands Natural Area: An area of 2,000 acres acquired through the Green Acres program, it demonstrates the ecosystem complex of saltmarsh habitats, and is a sanctuary for colonial nesting and migratory birds. It is classified type III.

6. Strathmere Natural Area, Corson Inlet, Cape May County. An area of 80 acres, it demonstrates dune habitat and the erosion effect of tidal movements confluent with outwash currents. Type III.

7. North Brigantine Natural Area: An area of 968 acres acquired with Green Acres funds and adjoining the Brigantine National Wildlife Refuge, it demonstrates both sand dune and salt marsh habitats and serves as a refuge for coastal birds. Beach area is type III, remainder type II.

8. Great Bay Natural Area, Bass River, Ocean County. An area of 330 acres, it is a salt marsh habitat and an excellent example of New Jersey Bay ecosystem. It is a highly productive oyster area, and is a resting area for coastal birds. Type I.

9. Island Beach State Park: The New Jersey State Legislature has statutorily reocgnized that Island Beach State Park is one of the few natural expanses of barrier beach remaining along the eastern edge of North America, that Island Beach State Park is highly valued for its topography, flora and fauna, and that Island Beach State Park serves the citizens of the State as a unique recreational and educational resource (N.J.S.A. 13:6-2 et seq.). This Act, requiring the park's continued preservation, further provides that the Park "shall be preserved, maintained and improved in such a manner as the Division of Parks and Forestry in the Department of Environmental Protection determines will best perpetuate the park's present physical state".

Through State ownership of Island Beach State Park and the terms of the law, New Jersey will manage the entire Park as a Geographic Area of Particular Concern. In addition, two parts of the park are designated "Natural Areas" under the Natural Areas System Act of 1976. Permissible uses of these areas are defined more specifically below:

(a) Island Beach Research Area and Wildlife Sanctuary: An area of 1,200 acres encompassing the width of Island Beach State Park and running north for 3.3 miles, it demonstrates a sand dune habitat, it is a wildlife sanctuary, and will serve as a research area. Beach area type III, remainder type II.

(b) Island Beach Natural Area: An area of 1,000 acres of the State park, encompassing its width and running 3.3. miles south (excepting maintenance area and offical residence), it demonstrates dune habitat and is a botanical preserve. Beach area type III, remainder type II.

10. Swan Point Natural Area, Brick Township, Ocean County: An area of 104 acres acquired through the Green Acres program, it demonstrates salt marsh habitat, and is a part of the Barnegat Bay ecosystem. Type II.

11. Manahawkin Natural Area: An area of 64 acres and a national natural landmark, it demonstrates a mature bottomland hardwood forest. Type III.

12. Liberty Park Natural Area: An area of 60 acres which is included within the master plan for Liberty Park, it demonstrates salt-marsh habitat for a variety of water fowl. It is a valuable study area for tolerance to urban encoroachment. Type I.

13. Rancocas Natural Area: An area of 80 acres, located in Westhampton Township, Burlington County, it demonstrates freshwater marsh and southern flood plain habitats. The north Branch of the Rancocas Creek follows along the southern and eastern boundaries of the area and the Timbuctoo Feeder of the North Branch follows the western boundary. To the north and west of the natural area is additional land belonging to Rancocas State Park. Type II.

(Maps of designated natural areas are available from the Green Acres Program, New Jersey, DEP, Box 1389, Trenton, N.J. 08625)

14. THE HACKENSACK MEADOWLANDS DISTRICT

The Hackensack Meadowlands District is the fourteenth geographic area of particular concern and is proposed as a distinct unit of the Coastal Zone with its own management system and policies. The District consists of uplands and coastal wetlands interlaced by tidal rivers and streams. Inclusion of at least part of the District within the New Jersey Coastal Zone is, therefore, required by the federal Coastal Zone Management Act, which states that a coastal zone must include coastal waters and adjacent shorelands with a direct and significant impact on the waters, transitional and intertidal areas, salt marshes, wetlands and beaches. The District was defined by the State Legislature in 1968 in the Hackensack Meadowland Reclamation and Development Act, which established the three goals of orderly development, solid waste management and environmental protection in the District. This occurred five years before the Legislature addressed the issue of development in the Raritan and Delaware Bays and Atlantic Ocean parts of the Coastal Zone through CAFRA, and four years before the enactment of the federal Coastal Zone Management Act.

New Jersey is proposing that the Hackensack Meadowlands District be treated differently than other parts of the coastal zone. This is because the District is the only part of the proposed coastal zone, or of the State, in which comprehensive land use decision-making is governed by a powerful regional agency which is part of the State government and has objectives and policies generally compatible with the proposed coastal management program.

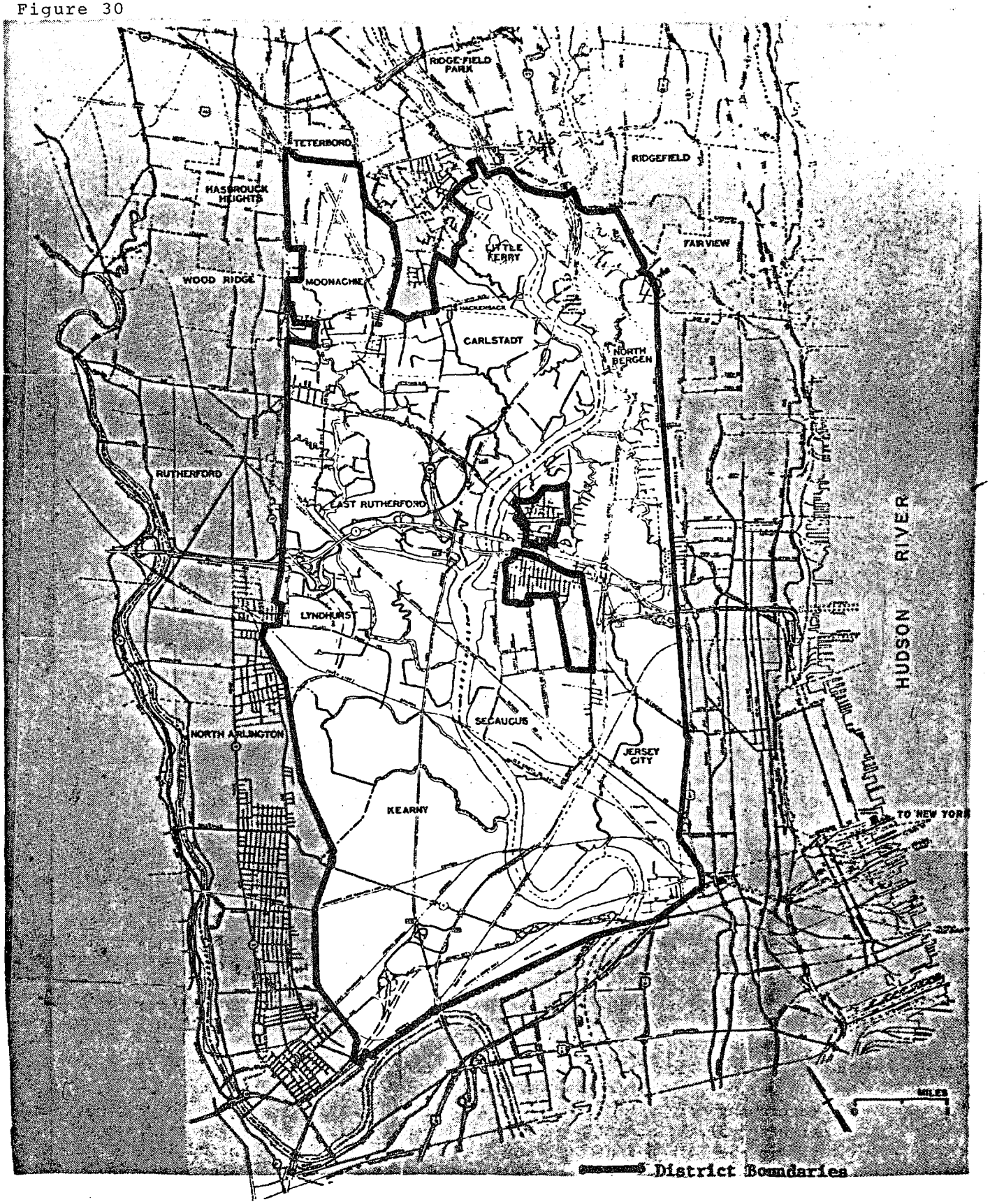
Despite a location six miles from midtown Manhattan, pre-1968 use of the Meadowlands was limited to an unplanned scattering of landfills, warehouses and other uses not requiring dry soils. The region was underutilized, yet the uses present were severely degrading to the potentially valuable wetlands environment. Natural resource management and planned filling for development were both stymied by the division of the 31 square mile meadowlands into fourteen separate municipalities in two counties. Because of the need for central planning direction if the wetlands environment were to be restored, and if the region were to meet its potential as a supplier of jobs and housing, the Legislature recognized the Meadowlands as a unique area where local zoning would have to be superseded by regional controls. The response was the Hackensack Meadowlands Reclamation and Development Act (N.J.S.A. 13:17-1 et seq.), which defined the boundary of the Meadowlands District, and established a management system which led to the adoption of a Master Plan Zoning Ordinance in 1972 and other management plans defining policies for resource management and development. It is this boundary, management system under the direction of the Hackensack Meadowlands Development Commission (HMDC), and policies which the State proposes to adopt as elements of the Coastal Management Program.

The boundary and management system will be discussed first, followed by a discussion of policies for the District and their implications for coastal zone management. Lastly, the proposed relationship between HMDC and the Division of Coastal Resources under an approved coastal management program will be described.

Boundary

The boundary of the Hackensack Meadowlands District of the Coastal Zone is depicted in Figure 30. In general, the District extends to the first major road or railroad upland of the tidally influenced meadowlands. The area of the district is

Figure 30



HACKENSACK MEADOWLANDS DISTRICT

19,730 acres of which, in 1972, 7,800 acres (40 percent) were developed, between 6,200 and 7,500 acres (31-38 percent) were vegetated coastal wetlands, and 1,400 acres (7 percent) were tidal waters.

Management System

The Hackensack Meadowlands Reclamation and Development Act established the Hackensack Meadowlands Development Commission (HMDC) as a political subdivision of the State, in but not of, the Department of Community Affairs. Among the Commission's authorities are the power to issue bonds or notes, and to acquire or lease lands and to exercise the power of eminent domain; the power to reclaim, develop, redevelop and improve the land in its district; the power to recover the cost of improvement by special assessments based on the resultant increase in property values; the power to establish an inter-municipal tax sharing formula so that all municipalities will share equitably in the financial benefits of new Meadowlands development; and the powers to adopt and implement a master plan for the physical development of the District, to adopt and enforce codes and standards to implement the plan, and to review and regulate plans for any subdivision or development within the District. The HMDC is also both empowered and required to provide facilities for the disposal of the same large quantities of solid waste from within the State which was being deposited as of January, 1969.

The HMDC consists of seven members, one of whom is the Commissioner of the Department of Community Affairs or an alternate. The other six members are appointed by the Governor subject to the requirement that two be residents of Bergen County municipalities within the District, two be residents of Hudson County municipalities within the District, and the remaining two consist of one resident of Hudson County and one resident of Bergen County. Four members of the Commission constitute a quorum and the Commission may exercise its power through the affirmative vote of a majority.

The HMDC is provided with technical support by a twenty-three member professional staff headed by an executive director. The executive staff is a multidisciplinary team composed of a four member administrative branch, a thirteen member engineering branch and a six member environmental branch.

The legislation creating the HMDC also created a Hackensack Meadowlands Municipal Committee consisting of the Mayor or elected chief executive of each constituent municipality of the District. The HMDC must submit the District master plan and amendments thereto, development and redevelopment plans, improvement plans, and codes and standards to the Committee for its review. The HMDC may not take final action on any proposal formally rejected by the Committee, except by a vote of 5/7 of the full membership. A public hearing is also required before any change may be made to the Master Plan.

To insure that implementation of the master plan will not only balance uses, but will also preserve the most valuable wetlands, share the fiscal benefits of the plan among all the 14 constitutent municipalities, and, most importantly, put an end to pollution so that the Hackensack Estuary will once again become an attractive place to both people and wildlife, a system of interlocking administrative tools were written.

The Master Plan Zoning Ordinance (1972; N.J.A.C. 19:4-1) delineates what, where, and how development may take place.* The accompanying Open Space Map (1972) specifies which areas are to be left as marshland preservation and, which are to be parkland, and identifies the water courses for special protection, while the Wetlands Order (1972) defines the manner in which those wetlands will be respected. Since most of the Hackensack Meadowlands District is privately owned, the Open Space Plan assembles a number of interdependent techniques -- zoning, tax sharing, riparian claim, easements, and cluster principle planning -- to maximize open space preservation without the infusion of extensive public dollars for purchase. The supporting administrative framework is completed with the Inter-municipal Tax Sharing Formula, the Building Code (1969), the Subdivision Regulations (1969), the Environmental Performance Standards (part of the zoning ordinance), the Socio-Economic/Environmental Impact Assessment Guidelines (1973), and the Ecological and Resource Management Plan (1978).

Construction plans for major or minor subdivisions are reviewed by the Chief Engineer of HMDC for consistency with the Master Plan Zoning Regulations, the HMDC Subdivision Code, Building Code, Foundation Regulations, and the Wetlands Order. If the subdivision is to be built on lands to which the State has a riparian claim, the prospective developer must provide evidence of a riparian grant, lease or license and of a Waterfront Development Permit if applicable. When the complexity of the proposal warrants, the Chief Engineer is assisted in his determination by a member of an Environmental Design Committee, a committee of professionals in the field of environmental and architectural matters appointed by the Commission. A written decision of the Chief Engineer may be appealed by the prospective developer to the HMDC, which can overrule the decision by a majority vote of a panel of at least three Commissioners. The detailed approval process is depicted in Figures 31 and 32.

Variances from HMDC Zoning Regulations are decided by the Executive Director, but full or conditional approval of a variance requires a concurring vote of a majority of Commission members. The Master Plan Zoning Regulations require that six findings be made before a variance can be approved: (1) the variance request is the result of a unique situation of the property in question, (2) granting of the variance will not adversely affect the rights of adjacent property owners or residents, (3) failure to grant the variance will result in exceptional practical difficulties or hardships for the applicant, (4) the variance will not adversely affect the public health, safety, morals, order, convenience, prosperity or general welfare, (5) the variance will not have an adverse environmental impact, and (6) the variance will not substantially impair the intent of the Master Plan Zoning

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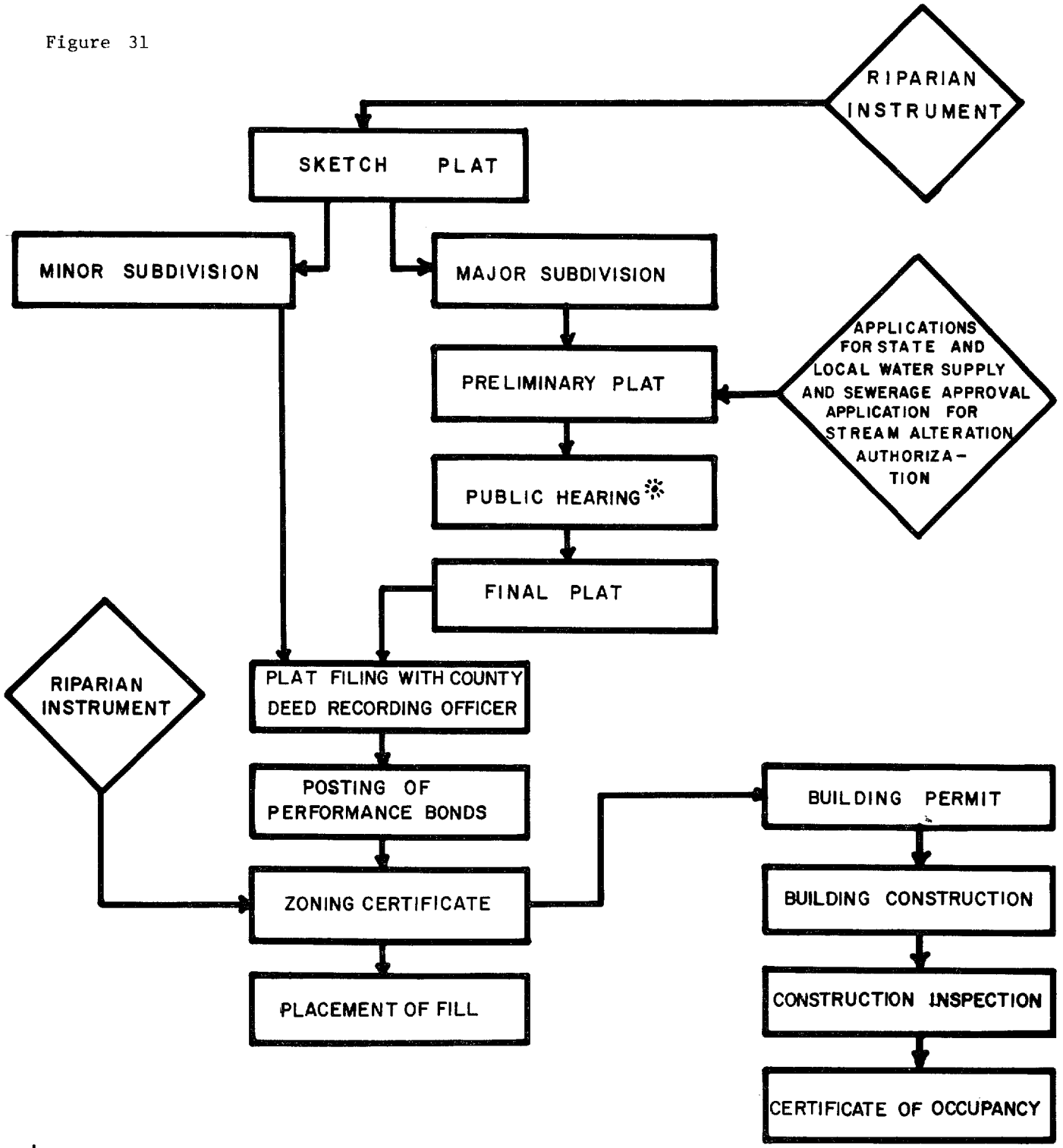
* It should be noted that the Hackensack Meadowlands District designations for wetlands development do not preclude federal agency recommendations and decision contrary to such development. The Hackensack Meadowlands District Plan does not meet the definition of a "Comprehensive Planning Process" under Section 404(b) (1) of the Clean Water Act and associated regulations. Therefore, federal agencies will evaluate proposed projects in the Hackensack Meadowlands District on a case by case basis. Wetland modification will require proper analysis and documentation under Section 404(b) (1) of the Clean Water Act regardless of adopted plans and ordinances. The 404(b) (1) process currently requires four tests to be met and properly documented through a public process including: 1) acceptance of unavoidable impacts; 2) alternatives analysis; 3) demonstration of water dependency; and 4) demonstration of need.

HACKENSACK MEADOWLANDS DEVELOPMENT COMMISSION
APPROVAL PROCESS FOR SUBDIVISION OUTSIDE OF SPA

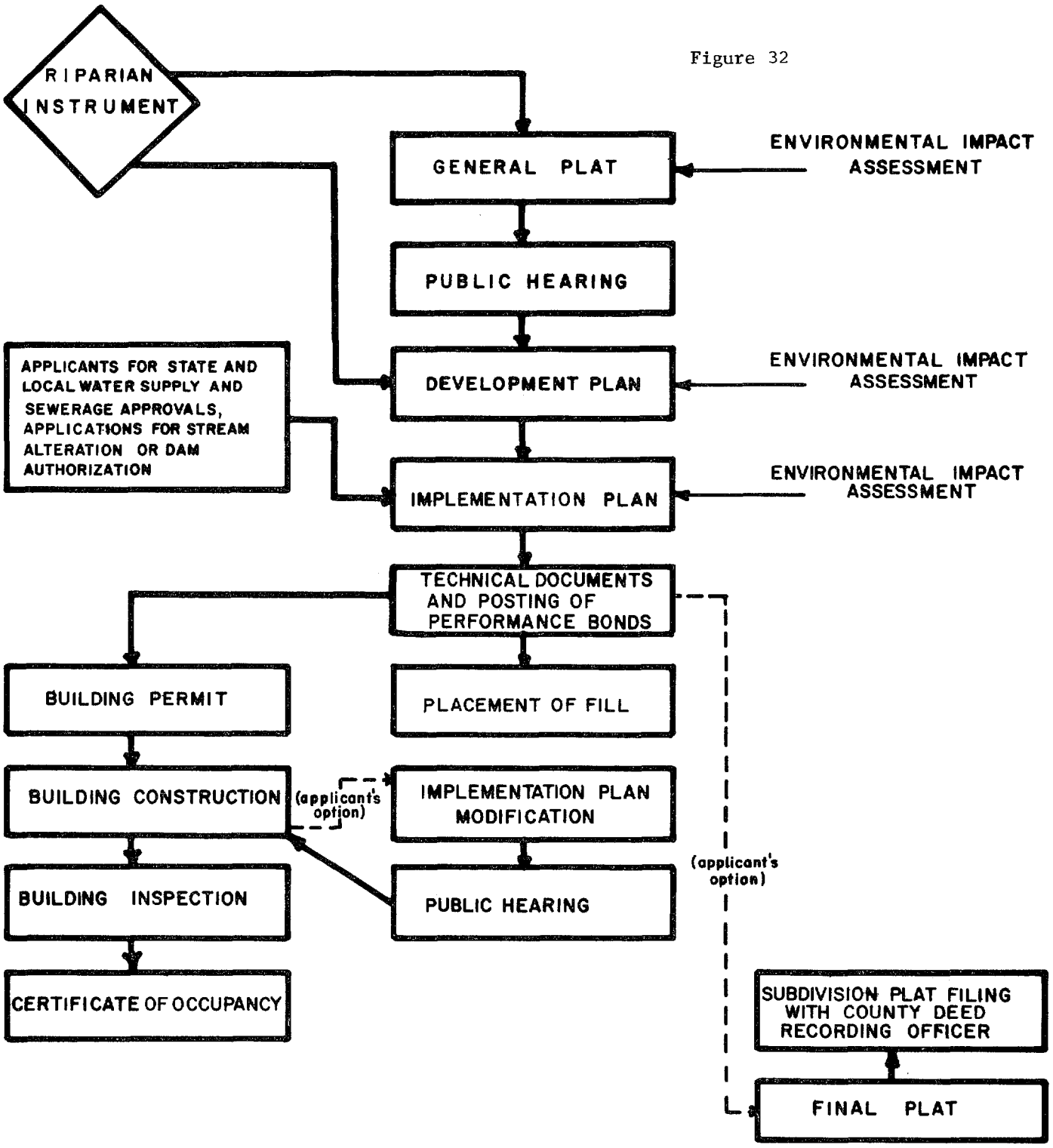
Figure 31



* MANDATORY UNLESS A PUBLIC HEARING ON THE PROPOSAL IS HELD BY THE MUNICIPALITY

HACKENSACK MEADOWLANDS DEVELOPMENT COMMISSION
APPROVAL PROCESS FOR SPA AND PLANNED UNIT DEVELOPMENTS

Figure 32



Regulations or result in substantial detriment of the public good. Appeals from variance disapprovals may be made to the Commission with a majority vote of at least four Commissioners required to overrule the Executive Director. Between 1973, the first full year during which the Master Plan Zoning Regulations were in effect, and 1977, 459 variance decisions were made. Seventy-two decisions involved applications for use variances (variances for a non-permitted use), and 53 (74 percent) of these use variances were approved. The remaining applications sought variances to bulk requirements (variances to bulk standards for a permitted use); 82 percent of these were approved. Public hearings must be held before a decision is made on use variance applications. A hearing is required on bulk variance applications only when requested by a person filing an adverse comment.

Within the Meadowlands District there are twelve Specially Planned Areas (SPA) where planning and development must be carried out in a unified manner for the entire area (100 to 600 acres) consistent with the HMDC planning process and in compliance with the purpose and specific requirements of the individual zones. Six are to be predominantly residential SPAs, of which one, Harmon Cove, is already partially developed. Of the remaining six areas, two are to be transportation centers accommodating major commuter transfer centers and office buildings; three are planned as special use areas for land uses of regional importance; and one is to be the Berry's Creek Center, intended to be a shopping, civic, cultural and transportation center which would serve as the focal point of the Meadowlands.

A developer proposing a project for a Specially Planned Area must control at least 80 percent of the land in the SPA. Approval is granted in a multi-stage process with General, Development, and Implementation Plans as increasingly specific review stages. Such large projects typically are built in sections over a period of years. If a development is staged, all regulations applicable to the entire area must be satisfied by each stage.

First, the applicant must file a General Plan covering the entire Specially Planned Area. An environmental and socio-economic impact assessment in accordance with HMDC guidelines must accompany the applicant's General Plan, and a public hearing on the General Plan must be held. If the SPA is to be built on lands to which the State has a riparian claim, the general plan must be accompanied by evidence of a riparian grant, lease or license, and of a Waterfront Development Permit if applicable. Action, in the form of approval, approval subject to certain conditions, or disapproval must be taken by a Development Board composed of the Executive Director, the Chief Engineer, a Mayor of a constituent municipality selected by the Hackensack Meadowlands Municipal Committee, and two HMDC Commissioners selected by the Commission. In reaching its decision, the Development Board is to consider: (1) the HMDC Zoning Regulations for SPAs, (2) the HMDC Wetlands Order, which describes the various inventory, conservation, and environmental protection steps required within each SPA, (3) the HMDC Open Space Map, and (4) the HMDC Environmental Impact Assessment Guidelines, which are keyed to every step in the planning, construction and operation of SPAs.

Variances from SPA requirements specified in the Master Plan may only be granted if the Development Board finds that the "quality of development in the SPA will not be adversely affected", "the Comprehensive Land Use Plan for the Meadowlands will not be adversely affected", and "the intent and purposes of all the applicable SPA regulations will not be impaired by the variance".

Following approval or conditional approval of a General Plan, the developer must file Development Plans for sections of the SPA in accordance with a timetable given by the Development Board in approving the General Plan. These Development Plans are more detailed plans which are reviewed by the Development Board for compliance with General Plan, with Development Plan requirements, and for any necessary riparian instruments or permits. Additional requirements may be imposed based upon the findings of an Environmental Design Committee. A decision of the Development Board regarding General and Development plans is subject to certification by the full Commission.

Next, the prospective developer must file a highly detailed set of plans called Implementation Plans for each section of the SPA. These Plans must be filed in accordance with a timetable for development specified in the approval of the Development Plans. The General Plan, Development Plans and Implementation Plans must all include an assessment of the environmental impact of the proposed project. The Implementation Plans are reviewed by the Development Board and by the Environmental Design Committee for consistency with the Development Plans as well for consistency with specific Implementation Plan requirements. Should an Implementation Plan be approved in full or with conditions, construction may commence following approval of engineering drawings by the Chief Engineer, approval of a final plat by the Development Board and the municipality, and posting of performance bonds.

HMDC Policies and Their Implications

The Hackensack Meadowlands Reclamation and Development Act directed HMDC to respond to a three-fold mandate:

-- to provide jobs, homes, and open spaces with need calculated at regional scale;

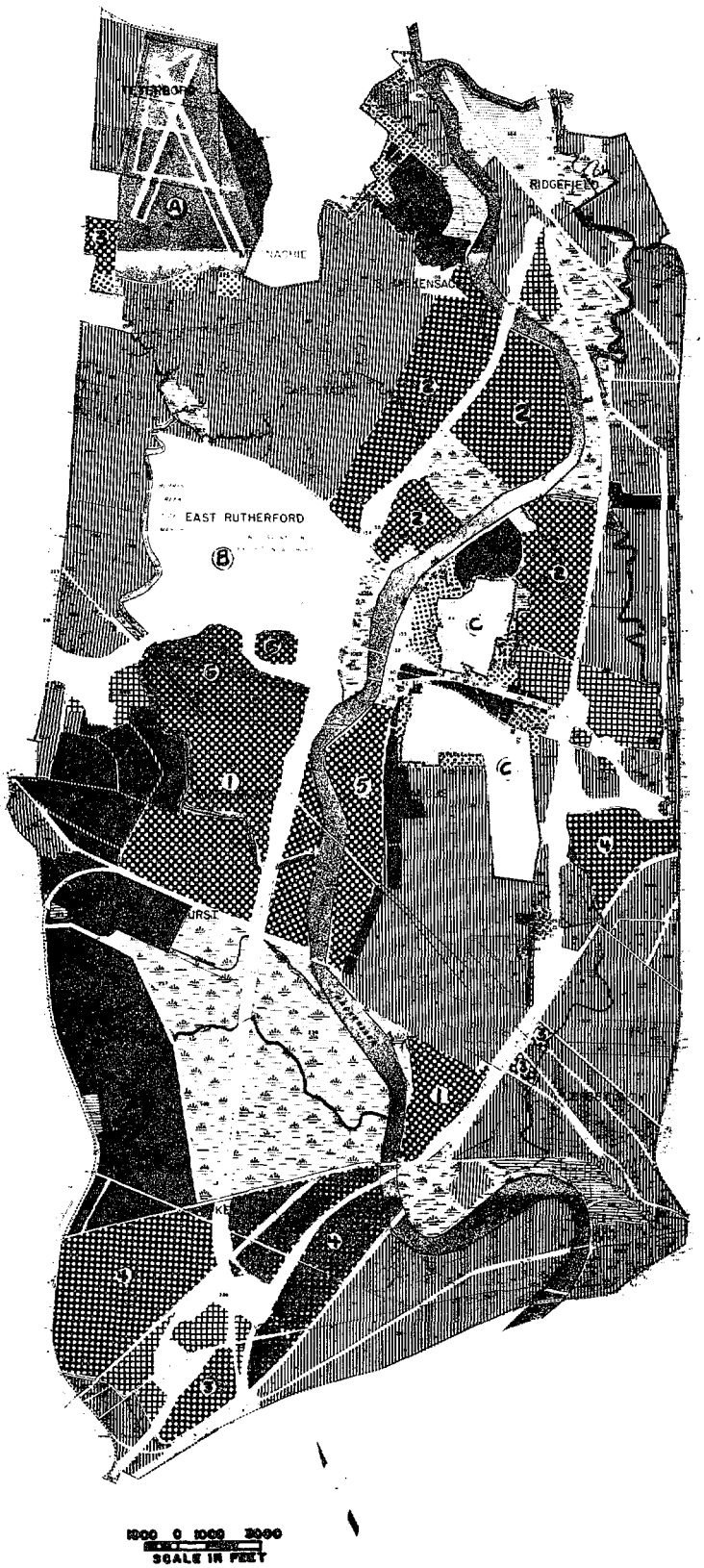
-- to protect the delicate balance of nature and to protect against air and water pollution;

-- to provide for solid waste management in perpetuity for all New Jersey municipalities then dumping in the Meadowlands.

With the goals in mind, the HMDC was directed by the Act to develop, adopt and from time to time amend a master plan for the physical development of the Meadowlands District. The result was a Comprehensive Land Use Plan developed by HMDC staff in December, 1971 and adopted in a revised form by the Commissioners in November, 1972 following a two-year construction moratorium. The Zoning Map has been revised three times since 1972. In April 1977, following public hearings, the zoning classification of thirty-nine parcels of land was changed, and in the Fall of 1978 the classification of another eight parcels was changed. These forty-seven changes involved 2,164 acres of land or eleven percent of the total area of the Meadowlands District. The most significant changes involve the expansion of park and marshland preservation zones to create Richard de Korte State Park, at the expense of a planned research and distribution park and a parkside residential SPA. To compensate the loss of this residential zone, an Island Residential SPA was expanded into an area formerly designated for marshland preservation. Also, one Transprortation Center SPA was replaced by industrial zoning, while a new Special Use SPA was created in an area designated for light industry and marshland preservation (see Figure 33).

Figure 33

HACKENSACK MEADOWLANDS DISTRICT
OFFICIAL ZONING MAP



ZONES

- Marshland Preservation Zone
- Park and Recreation Zone
- Waterfront Recreation Zone
- Low Density Residential Zone
- Commercial Zones
- Research, Industrial and Distribution Zones
- Public Utility Zones
- (A) Airport Facilities
- (B) Sports Complex

SPECIALLY PLANNED AREAS

- (1) Parkside Residential
- (2) Island Residential
- (3) Transportation Center
- (4) Special Use
- (5) Island Residential - Harmon Cove
- (6) Berrys Creek Center

(C) Seacaucus (Outside District)

Proposed December 28, 1971.
Includes all amendments through January 16, 1980.

Table I - Developed Land Uses in Hackensack Meadowlands District (1972)

Transportation	3,393 acres (includes Teterboro Airport)
Industry	2,384 acres
Utilities	786 acres
Commercial	254 acres
Residential	206 acres
Vacant building and buildings under construction	133 acres
Quarry	115 acres
Marinas	42 acres

Source: HMDC: "Open Space for the Hackensack Meadowlands", 1972.

If the Meadowlands Master Plan were to be fully implemented in its present form, the amount of land in developed uses would increase from 8,260 acres in 1972 to 13,410 acres (Figure 34). Most of the increase in developed land would be in the residential Specially Planned Areas, in light industrial, distribution, research and commercial zones, and in the already developed New Jersey Sports Complex.

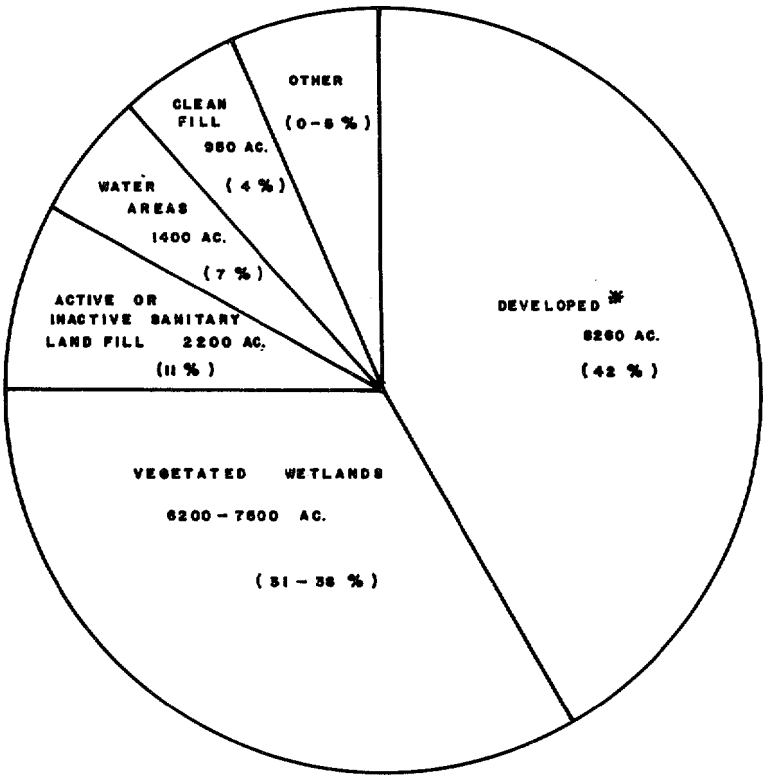
The amount of open space would decline from about 8,000 acres in 1972 (not counting sanitary landfills) to 6,320 acres. This is the maximum amount that the Meadowlands Commission believes can be designated for open space given the Legislative mandate to provide for the orderly development of the District, and the constitutional mandate that the Commission not deprive property owners of the use of their land without compensation. This open space is to be preserved by a combination of techniques including the zoning of publicly owned land for open space use, the purchase of additional public lands, the regulation of a fifty foot wide natural buffer strip along stream corridors, and a requirement that a certain amount of land be preserved as open space in each SPA. This open space requirement ranges from 50 percent in Island Residential Areas to 15 percent in Transportation Centers. Land use and zoning consultants calculated that because of the strong demand for developable land in the Meadowlands Distrct, intensive, planned development of the remainder of the SPAs would allow the landowners a reasonable economic return on their land.

Most of the loss in open space in the District will involve wetlands. In 1972, on the basis of "Wetlands Ecological Value Overlay" maps produced for the purpose of tidelands delineation, DEP estimated there were 6,900 $\pm$ 690 acres of vegetated wetlands in the District. In April 1975, HMDC produced a report entitled "Wetland Bio-Zones of the Hackensack Meadowlands: An Inventory". The report contained a map dated August, 1974 (Figure 35) depicting five wetland biozones: (1) open bay, mud flat, (2) low salt marsh, (3) high salt marsh, (4) reed, cattail, cordgrass marsh, (5) fresh water, diked area. The map indicated that the Meadowlands District contained 5,400 $\pm$ 540 acres of wetlands in 1974. In January, 1979 HMDC calculated that these five wetlands zones totalled only 4,664 acres. The difference between the 1972, 1974 and 1979 figures may be attributed in part to different interpretations of wetland areas and in part to filling, especially for the New Jersey Sports Complex.

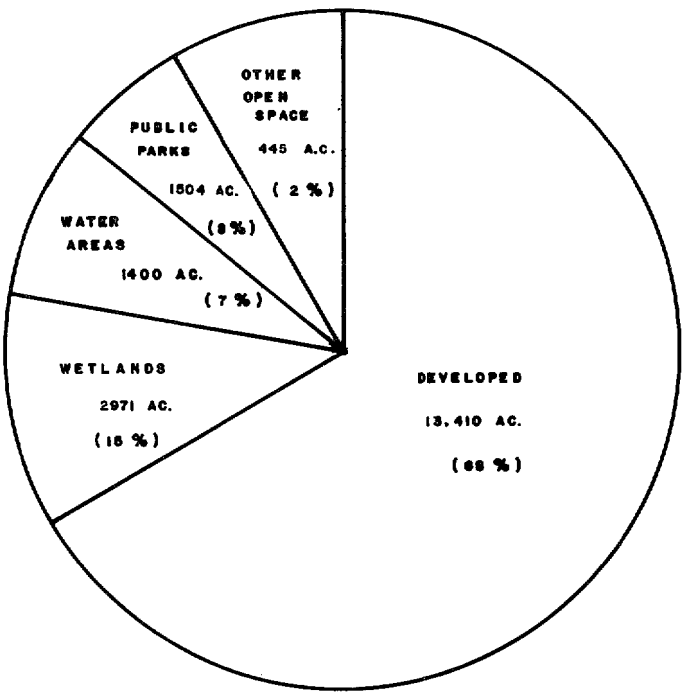
Of the 4,664 acres of wetlands believed to exist in 1979, about 1,000 acres are described as open bay or mud flat. This type of area, although covered by horned pond weed (*Zanichellia pallustris*) and a filamentous green alga (*Stilphora rhizodes*) and above water at low tide, would normally be defined as inter-tidal flat rather than as wetlands. If HMDC's broad definition of wetlands, including

1972 MEADOWLANDS DISTRICT LAND USE

Figure 34

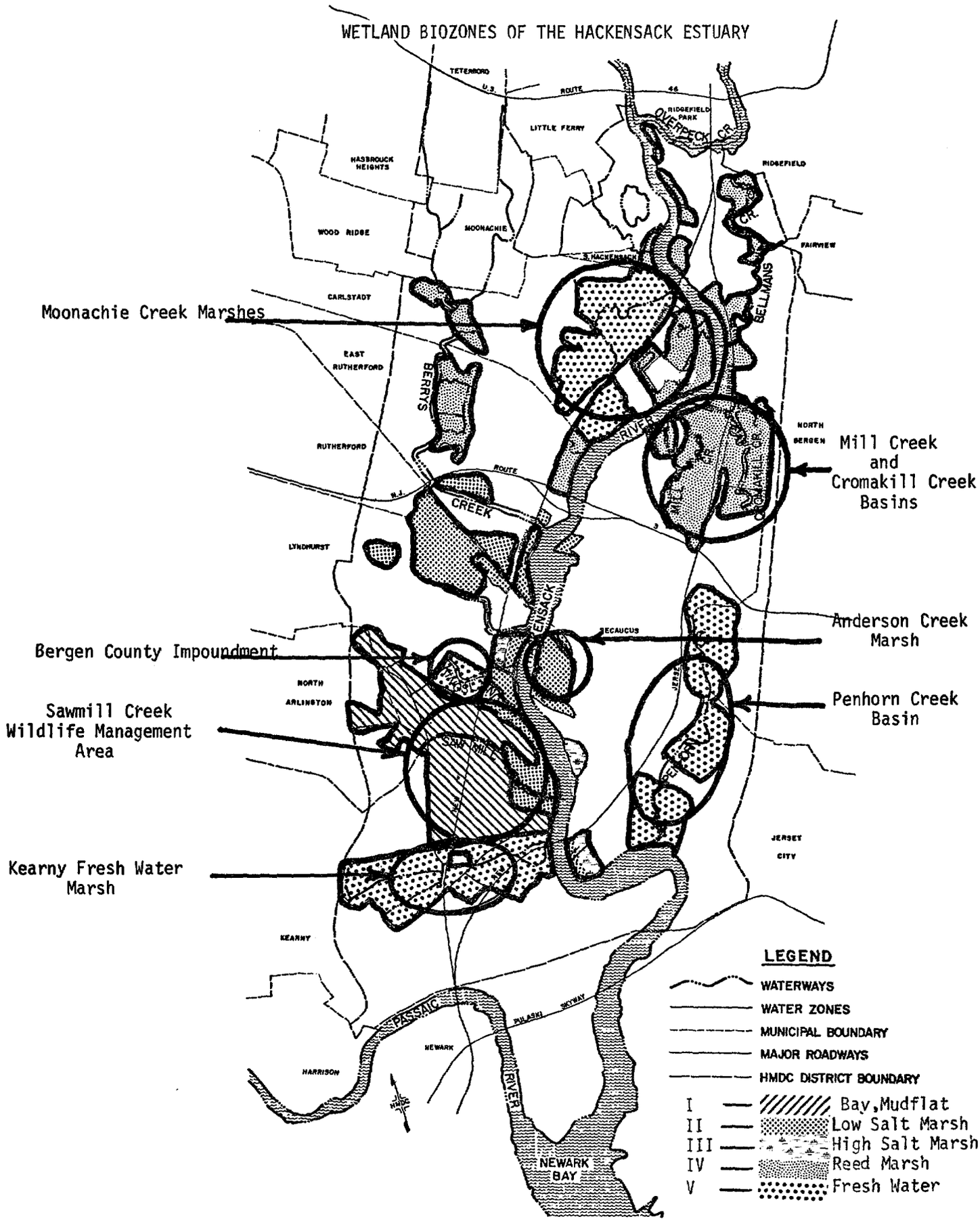


PROJECTED MEADOWLANDS DISTRICT LAND USE UPON IMPLEMENTATION OF THE MASTER PLAN



* SEE TABLE ONE BREAKDOWN

Figure 35


WETLAND BIOZONES OF THE HACKENSACK ESTUARY
Moonachie Creek Marshes
Mill Creek and Cromakill Creek Basins
Anderson Creek Marsh
Bergen County Impoundment
Penhorn Creek Basin
Sawmill Creek Wildlife Management Area
Kearny Fresh Water Marsh
TETERBORO
U.S. ROUTE 46
LITTLE FERRY
RIDGEFIELD PARK
OVERPECK CR.
RIDGEFIELD
HASBROUCK HEIGHTS
WOOD RIDGE
MOONACHIE
S. HACKENSACK
FAIRVIEW
BELLMANS CR.
CARLSTADT
EAST RUTHERFORD
BERRYS
RUTHERFORD
NORTH BERGEN
CROMAKILL CR.
ROUTE
N.J.
CREEK
LYNDHURST
SECAUCUS
NORTH ARLINGTON
SAW MILL
JERSEY CITY
KEARNY
PASSAIC
PULASKI SKYWAY
NEWARK
HARRISON
RIVER
NEWARK BAY
LEGEND
WATERWAYS
WATER ZONES
MUNICIPAL BOUNDARY
MAJOR ROADWAYS
HMDC DISTRICT BOUNDARY
I Bay, Mudflat
II Low Salt Marsh
III High Salt Marsh
IV Reed Marsh
V Fresh Water

these open bays and mud flats, is used, the Meadowlands District contains 4,664 acres of wetlands in 1979, with 2,970 of these acres designated for preservation by the HMDC Master Plan. If a narrower definition, excluding open bays and tidal flats, is used, the Meadowlands District contains about 3,664 acres, approximately 2,200 of which are designated for preservation.

Of the 5,400 acres of wetlands present in 1974, 1,300 ± 130 acres were described by the 1975 Wetlands Bio-Zone report as fresh water wetlands, separated from the estuarine system by dikes or tidal gates, and 2,000 ± 200 were within the intertidal zone (between mean high water and mean low water).

Of the 2,970 acres of wetlands designated for preservation, 1,500 will be within SPAs as part of the open space requirement, and about 1,200 acres will be within the shallow tidal bays, fresh water marsh and Sawmill Creek State Wildlife Management Area of the proposed 2,000 acre Richard de Korte State Park.

The amount of public parkland will be increased from fifteen acres to about 1,500 acres. Five hundred and thirty-five of these acres will be the open space areas required within Parkside Specially Planned Area. Eight hundred of these acres will be within the Richard de Korte State Park and will be created by the landscaping and vegetating of sanitary landfills. One hundred acres will be within Losen Slote State Park. The Commission's Solid Waste Management Plan (revised draft, March 1979) provides for the replacement of landfills by baling and resource recovery facilities, and for the transformation of existing landfills into parkland.

Finally, the requirement that a fifty foot buffer strip along watercourses be kept in a natural state will result in the preservation of only fifty acres of open space, but these fifty acres will be the most biologically productive acreage in the District, as well as serving as filters for stormwater runoff.

At the inception of planning for the Meadowlands District, the Hackensack River Estuary was a highly stressed ecosystem. Sewage and industrial discharges were allowed to flow untreated into the river and its tributaries; oil spills were a frequent occurrence; garbage and toxic wastes were dumped into landfills that were encroaching ever further into virgin marshland. By existing local zoning, the Hackensack Meadowlands were destined to disappear into a complex of industrial development and landfill.

Adopted HMDC policy documents form an enforceable land use regulation system which has enabled the Commission to institute a massive revival effort in the Hackensack Estuary. Discharges into the river have been limited by performance standards specifying type, amount, and location.

Sanitary landfills have been restricted in size, with liquid wastes prohibited, ultimately to be replaced altogether by baling and resource recovery facilities. And most importantly, 1,100 acres of salt marsh, tidal bay and mudflat, once destined for garbage dumps, is now dedicated by the State as the Sawmill Creek Wildlife Area.

Improvement of water quality in the District, over the last 10 years, has been documented in an on-going joint monitoring program by the Commission and the New Jersey Institute of Technology. Yet the most significant and impressive evidence of the system's revival can be seen in the reappearance of blue claw crabs and crabbers, striped bass, and alewife herring; in the increasing utilization by over 230 species of wildfowl, shore and wading birds; in the discovery three years ago, of the first pair of breeding marsh hawks to be found in the state in thirty

years; and in the desire of people to live and play on the banks of the Hackensack River. The Hackensack Meadowlands District is thus a case where balanced land use planning and regulation has produced not only an attractive human development, but one which coexists with a fast-recovering, manageable wetland ecosystem as well.

Under the supervision of the HMDC, over $600 million of new construction was undertaken between 1970 and 1977, almost two thirds of it by private enterprise. One of the twelve Specially Planned Areas, Harmon Cove, is partially developed. This Island Residential SPA by Hartz Mountain Industries, Inc. now includes 626 townhouse units, a major hotel, a hospital and office buildings. Across the Hackensack River from Harmon Cove is the New Jersey Sports Complex with a racetrack and a professional football/soccer stadium already constructed and an indoor sports arena under construction. Employment space for nearly 25,000 people has been created since 1970. A result has been a decrease in wetlands areas, but the decrease is less than it would have been without the HMDC policy of wetland preservation in SPA, encouragement of cluster development and the policy prohibiting the horizontal expansion of landfills.

Nothwithstanding HMDC's record of environmental preservation and recovery linked with meeting development needs, it is clear that implementation of the HMDC Master Plan would result in a lesser degree of preservation of environmentally sensitive land and water areas than would the Coastal Resource and Development Policies applied elsewhere in the coastal zone. The Coastal Policies, however, were not developed with a district that is one-third tidal marsh or water area in mind, nor for an area under intense development pressure because it represents the largest block of undeveloped land within ten miles of the center of the nation's largest metropolitan area. Literal application of the Coastal Policies in the Meadowlands District would violate the will of the State Legislature, which has called for the orderly development of the Meadowlands in compliance with the HMDC Master Plan and which specifically exempted the Meadowlands District from the Wetlands Act. The promulgation of different resource policies for different parts of the State in response to different needs has a precedent in the Coastal Policies for the Bay and Ocean Shore Segment, which differentiate between high, moderate and low growth areas based upon existing development, environmental sensitivity and State policies toward development patterns. State environmental policy, therefore, envisages a continuum of regions, ranging from sections of the Delaware Bay and Atlantic Ocean shores where low levels of growth and extensive preservation are encouraged, up to the Meadowlands District where the HMDC Master Plan calls for extensive development consistent with an ecological and Resource Management Plan, Open Space Plan and Wetlands Order. The Department of Environmental Protection, therefore, proposes to adopt by reference the Master Plan and its associated policy documents, with their dual concerns of promoting development and preserving the most productive wetlands, as coastal policy for the District.

Relationship Between Division of Coastal Resources and Hackensack Meadowlands Development Commission

The HMDC will be the lead agency for planning and regulation of development in the Meadowlands District under the Proposed New Jersey Coastal Management Program. The Division of Coastal Resources will be guided by the HMDC Master Plan, its adopted components and management plans in making decisions on Waterfront Development Permit applications (the only Division permit applicable in the Meadowlands), and will consult with HMDC staff concerning interpretation of these policies. The Division will be guided by adopted HMDC policies in its recommendations

to the Tidelands Resource Council concerning tidelands grants, leases and licenses, but the Council will also be guided by the need to obtain either a fair market price to benefit the School Fund (a requirement of the New Jersey Constitution), or to obtain lands of equal or greater value to the public, in exchange for lands alienated.

The Department will work together with HMDC to preserve wetlands and other Open Space designated for preservation by the HMDC Master Plan, and to identify additional parcels of land which because of their biological productivity or value for recreational purposes, should also be considered for preservation. The Department and the HMDC will explore public acquisition and other techniques for the preservation of these lands. Working together, the Department and HMDC will be able to ensure the preservation of at least as much wetlands and other open space as presently called for by the HMDC Master Plan.

Amendments to the Zoning Regulations of the Hackensack Meadowlands District will be considered amendments to the Coastal Management Program, when they meet the definition for amendments found in 15 CFR 923.80(c):

> "amendments are defined as substantial changes in, or substantial changes to enforceable policies or authorities related to: (1) boundaries; (2) Uses subject to the management program; (3) Criteria or procedures for designating or managing areas of particular concern or areas for preservation or restoration; and (4) Consideration of the national interest involved in the planning for and in the siting of, facilities which are necessary to meet requirements which are other than local in nature."

It should be noted that the Master Plan has been amended three times since its adoption in 1972.

In compliance with 15 CFR 923.53(a)(1), the Division of Coastal Resources will determine the consistency of federal activities with the Coastal Management Program in the Hackensack Meadowlands as elsewhere in the State. However, no federal consistency determination will be made in the Meadowlands District without first consulting with the HMDC concerning the consistency of the federal activity with the District Master Plan and other adopted HMDC policy documents.

AREAS OF PRESERVATION AND RESTORATION

Section 306 (c)(9) of the federal Coastal Zone Management Act requires that a State's program "makes provision for procedures whereby the specific areas may be designated for the purpose of preserving or restoring them for their conservation, recreational, ecological or esthetic values". This is a requirement that a process to identify areas for preservation or restoration, rather than a list of areas themselves, be available to the state coastal agency.

The Department of Environmental Protection administers several approved programs through which areas can be designated for preservation or restoration. Because these programs are all in the same Department, administrative procedures are already in place to insure their coordination with the coastal program.

Through the Green Acres Administration (N.J.S.A. 13:8A-35 et seq.), DEP can purchase land or provide grants to local governments for land purchase and park development. The amount of money available is established by voter approved bond issues and legislative appropriations.

The Green Acres Administration also administers two other programs which provide DEP with the ability to indicate concern for the preservation or restoration of an area without the absolute certainty of success provided by land purchase. Under the Natural Areas Systems Act (N.J.S.A. 13:1B-15.12a et seq.) described in the Geographic Areas of Particular Concern section, DEP can identify additional natural areas within DEP-owned and managed lands in need of preservation or protection and available implementation options. The Wild and Scenic Rivers System Act, passed in 1977, permits DEP to classify, designate, and administer river areas as wild, scenic, recreational, or developed recreational rivers. The rules and regulations for these two programs further describe the process for designation.

The Division of Fish, Game and Wildlife can apply funding available under the federal Endangered Species Act to the preservation of species habitats through land purchase or management. This is one of the major tools being used to preserve the Higbee Beach - Pond Creek Geographic Area of Particular Concern.

Another procedure for the designation of areas for preservation or restoration is through the New Jersey Register of Historic Places and the National Register of Historic Places. The Commissioner of DEP, as the State Historic Preservation Officer, may approve nominations to the keeper of the National Register of publicly or privately owned areas and sites for inclusion on the Register. Such inclusion prohibits any federal, state, county or municipal agency from undertaking a project which would harm the historic place, without the approval of DEP, and, in the case of the National Register, the approval of the Advisory Council on Historic Preservation. These historic places are also identified as a Special Land Area in the Location Policies of Chapter Four.

SPECIAL COASTAL PLANNING ELEMENTS

The Coastal Zone Management Act amendments of 1976 require a State's coastal program to include special planning processes. These include a planning process for siting energy facilities in or affecting the coastal zone and managing their impacts, a planning process to provide for shorefront access and protection and a planning process to evaluate and mitigate shoreline erosion problems.

ENERGY FACILITY PLANNING PROCESS

Introduction

Section 305 b (8) of the Coastal Zone Management Act as amended requires states to develop a planning process to anticipate and manage the impacts of energy facilities in or affecting the coastal zone. As defined by NOAA's rules (15 CFR 923.13), the plan should address the following four elements (1) Identification of energy facilities likely to locate in or which may significantly affect the state's coastal zone; (2) Procedure for assessing the suitability of sites for such facilities and their impacts; (3) Articulation of state policies for managing energy facilities and their impacts and (4) Identification of how affected public and private parties may be involved in the process. These four elements are discussed below.

I. Identification of Energy Facilities Likely to Locate in or Significantly Affect the State's Coastal Zone

Energy facilities referred to in the New Jersey Coastal Area Facility Review Act (N.J.S.A. 13:19-1 et seq.), the New Jersey Department of Energy Act (N.J.S.A. 52:27-S-1 et seq.) and the federal Coastal Zone Management Act (P.L. 92-583) are those most likely to be proposed in or signficantly affect New Jersey's coastal zone.

They include but are not limited to electric generating plants fueled by coal, uranium, oil and gas; transmission lines; facilities relating to the development of outer continental oil and gas such as support bases or marine terminals, pipeline, compressor stations, gas processing, refineries, tank farms, pipe-coating yards and platform assembly yards; terminals for the transfer, storage and conversion of liquid natural gas (LNG) to natural gas (See also Figure 36). A more detailed resource list is contained in the Energy Use Policies of Chapter Four.

To be located in the coastal zone, these facilities must comply with the relevant local, state and federal regulations and with the Coastal Resource and Development Policies in Chapter Four to be adopted as rules by DEP. Facilities likely to be located in New Jersey's coastal zone have also been addressed in a DEP 1977 Staff Working Paper on Energy Facility Siting Issues in New Jersey's Coastal Zone.

II. Procedures to Assess the Suitability of Sites

The general energy facility siting procedures are articulated in the Energy Use Policies in Chapter Four of Part II. The acceptability of all proposed new or expanded coastal energy facilities shall be determined by a review process that involves both the New Jersey Department of Environmental Protection and the New Jersey Department of Energy. The New Jersey Department of Energy is responsible for determining the need for a proposed energy facility, and the Department of Environmental Protection is responsible for determining the acceptability of coastal energy facility sites.

FIGURE 36

Energy Facilities likely to locate in New Jersey's Coastal Zone and their Major Impacts

MAJOR IMPACTS

	Land Requirements			Water's Edge Siting Requirement	Emissions				Buffer Requirements
	15 acres or less	15 acres or more	ROW[1]	River/Coast/Channel	Air	Water	Radiation	Noise	
ELECTRIC GENERATING PLANTS FUELED BY:									X
Coal		X		X	X	X			X
Uranium		X		X		X	X		X
Oil		X		X		X			X
Gas Turbines (Peakload)		X		X		X			
ASSOCIATED FACILITIES:									
Transmission Lines			X						
OUTER CONTINENTAL SHELF RELATED FACILITIES:									
Primary									
Support Base	X			X					
Submarine Pipeline Landfall and Right-of-Way			X						
Pumping/Compressing Stations	X								
Secondary									
Gas Processing		X			X	X		X	X
Refineries		X			X	X		X	X
Tank Farm	X								
Marine Terminal				X					
Tertiary									
Pipe-Coating					X				
Platform Assembly		X		X					
LNG		X		X					
Deepwater Ports[2]				X					
Uranium Enrichment Plants[3]									
Gasification[3]									

[1] ROW-right-of-way

[2] Deepwater ports require water site; associated facilities could include either pipelines or marine terminals and storage tanks

[3] Impacts not yet identified; none proposed for New Jersey

The Department of Environmental Protection will use the Coastal Resource and Development Policies, the three step decision making process discussed in detail in Chapter Three, to determine the suitability of proposed energy facility sites. In general, proposed facilities must comply with the Location, Energy Use and Resource Policies.

The first step in the CLAM method involves identification of the land and water features on a proposed site and a review of the coastal policies for the combination of features of which the site is composed. The Location Policies classify land and water features into three categories: Special Areas, General Water Areas and General Land Areas. The Coastal Resource and Development Policies identify several Special Areas in which development should be restricted, modified, or prohibited to insure their protection.

The Location Policy for General Water Areas varies according to the depth of the water basin, flow of the water channel and proposed use of the water areas. The Waters Area Policy Summary Table presents policies for 18 types of uses in seven types of General Water Areas.

In General Land Areas, the acceptable intensity for development is determined by the coastal region in which the site is located, environmental sensitivity of the site, and development potential of the site, using the Land Acceptability Tables in Section 7:7E-5.6.

Once the location acceptability has been determined according to the location policies, a proposed development must pass through the second and third stages in the screening process, the Use and Resource Policies. For example, a proposed energy facility must comply with the Energy Use Policies. The Resource Policies, which involve a review of the proposed development's effect on the resources of the built and natural environment, serve as standards to which proposed developments must adhere.

III. Articulation of State Policies and Authority for Managing Facilities and Their Impacts

New Jersey's two major industries are the petrochemical and tourism industry, which occupy first and second place respectively in the state's economy. As long as energy facilities were clustered in the northern waterfront close to the ports of New York, Elizabeth and Newark and along the Delaware close to the Philadelphia - Camden port area, the perceived potential conflicts with siting were few. But as utilities in recent years have turned to the building of larger energy facilities such as nuclear facilities, in the undeveloped sections of the State traditionally devoted to conservation, recreation, tourism and less land intensive uses, and as the need and potential for waterfront recreation in urban areas has been demonstrated, the potential for conflict among competing interests concerning land use has increased.

The policy in New Jersey has been to promote energy production as long as it is not at the expense of the environment. This policy has been stated several times in the context of outer continental shelf development. For example, in January 1977, Governor Byrne said in his annual message to the Legislature:

> Although promoting new sources of energy is a primary goal of this Administration, we will not sacrifice our national resources in the name of energy exploration. We are in favor and will actively endorse development of fuel resources on the outer continental shelf -- in an environmentally and aesthetically sound manner.

(See also statements by the Governor before the Department of the Interior in Atlantic City in January 1976; before the House Ad Hoc Committee on the Outer Continental Shelf May 10, 1977, and before the American Bar Association in New York City August 8, 1978.) Such statements have consistently expressed New Jersey's need to balance energy with environmental safeguards.

While articulating the State policy concerning energy development, the energy policies in the New Jersey Coastal Management Program represent the consideration of various conflicting, competing and contradictory local, state and national interests in the diverse coastal resources and in the diverse uses of coastal locations. By balancing the competing interests, the coastal energy policies provide a means to facilitate energy facility siting decisions in New Jeresy's coastal zone.

Under the Coastal Area Facility Review Act of 1973, the Wetlands Act of 1970, the Waterfront Development Permit Law, and the Riparian Statutes, DEP has planning responsibility and exercises regulatory authority over the siting of energy facilities in the coastal zone. DEP was also designated by the Governor as the lead agency to plan for and implement the State's coastal program pursuant to the provisions of the federal Coastal Zone Management Act. Under Sections 305 and 306 of the CZMA, a State's coastal program must specifically address planning for and siting of energy facilities.

In 1977 the New Jersey Legislature created the Department of Energy (DOE) to address the energy issues which gained public prominence during the 1973-1974 OPEC embargo and in 1976 when a shortage of gas threatened the state's economy. DOE was conferred with co-extensive jurisdiction with any other state agency regulating energy facilities, which, in most cases, is DEP, administrator of the laws noted above.

Because of their overlapping interests in the siting of energy facilities, DEP and DOE developed a memorandum of understanding to define their respective energy-related responsibilities. A signed copy is contained in Appendix C to the Coastal Management Program and in the DOE Energy Master Plan.

Briefly, the memorandum of understanding states that once permit applications submitted under the CAFRA, Wetlands and Waterfront Development Permit Laws have been declared complete by DEP, the Department will forward a copy of the application to DOE for review.

DOE will then make its findings on the need for the facility and relay these (in the form of an Energy Report) back to DEP 30 days before a decision is due. At the same time, DEP will invite DOE to attend any pre-application conferences or hearings that DEP may schedule.

Should the two agencies disagree concerning the disposition of a proposed energy facility, they must (according to the Department of Energy Act of 1977) inform the Governor who must convene an Energy Facility Review Board made up of the Director of the Division of Energy Conservation and Planning (in the Department of Energy) the head of the agency disagreeing with DOE, and a third person to be appointed by the Governor.

Since DOE was created in 1977, there have been no disputed energy facility decisions.

Municipal and county governments retain their traditional land use authority with respect to the approval or denial of permits for energy facilities.

Coastal Energy Impact Program

The Coastal Energy Impact Program (CEIP), which provides assistance to states and localities to mitigate potentially adverse effects of energy installations is another technique for managing energy facilities and their impacts. Although the CEIP program is administered by DOE, DEP as the designated lead state agency on coastal zone management reviews all CEIP applications for consistency with the coastal program. In addition, DEP is a member of the Intrastate Allocation Committee which selects CEIP projects for funding. Other members of the Committee include representatives from the Departments of Energy, Community Affairs, the Treasury; the County and Municipal Government Study Commission and Advisory Council on Energy Planning and Conservation.

As already mentioned, energy facilities have wide ranging implications for the social economy of a region. The federal Coastal Management Act requires states participating in the federal coastal program to consider the national interest that energy facilities located in their state might have. Although each states is not mandated to approve such facilities, the State must demonstrate that facilities in the national interest have been considered and it must indicate the process used to consider such facilities.

The process by which New Jersey will consider the national interest in its energy planning is explained in the National Interest section of this Chapter and in Appendix A of the NJ DOE Master Plan. Briefly, DEP and DOE have agreed to consider the national interest in reviewing permit applications. DOE will also address the issue in the Energy Reports it prepares and in the implementation of the State Energy Master Plan. This arrangement was formalized in the Memorandum of Understanding between the two agencies.

IV. Identification of How Interested and Affected Public and Private Parties may be Involved in the Planning Process

In New Jersey, participation in the coastal energy planning process takes place in several forms.

A. Public Hearings and Meetings

The CAFRA statute requires that a public hearing be held on each permit application. In addition, DEP may at its discretion hold public hearings as part of the review process for other permits issued by the Department. Interested persons may express their views at such meetings, which are usually arranged in close proximity to the site of a proposed project. Notice of public hearings and meetings on permit applications are contained in the DEP Bulletin and the local press.

B. Informal Meetings

DEP sometimes schedules meetings on controversial issues to obtain public comments to help in its decision-making. For example, DEP held a meeting in October 1978 in Forked River, Ocean County on the proposed salt-water cooling tower for the Nuclear Generating facility there. This meeting drew about 500 people.

As part of the coastal planning process, over the past four years, DEP has held several series of public meetings to receive public comments on proposed coastal policies and regulations.

Before drafting the Energy Master Plan, DOE held several public meetings to solicit the views of the public concerning what the Master Plan should contain.

C. Regularly Scheduled Meetings

Environmental Advisory Group

DEP meets regularly with an environmental advisory group which includes active representatives from the American Littoral Society, League for Conservation Legislation, the Natural Resource Defense Council, Association of N.J. Environmental Commissions, Sierra Club, N.J. Conservation Foundation, League of Women Voters and Public Interest Research Group and occasional representatives of other statewide environmental groups. Citizens who are unable to attend such meetings, but who wish to express their views may do so through one of these representatives or directly through DEP's Division of Coastal Resources.

The Tidelands Resource Council

The agency which serves as trustee over riparian lands is the Tidelands Resource Council. This is a group of twelve citizens appointed by the Governor, in but not of DEP, which meets twice a month to review applications for riparian grants, leases and licenses submitted under the State's Riparian Statutes. The meetings are open to the public.

Advisory Council on Energy Planning and Conservation

DOE meets monthly with the statutory Advisory Council on Energy and Conservation. The 15-member Council is made up of representatives of the following interest groups: natural gas, bottled gas, home heating oil and coal, terminal operators, refiners, utilities, environmental and consumer. Council meetings are closed to the public although a favorable vote of the Council might permit an individual to attend on a particular issue.

As part of the coastal planning and implementation process, DEP and DOE also meet on request with particular interest groups such as the petroleum industry, utilities, consumer and environmental groups to discuss the implications that proposed energy policies and regulations may have on their activities.

D. Call for Information

In 1975, DEP involved the energy industry early in the coastal planning process by issuing a "Call for Information". Through this, DEP solicited information from industry concerning their projected plans to build energy facilities in New Jersey's coastal zone. One of the goals was to learn more about the siting and technical requirements for outer continental shelf development. While the oil and gas industry response was disappointing and not site specific, the state electric and gas utilities submitted some sites which they indicated they were holding for future consturction and/or expansion. From the information received from industry, DEP compiled a document Call for Information on Coastal Energy Facility Siting: An Analysis of Responses which is available to the public.

E. Hudson River Waterfront Study, Planning and Development Commission

Outside the CAFRA area, in January 1979, the Governor established the Hudson River Waterfront Study, Planning and Development Commission to study various alternatives for planning and redevelopment of the northern waterfront. Proposals to build facilities for storing petrochemicals have aroused intense controversy along this section of the waterfront. Because of the significance of energy for the area, it is expected that energy siting issues will be addressed by the new Commission.

F. Newsletters and Written Comments

Members of the public may follow energy issues through newsletters issued by DEP and DOE which report on meetings, hearings and recent publications. The Jersey Coast is issued at least quarterly by the Division of Coastal Resources. DOE publishes a monthly Energy Line which is devoted exclusively to energy issues in the state.

DEP's Division of Coastal Resources also maintains a mailing list of over 5,000 names to which it sends the newsletter and other information of interest to the public.

Members of the public wishing to comment in writing on various issues are urged to send comments to DEP and DOE. Comments in response to proposed rules will also be considered under the New Jersey Administrative Procedures Act.

G. Office of Public Participation

DEP established a special Office of Public Participation in 1979 which is staffed with an office chief and an assistant. This office serves as a formal mechanism to coordinate all public participation efforts in the Department.

DEP Division of Coastal Resources public participation activities for all issues including energy facility siting are described in greater detail in Appendix A.

SHOREFRONT ACCESS AND PROTECTION PLANNING PROCESS

Section 305(b)(7) of the Coastal Zone Management Act and rules adopted thereunder (15 CFR 923.21) require coastal states to develop a planning process that will identify public shorefront areas appropriate for access or protection. The process must include the following elements:

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

II. A procedure for assessing public beaches and other public areas, including State owned lands, tidelands and bottom lands, which require access or protection, and a description of appropriate types of access and protection.

III. Identification and description of enforceable policies, legal authorities, funding programs and other techniques that will be used to provide such shorefront access.

These elements are outlined below.

Beach access has not always been a controversial issue in the past, when many urban waterfronts were pre-empted by industrial uses. Access to the shoreline in built-up areas outside beach resorts has recently emerged, however, as an important issue. With new lifestyles and technologies and changing residential settlement patterns, much of the waterfront has become vacant and ready for reuse providing opportunities for urban revitalization and recreation. Shorefront access in this context includes both physical and visual access to the beach and along the urban waterfront. Before continuing, it may be useful to define what is meant by "beach" and the various forms of "access".

I. DEFINITION OF "BEACH" AND IDENTIFICATION OF PUBLIC AREAS MEETING THAT DEFINITION

The Beach Access Study Commission, staffed by DEP, recommended the following definition of beaches in 1977. "Beaches include both the dry sand area landward from the mean high water line to the vegetation line as well as the wet sand seaward of the mean high water line." Where there is no vegetation, the beach area ends at a seawall, road, parking lot or boardwalk. The wet sand area is known as the public trust land. It belongs to the state of New Jersey unless the state has conveyed a so-called riparian grant for the tide-owned land. (The public trust or commons refer to property to which all members of the community have a right). Access to the ocean for fishing, navigation and transportation has traditionally been regarded as a protected right.

During the 1800's and early 1900's, the State of New Jersey sold riparian grants along about one third of the Atlantic Ocean. Even where sold by the State, tide-flowed (wet sand) or riparian lands remained impressed with a public trust and had to be open to the public for purposes of navigation and commerce.

Tidelands which have been granted to a private entity may be built upon or filled in to the exclusion of the general public only upon issuance of a special riparian "waterfront development" permit. The grant of tidelands excludes any person other than the grant owner from seeking such a permit.

Access relates to legal, physical, and visual and financial considerations. These types are defined below:

A. Legal Access.

According to New Jersey law, land extending seaward of the mean high tide line is held in trust by the State on behalf of the public. These "public trust lands" include the wet portion of the beach that is uncovered six of the 12 hours in a tidal cycle. In recent years, however, courts have come to recognize that the public trust doctrine extends to the dry portion of the beach, at least where that beach is municipally owned.

In the haste to encourage growth and industrialization after the Nation's founding, portions of the beach were often granted to private interests and to municipalities. As increases in leisure time and improvements to transportation in the late 1960's and early 1970's attracted increasing numbers of people to the shore for recreation, efforts to exclude the general public from beach areas led to numerous lawsuits.

The New Jersey courts have not regarded the public trust doctrine - which originally recognized only the public's right to use trust lands for fishing and navigation - as immutable. Rulings favoring increasing public access to municipally owned dry beaches have recognized the important role that recreation plans in today's post-industrial society. Legal access, is less of a problem in New Jersey today than physical or visual access.

B. Physical Access.

Physical access relates to the difficulties of reaching the water's edge because of lack of transportation to the water's edge and/or lack of parking facilities. Physical access to the shoreline, beach and ocean has also been blocked by private construction precluding access to the water for fishing, walking or simply viewing.

C. Visual Access.

Visual access is impeded where construction blocks off views to the beach and water. The protection of views can enhance the character of a place and contribute to protecting its natural features and property values. Views overlooking water also offer intangible social benefits to the public at large which have been recognized as worthy of protection.

D. Fees, Changing Rooms and Parking.

Merely getting to the beaches was a challenge in the past because of limited transportation facilities. Later when highways were built they brought large numbers of people to the shore. In response, some municipalities and residents sought to restrict tourists by imposing various types of fees. While the New Jersey Supreme Court ruled as unconstitutional the imposition of differential beach fees (Neptune vs. Avon 61 NJ 296) between residents and non-residents, most municipalities have imposed fees along the entire shorefront, with the exception of Keansburg,

Atlantic City (which levies an 8 percent luxury tax in its hotels), the Wildwoods and Upper and Lower Township in Cape May County. Because of the wide range in fee schedules, the New Jersey Beach Access Study Commission recommended to the Governor and Legislature in 1977 that beach fees be in line with the actual cost to the local government of maintaining and operating these beaches so that high fees should not deter potential visitors.

Access to the shorefront has also been impeded in the past in some communities by the imposition of high fees for parking and changing facilities. In light of adverse press publicity of such practices, successful litigation and the need for State funding by shorefront communities to cope with storm damage, and recently adopted state review policies as to how to maximize public funds, high parking and changing room fees are not expected to be a factor in the future.

II. PROCEDURE FOR ASSESSING PUBLIC BEACHES AND OTHER PUBLIC AREAS, INCLUDING STATE OWNED LANDS, TIDELANDS AND BOTTOM LANDS, WHICH REQUIRE ACCESS OR PROTECTION, AND A DESCRIPTION OF APPROPRIATE TYPES OF ACCESS AND PROTECTION

New Jersey's small shoreline must serve the dense population of the state and region. This makes it desirable that as much of it as possible be visually and physically accessible to the public. This applies especially to those stretches closest to large seasonal and/or year-round populations. Much of the shorefront in the beach segment (Sandy Hook to Cape May) is open to the public. In the one county - Monmouth - where beach access is particularly restricted, the issue is being litigated by the Department of the Public Advocate.

Along the rivers, much of the adjacent waterfront is in private ownership belonging to industrial, commercial or residential interests. Where this is the case, municipalities are encouraged in the Coastal Resource and Development Policies to take into account the need for providing visual and physical access where new waterfront development is contemplated. Because much of the waterfront in urban areas is vacant and in a state of decay (having been abandoned by railroads and formerly water-dependent facilities), the opportunity exists to bring urban populations back to waterfronts to enjoy the recreational amenities they afford.

Diversity characterizes New Jersey's shorefront with different types of shorefront exhibiting different needs and requiring different management strategies. These types are characterized below.

A. Shorefront Types

There are two major types of shorefront in New Jersey: beach and urban waterfront.

1. Ocean Beach

a. These include the ocean beaches between Sandy Hook and Cape May Point which are the magnets for the state's coastal resort economy. They are located in Monmouth, Ocean, Atlantic and Cape May Counties, and extend for about 124 miles. Of these, 32.6 miles or 26 percent are in private ownership or use; 63 miles or 51 percent are in municipal ownership, 11.5 miles or 9.2% are in state ownership and

16 miles of 13.4% are in federal government ownership. Most of the private or restricted beaches are located in Monmouth County which is also closest to the densely populated urban areas in the northeast. Overcrowding of beaches in Monmouth County is aggravated by the narrowness of the peninsula on which the beaches are located and the lack of ample parking space in an area where automobiles are the most common mode of transportation to the beach. Bay Head in Ocean County, whose entire beachfront is private, is being challenged in the courts by the Department of the Public Advocate. Public debate and legal action related to the beach access issue have to date focused primarily on the beaches located in the counties cited above.

2. Bay Beach

Bay beaches are protected by barrier beaches located along the mainland fronting the Atlantic Ocean. These include the beaches bordering the Manasquan, Navesink, Metedeconk and Shark Rivers; Barnegat Bay; Great and Little Bay; Absecon Bay, Great Egg Harbor and the Intra-coastal Waterway. Bay beaches also include those located along Raritan Bay going north toward the harbor of New York and New Jersey and along the Delaware Bay and River going towards Trenton.

An inventory of the status of ownership and use of 345 miles of bay beaches was made by the U.S. Army Corps of Engineers in 1973. This inventory indicated that much of the land bordering the bays was inaccessible because of extensive wetlands. In the interests of conservation, such land will probably continue to remain inaccessible to conform with the state's policy to protect wetlands which have been identified as geographic areas of particular concern. (The U.S. Army survey (National Shoreline Study) extended up to South Amboy in Raritan Bay and Pennsgrove on the Delaware River).

B. Urban Waterfronts Lacking Beaches

Waterfronts in the Harbor of New York and New Jersey, along portions of the Delaware River near Camden, the Arthur Kill, Newark Bay, and the Hudson, Rahway, Hackensack and Passaic Rivers typically do not have beach access, although exceptions do exist, such as at Perth Amboy.

Railroads and industries have dominated the urban waterfront along the Hudson River, Arthur Kill and along the urban sections of the Delaware River near Camden. With the demise of ferries and waterfront terminals and the decline of railroads, much of this waterfront is abandoned and unused. To the extent that publicly-owned lands become candidates for redevelopment, state and local governments have an opportunity to stipulate, as a condition for issuing public funds, that access to the waterfront will be available to the public.

C. Supply and Demand

Ensuring the adequacy of access depends on the demand for access and the availability of land to supply these needs. New Jersey's shorefront is finite, while the number of people using it is expected to increase in the future. The 1977 edition of the State Comprehensive Outdoor Recreation Plan

(SCORP) predicts that the demand for swimming in salt water will increase from 61,884,252 occasions in 1976 to 68,525,884 occasions in 1985, an 11 percent increase. In 1996, the number of swimming occasions is expected to increase to 77,008,248, a 24 percent increase over 1976. As pressure on the finite waterfront increases, it becomes more important than ever to insure that the waterfronts remain open and accessible to the public.

Recognizing such pressures, the state has taken steps to increase the opportunities for waterfront uses. In the Harbor which New Jersey shares with New York, Liberty State Park opened in 1976. While partially finished, it is already serving a demand for waterfront recreation in the densely populated northeastern counties of New Jersey. In addition, its proximity to historic Ellis Island and the Statue of Liberty and its view of lower Manhattan, has made it a major regional, if not a national resource.

D. Local Government Designation of Access Points and Corridors

To the extent that public land will be needed in the future to furnish public access to beaches, based on projections and municipal resource inventories, local governments in the urban waterfront segment may have an opportunity, once New Jersey's coastal management program has been approved, to review the adequacy of existing access points and corridors as defined below and recommend where available access points and corridors may be needed.

Access Corridors are paths or open space systems running parallel to the coast where they may link up with access points.

Access points are paths which run perpendicular to the water from the first inland cultural feature to the water's edge where they may link up with the parallel corridors as defined below.

In recommending access corridors or points of access, municipalities will be asked, at a minimum, to consider the following:

1. The amount and adequacy of shorefront that is available given the resident population and regional demand, using SCORP and/or other supply and demand figures.

2. Identification of access corridor and points of access in terms of their contemplated uses. (i.e. fishing, bicycling, viewing, picnicking, boat launching, photography, historic sites visitations, walking, etc.).

3. Identification of existing corridors in adjacent communities to encourage, to the extent possible, the planning for acquisition of a continuous public access corridor across the boundaries of several municipalities sharing a common waterfront.

4. Provision by each municipality bordering a waterfront beach or bay of at least one public waterfront park for some of the uses outlined above in accordance with the Basic Coastal Policies.

5. That access points serve the largest number of people without creating adverse impacts on the surrounding environment.

6. That access points not impinge on the rights of adjacent private property owners.

III. MANAGEMENT TECHNIQUES: IDENTIFICATION AND DESCRIPTION OF ENFORCEABLE POLICIES, LEGAL AUTHORITIES, FUNDING PROGRAMS AND OTHER TECHNIQUES TO PROVIDE SHOREFRONT ACCESS

The state has a variety of enforceable policies, legal authorities, funding programs and monitoring techniques which help maintain and increase public waterfront access in New Jersey. These are described below:

A. Public Trust Doctrine

As delineated in Appendix F (Legal Commentary), maintaining public access to the shorefront in the coastal zone evolved from the Public Trust Doctrine. This is property to which all members of a community traditionally had a right to use for fishing and navigation. The New Jersey Supreme Court extended the public trust doctrine to include recreation in its Neptune vs. Avon (61 NJ 296) decision of 1972.

Until 1978, the Public Trust Doctrine did not apply to New Jersey's dry sandy beaches owned by either local, state or federal government or by private individuals or associations. In 1978 a New Jersey Supreme Court decision (Van Ness v. Deal [78 NJ 174]) extended the Public Trust Doctrine to apply to the dry sand of municipally-owned beaches:

> "whether natural, or man-made the beach is an adjunct to ocean swimming and bathing and is subject to the Public Trust Doctrine."

It should be noted that the cases to date relate exclusively to publicly-owned lands.

However, if New Jersey's coastal management program is approved, planning funds for the acqusition of waterfront sites would be available under Section 306 of the Act which could be combined with State Green Acres program funds to acquire, design and and develop shorefront access systems.

B. Coastal Permit Review

The authority to promote public access through regulatory action is contained in the four fundamental coastal laws summarized in Chapter Three: CAFRA, the Wetlands Act, the Waterfront Development Law, and the Tideland Statutes.

Several applications for CAFRA permits were denied in 1976 and 1977 for, among other reasons, not giving adequate consideration to the issue of shorefront access. The reasons for denial are stated in the following published opinions: Opinion 1 - Lehigh Construction (Toms River Condominium); Opinion 27 - Tranquillity Park; Opinion 35 - Riverview Heights; and Opinion 37 - Shark River Island development. Copies are available from the Bureau of Coastal Planning and Development.

In addition, the State has an opportunity through its capital spending programs (See Chapter Three) to insure that funds will be used to maximize the public's access to the shorefront.

C. Capital Spending

1. State Program

(a) The Green Acres Program administered by DEP determines how funds from the federal Land and Water Conservation Fund and State Green Acres bond issues may be spent for park and open space acquisition and development. Green Acres funds have been used to acquire several waterfront sites for public use. These include Higbee Beach (Cape May County), Seven President's Park (Monmouth County), Cattus Island (Ocean County) and Liberty State Park (Hudson County).

(b) The New Jersey Conservation Foundation, a private organization, sometimes assists the state by acquiring options on land in emergency situations for later acquisition by DEP's Green Acres Administration.

(c) The Beaches and Harbor Fund Act provides funds to municipalities to restore shorefronts damaged by storms, hurricanes and the like. In administering the Shore Protection Program, State policy since 1972 has been to make the disbursement of funds to municipalities conditional upon their making the shorefront open to the public. This policy is also reflected in proposed rules under the Beaches and Harbor Fund Act of 1977.

2. Federal

In Section 315 of the federal Coastal Zone Management Act, as amended in 1976, Congress authorized the acquisition of lands to provide public access along shorefronts containing environmental, recreational, historical, scenic, ecological or cultural benefits. Unfortunately, these funds have not been appropriated to date.

D. Other Techniques to Provide Shorefront Access

A. Monitoring

New Jersey's short 126 mile oceanfront beach stretch makes it possible to inspect it periodically by foot and/or by air. In 1976 and 1978, members of DEP and citizen representatives walked the length of the 124 mile shorefront to assess the state of the beaches with respect to erosion, storm damage and access. Along the way, they met with heads of municipal governments. Recommendations from these inspection tours were included in a report to the Governor and Legislature in April 1977 by the Beach Access Study Commission which was appointed by the Governor in 1976 to study the issue of beach access. These recommendations have been incorporated into the policies of the Coastal Management Program. Similar beachwalks and surveys which will be continued in the future will form the basis for evaluating where additional points of access are needed and should be acquired.

Resulting from the 1976 beachwalk and the Beach Access Study Commission report was the publication in 1977 and annual updates in 1978 and 1979 of A Guide to New Jersey Beaches. This provides an inventory of New Jersey beaches, and the resources and facilities they afford. The inventory, which was distributed widely to the public, includes the schedule of beach fees charged by various municipalities and indicates if parking and mass transit (mostly bus) are available.

B. Beach Shuttle

In 1977, DEP, with financial assistance from NOAA-OCZM, instituted a beach bus shuttle from the heavily travelled Garden State Parkway in Toms River to Island Beach State Park. The purpose of this experiment was to increase the use of the State Park whose limited parking facilities do not reflect the actual number of people that the park can safely and ecologically accommodate. The shuttle transported 7,594 people in 1977 at a cost of $50,000 or $6.08 per person and 7,714 people in 1978 at a cost of $42,000 or $4.95 per person (these costs were in addition to a per capita charge of $.50).

The beach shuttle was also operated with State funds during the summers of 1978 and 1979. Because the shuttle allows more people to use Island Beach State Park and with a potential fuel shortage, DEP hopes to continue operating the beach shuttle each summer.

The first year of the program was subsidized by the federal Office of Coastal Zone Management as a pilot project. The project has continued through the involvement of several units of government, including the New Jersey Departments of Transportation and Energy, the New Jersey Highway Authority, Ocean County, Dover Township, and the Dover Township Sewerage Authority.

C. Enforceable State Policies Pertaining to Shorefront Access and Protection

The State policies pertaining to shorefront access and protection (see Chapter Four) include the Special Area Policies for Beaches (7:7E-3.19); Coastal Wetlands (7:7E-3.20); and Central Barrier Island Corridors (7:7E-3.22). The Resource Policies address Public Access to the Shorefront (7:7E-8.13) and Scenic Resources and Design (7:7E-8.14).

As outlined in an earlier section of this Chapter, New Jersey has designated the following shorefront areas as being of particular concern:

Coastal Wetlands (generic)
Wet Sands
Higbee Beach
Cape May Point Natural Area
Cape May Wetlands Natural Area
Strathmere Natural Area
North Brigantine Natural Area
Great Bay Natural Area
Island Beach State Park
Swan Point Natural Area
Manahawkin Natural Area

Liberty State Park
Rancocas Natural Area
Hackensack Meadowlands Development Commission District

They have been singled out for special treatment because of their recognized ecological sensitivity and uniqueness under the Natural Areas System Regulation (N.J.A.C. 7.2-11.5-B); their regional, state and/or national significance and, not least, because of the availability of state legal authorities to protect them.

CONCLUSIONS

The most important aspects of the shorefront planning process will be to identify where access is or is not available. This will constitute the first step towards developing strategies, such as a possible acquisition schedule, to ensure adequate access to and along New Jersey's shorefront. Such planning becomes more feasible within the framework of a comprehensive coastal program and will become an implementation task after New Jersey's entire coastal management program is approved.

SHORELINE EROSION/MITIGATION PLANNING

Introduction

Under the federal Coastal Zone Management Act, state coastal management programs must include a planning process for assessing the effects of shoreline erosion and studying ways to control the impact of such erosion and to restore areas adversely affected by such erosion. These specific federal requirements are defined in Section 305(b)(9) of the Act. The pertinent federal rules on this requirement are identified at 15 CFR 923.25. This planning process must include two parts:

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

(2) Identifying and describing enforceable policies, legal authorities, funding techniques and other techniques that will be used to manage the effects of erosion as the State's planning process indicates is necessary.

Background

Since the early 1920's, the State of New Jersey has been giving financial and technical assistance to help shorefront municipalities cope with shoreline erosion. In the early 1940's, new State legislation (P.L. 1940, C. 52; N.J.S.A.) authorized and empowered the then Department of Conservation and Economic Development, now the Department of Environmental Protection, to repair, reconstruct or construct bulkheads, seawalls, breakwaters, groins, jetties, beachfills, dunes, and any or all appropriate structures for shore protection purposes. The annual appropriation for this work was $1.0 million. In recent years, the need for shoreline erosion planning has been heightened as a result of major coastal storms, particularly the March 1962 storm, the cumulative effects of minor storms in the past decade and increased shoreline development. The New Jersey Capital Budgeting Commission recognized the annual $1 million appropriations for State aid to municipalities for shore protection purposes was inadequate and in 1977 the voters of the State approved a $30 million Beaches and Harbor Bond Issue, which provides $20 million for State aid for shore protection purposes.

In brief, the State of New Jersey has had a shoreline erosion planning and management process in place for several decades. This section of the New Jersey Coastal Management Program documents the process and outlines the work underway today and also that work likely to be undertaken in the future as the State continues to confront the challenge of shoreline erosion.

1. Shoreline Erosion Assessment Method

The New Jersey approach to assessing the effects of shoreline erosion has four components: first, review previous studies of shoreline erosion; second, initiate shoreline erosion studies; third, participate in ongoing shoreline erosion studies by other agencies and organizations; and fourth, review site-specific development proposals in the coastal zone that may affect shoreline erosion.

The most significant previous studies of shoreline erosion in New Jersey that have been reviewed were conducted by the U.S. Army Corps of Engineers, both the New York and Philadelphia Districts. In 1953, the Corps of Engineers, New York District conducted a comprehensive study and issued a report for the shore protection required along the Atlantic oceanfront from Sandy Hook to Barnegat Inlet. In 1956, the Corps of Engineers, Philadelphia District completed a similar study for the area from Barnegat Inlet to Cape May Point. More recently, the Cape May County Planning Board prepared a report on its beaches and inlets called Inlets and Beaches, Cape May County, March 1977.

As part of the coastal planning process funded since 1974 under the federal Coastal Zone Management Act, the Department of Environmental Protection has initiated staff and consultant studies of shoreline erosion. The most comprehensive work to date, entitled Coastal Geomorphology of New Jersey, was completed in 1977, under contract to DEP, by the Center for Coastal and Environmental Studies at Rutgers University. Additional minor staff studies have been carried out in the past and are likely to be initiated in the future. The most significant study initiated by DEP currently is the preparation of a statewide Shore Protection Master Plan, by Dames and Moore, Inc. of Cranford, New Jersey, consulting engineers and scientists, who are assisting the Department of Environmental Protection and the Department of Treasury, Division of Building and Construction in carrying out the shore protection portion of the 1977 Beaches and Harbors Bond Issue. The Center for Coastal and Environmental Studies has begun a technical study to determine the protective capacity of natural and man modified dune areas for the purpose of delineating dune management areas. As necessary, additional analytical studies will be initiated in the future.

Third, the Department of Environmental Protection participates in ongoing shoreline erosion studies carried out by other agencies, particularly the U.S. Army Corps of Engineers and relevant county and municipal agencies. The entire process of shore protection in New Jersey is a cooperative state-municipal, and often federal-state-county-municipal effort. As specific shoreline studies are completed to protect specific inlets, replenish beaches, or propose additional measures, these studies are closely coordinated by the Department of Environmental Protection as the lead agency in shore protection. Similar participation in joint studies will continue in the future.

Fourth, the Department of Environmental Protection reviews site specific development proposals along the waterways (ocean, bays and rivers, etc.) of the State for a number of considerations, including shore protection. This site specific review provides opportunities for review of individual projects at specific locations.

Fifth, field staff of the Department of Environmental Protection visually monitor the shoreline frequently, from the ground and the air in order to identify shoreline erosion problems. This surveillance method for assessing the effects of shoreline erosion will continue and will become an increasingly important monitoring method. DEP has also received updates on important local issues from the Coast Watchers, a group of concerned citizens organized by the American Littoral Society who live in and monitor the coast.

The general conclusion of all these reports is that the problem is quite severe, since the shoreline is receding with an annual loss of sand from the New Jersey beaches of approximately 2,600,000 cubic yards.

The main problem is that there is no natural external supply of material to offset the annual loss of sand. This means that the sand available for accumulation on the updrift sides of groins and jetties is being eroded from existing beaches. It also means that to provide adequate shore protection to beaches the sand has to be transported by hydraulic dredging or by trucking in the material.

The source of sand material required for the artificial nourishment of the beach comes from nearby borrow areas in the interior bays and lagoons. When this source of sand material is not available, nearby land borrow areas will have to be used.

Ultimately, the time will come when these nearby sources of sand material, i.e. bays, lagoons, and nearby land borrow sites for artificial beach nourishment, are depleted. Then it will be necessary to find sand on the mainland or offshore in the Atlantic Ocean.

An economic way of removing sand from the ocean floor is under study by the Corps of Engineers, and as part of this study a pilot project of direct pump out of hopper dredges of the Philadelphia District was initiated at Sea Girt in 1962 to explore the utilization of offshore sand source.

Presently the Division of Coastal Resources works with local engineers in the design of the needed jetties, groins, seawalls, bulkheads, revetments and beachfill. The Division then advertises for bids and administers the contract and supervises their construction. Field personnel from the Division constantly monitor New Jersey's beaches, watching for developments which may be the forerunner of serious beach erosion problems.

The creation of the Shore Protection Master Plan is the initial major task of the Bond Program. The Shore Protection Master Plan will be a regional statewide shoreline plan, to be financed by the Beach and Harbors Fund (1977). It will outline a method for designating areas for erosion control, mitigation and/or restoration. Some of the criteria for the study are listed below. The major objectives are to maintain and protect beaches through the identification of areas of concern for program development, including identification of State agencies involved, procedures for program administration and funding strategies, identification of legal authorities and funding programs and other techniques that can be used to meet management need. In part, the master plan will identify:

1) Coastal Features and Processes

2) The Status of the New Jersey Shore

3) Alternative Responses to Coastal Erosion and Public Policy

4) Shore Erosion Control Alternatives

5) Comparative Evaluation of Alternative Responses to Erosion

The Phases of the Bond Program will be: a) a comprehensive regional design phase creating a master plan, b) a municipal coordination phase, c) an individual reach design phase and d) a construction phase for each reach.

A major task will be the survey and assessment of the extent of damage or threat of damage and a priority listing of facilities, projects and programs, dealing with this damage. The objective is to physically alter the shoreline to correct for storm damage, retard or arrest erosion and increase the accretion process. This process will correct emergency conditions of storm damage, create larger protected beaches, provide additional and future shoreline protection from storms, rehabilitate existing shore protection structures and provide routine maintenance for shore protection facilities.

The program will also increase public participation, appreciation and awareness of shoreline uses by providing greater beach access, increasing public ownership of shorefront lands, providing stimuli for initiating and improving local beach protection laws, providing incentives for increased local government land use planning and increasing State tourism and recreational use of the shoreline.

A community's eligibility for fundable projects will be determined by whether it has: 1) an acceptable beach access policy and planning process, 2) an acceptable beach/dune protection policy and other management techniques and 3) an acceptable high risk beach erosion policy and other management techniques.

The Division of Coastal Resources funded Rutgers University, Center for Coastal Environmental Studies in 1979 to delineate dune management areas.

From 1952 to 1971, aerial photographs were taken by the Division of Coastal Resources in the spring and in the fall. These photographs created an excellent historical record of the shoreline. During 1972, the funds used for shore protection flights were diverted to wetlands photography, which produced coastal photography for 1972. Between 1973 and 1976, no flights were made. Half of the 1977-78 flight was flown in the fall of 1977 and the other half was flown in the Spring of 1978. All of the photography produced by the Division has enabled careful assessment of the effects of shoreline erosion.

To meet the specific "geographic areas of particular concern" requirements of the federal Coastal Zone Management Act (Section 305(b)(3)), New Jersey has designated all coastal wetlands, the Higbee Beach-Pond Creek Meadow Area, wet sand beaches and the Hackensack Meadowland District as "geographic areas of particular concern" as defined under federal law. New Jersey has also defined ten areas under the State Natural Area System Act of 1976 as "geographic areas of particular concern". New Jersey has decided <u>not</u> to designate any geographic areas of particular concern, under federal law, for erosion purposes, although the wet sand beaches clearly are areas where erosion sometimes occur. Under the federal Coastal Zone Management Act, states must also establish a process for identifying various preservation and restoration areas. The chief process employed by New Jersey for identifying such areas in terms of shoreline erosion is the shore protection master plan currently underway. The aim of the master plan is to identify on a reach-by-reach basis, those areas in need of various types of shore protection. Areas appropriate for restoration will be included as part of this process.

New Jersey's basic procedure for managing the effects of shoreline erosion is the ongoing program of analyzing the shore protection needs of the State and responding to those needs, within the limits of available technical and financial resources, with appropriate construction activity. Each year, DEP's Division of Coastal Resources makes an annual determination on the projects likely to be funded in a particular year. Depending upon the availability of funds and the need for and the urgency of shoreline erosion, projects may range widely in scope.

For example, current projects under consideration in 1979 include construction of three low profile groins at Sea Isle City (Cape May County), replacing the deteriorated timber bulkheads with aluminum bulkheads in Shark River in Neptune Township (Monmouth County), replacing steel bulkheads with reinforced slab bulkhead at Belmar (Monmouth County), replacing and repairing a stone seawall along Ocean Drive at the northern tip of Avalon (Cape May County), constructing a jetty at Bidwells Creek Harbor of refuge at Middle Township (Cape May County), constructing a bulkhead at Wills Hole Thorofare, Point Pleasant Beach (Ocean County), repairing the seawall at Sea Bright (Monmouth County), and beach replenishment in Atlantic City (Atlantic County). These illustrative projects are all managed jointly by DEP in conjunction with the appropriate municipality.

In addition, DEP undertakes emergency shore protection action as necessitated by storms and natural disasters. Also, shore protection needs that develop through the ongoing inspection programs of the Division of Coastal Resources are addressed in this manner.

Enforceable Policies, Legal Authorities and Funding Techniques for Shoreline Erosion Management

New Jersey has proposed five key policies on shoreline erosion, which are contained in Chapter Four. The Special Area Policies on High Risk Erosion Areas, Beaches and Dunes (7:7E-3.19), Use Policies on Coastal Engineering (7:7E-7.11), and the Resource Policy on Flood Hazard Areas (7:7E-8.23) are the applicable policies. In addition, the more general policy on shoreline erosion, and the appropriation of shore protection funds can be found in the enabling legislation for the 1977 Beaches and Harbor Bond Issue.

The statutory basis for New Jersey's shoreline erosion planning and management efforts rests upon several State laws. First, P.L. 1940, C. 42 authorized and empowered the Department of Environmental Protection to repair, construct or reconstruct bulkheads, seawalls and other shore protection structures, including beachfills and dunes as necessary to protect the environment. The Beaches and Harbors Fund established by the 1977 Beaches and Harbors Bond Issue also explicitly authorizes this Department to undertake shore protection planning and to implement the plan that is developed. The first appropriation of funds from the bond issue reiterated the importance of and reauthorized the Department's efforts. In addition, the enabling legislation establishing the Department in 1970 authorized the preparation of comprehensive plans for natural resource management. The planning mandate of the Coastal Area Facility Review Act also authorizes the Department to prepare a management strategy for the coastal environment, which includes the shoreline. The chief funding program available for shoreline erosion planning and management is the 1977 Harbors and Beaches Bond Issue which provides for $20 million in funds that may be made available to municipalities on a matching basis. In previous years, an annual appropriation of $1 million was made available for shore protection purposes, a sum that proved inadequate to the task. In

addition, funds may be available for large scale projects that are part of an approved federal project financed by the U.S. Army Corps of Engineers. This applies particularly to protective work for the major inlets along the Jersey shoreline.

Finally, the land management activities regulated through New Jersey's coastal management program also address shoreline erosion planning to the extent that inappropriately located development is carefully scrutinized and prohibited where necessary, when it would adversely effect shoreline erosion problems.

In 1977, recognizing the severity of the problem and the limited resources available, the Beach and Harbor Bond Act (P.L. 1977, c. 208) was passed. The Act authorized the creation of a debt of the State of New Jersey by the issuance of bonds of the state in the aggregate principal in the amount of $30,000,000 for the purposes of researching, planning, acquiring, developing, constructing and maintaining beach (and harbor) restoration.

In 1978, the Commissioner of the New Jersey Department of Environmental Protection, under the authority of "Beaches and Harbors Bond Act of 1977" P.L. 1977, c.208, N.J.S.A. 12:6A-1 et seq., and N.J.S.A. 13:1-11 et seq. proposed to adopt regulations to establish procedures for governing the operation of shore protection construction projects and research design programs that are financed, in part or in whole, by funds from the Beaches and Harbor Fund. The rules proposed prescribe procedures for application, selection, award, and administration of matching grants and design or construction contracts; provide guidance for determining site specific considerations for locating shore protection structures; establish policies and procedures for distribution of operational funds for the purpose of making State matching grants to local governmental agencies for the planning, design and construction of shore protection facilities, dune restoration, and beachfill projects; establish procedures for contract construction. Also, the proposed rules provide guidance in developing a comprehensive shore protection plan.

CHAPTER SIX - NEXT STEPS IN COASTAL MANAGEMENT IN NEW JERSEY

Introduction
Management System
Coastal Policies
Data Management and Information System
New Legislation
Conclusion

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Introduction

New Jersey has devoted growing attention to the management of its coastal zone over the last ten years. This Proposed New Jersey Coastal Management Program and Draft Environmental Impact Statement presents the results of the efforts to date.

Next, the New Jersey Department of Environmental Protection and the National Oceanic and Atmospheric Administration will subject this document to intensive public review and debate. Three thousand copies will be distributed to interested individuals and groups. In addition, DEP will summarize the major recommendations of the Proposed Program in its newsletter, The Jersey Coast, in press releases, and in public meetings throughout the coastal zone. In addition, N.J. DEP and NOAA-OCZM have scheduled a series of joint public hearings indicated on the back cover of this document.

NOAA-OCZM and N.J. DEP will then consider the submitted comments. The New Jersey Coastal Management Program and Final EIS will include a section noting each comment made on the Proposed New Jersey Coastal Management Program and Draft EIS, the person or organization making the comment, and a response to the comment. The response will indicate either how the program has been changed to address the comment or why the suggestion has not been followed. In 1978, when NOAA-OCZM and N.J. DEP used this process to prepare the Coastal Management Program - Bay and Ocean Shore Segment and Final EIS, 1146 discrete comments from 82 individuals and groups were examined in this manner. (See pages 329-466 of the State of New Jersey Coastal Management Program - Bay and Ocean Shore Segment and FEIS, August 1978).

NOAA-OCZM and N.J. DEP expect to complete their revisions to this document by mid 1980. N.J. DEP will then ask the Governor to submit the New Jersey Coastal Management Program and Final EIS to NOAA for their approval by August 1980.

The anticipated federal approval of the New Jersey Coastal Management Program will be an important step forward. New Jersey will then become eligible for increased grants to implement the program throughout the coastal zone under Section 306 of the CZMA. These grants will enable the State to apply the program and to refine and improve it as necessary. The coastal activities New Jersey plans to pursue following program approval are summarized below. They are grouped into four general areas: Management System, Coastal Policies, Data Management and Information System, and New Legislation.

Management System

New Jersey will continue to work to improve the clarity and efficiency of its coastal regulatory programs. This will include following up the reorganization of the Division of Coastal Resources (formerly Marine Services) in the summer of 1979, with the preparation of one set of procedural rules to govern the CAFRA, Wetlands and Waterfront Development permit programs, and with further efforts to insure that only one review process is required for an applicant needing any number of approvals from the Division.

In addition, the Division will further develop its monitoring and enforcement activities which were substantially upgraded by the Division reorganization. Staff will be added to the new Bureau of Coastal Enforcement and Field Services so that the Bureau will be able to insure that coastal activities subject to DEP regulation are, in fact, regulated and that coastal regulatory decisions made by the Division are followed.

The Division of Coastal Resources will also work with other parts of DEP and other State agencies to maximize the use of the Coastal Resource and Development Policies, and to create additional procedures for the joint review of projects requiring permits and/or funding from several state sources. Similarly, the Division will continue to seek such opportunities with federal, regional, county and municipal agencies. The application of "federal consistency" to projects in New Jersey once the Coastal Management Program is approved should enhance State-Federal coordination.

The Division of Coastal Resources will also continue to seek specific local projects which can help further the Coastal Resource and Development Policies. The Division will pass through a limited number of small grants from its CZMA grants to municipalities and counties in the coastal zone. In addition, the Division will provide advice and technical support to municipalities and counties for projects such as the review of plans, ordinances and specific coastal proposals, and to help identify and coordinate other state, regional and federal agencies which may be able to collectively help realize a local coastal project.

Lastly, DEP will continue its public participation program to insure that people affected by the Coastal Management Program are aware of it and understand it, and that interested people have opportunities to help improve it. DEP, therefore, will continue to publish The Jersey Coast, to produce reports, displays, and slide shows focused on coastal issues and to speak frequently at public meetings and events.

Coastal Policies

DEP will continue to develop the Coastal Resource and Development Policies to make them increasingly specific, predictable and easily understandable. At least once each year, the Department will consider whether revisions should be proposed to the administrative rules under which the policies will be adopted.

The Department will incorporate the work products received from two contractual studies completed in 1979: an estuarine study and a development potential study. In addition, DEP will continue to seek and explore techniques to more fully integrate social and economic information into coastal decision making. DEP also

will also continue to analyze specific coastal issues of importance including fisheries management, the development of a shore protection master plan, and the appropriate location for marine and estuarine sanctuaries in New Jersey. The Department will then use the results of these analyses to propose revisions to the Coastal Resource and Development Policies and to take other steps which may be indicated.

Data Management and Information System

One major current and continuing activity of the New Jersey Coastal Management Program is the development of a geographic information system which would be useful for coastal planning and decision making by the Division of Coastal Resources and valuable for as many other DEP programs, and programs in other State, Federal and local agencies, as possible. One important goal of such a system is that it be stored on a computer so that information could be readily used for a wide variety of calculations and could also be routinely updated relatively easily and cheaply.

The Coastal Location Acceptability Method (CLAM), the automating of CLAM (Auto-CLAM), and further adaptations require a wide variety of geographic and tabular data from a number of sources. Output quality is limited by the accuracy and updatedness of these data. Remote sensing data, both optical and digital, ground truth surveys, monitoring station data and published data must all be integrated and combined in a single analysis. This requires better survey updating and better indexing and cross referencing of geo-data than now exists.

New Legislation

The Proposed New Jersey Coastal Management Program is based entirely on existing State laws. In the course of administering these laws and of preparing the Coastal Management Program, interested citizens and DEP staff have suggested potentially desirable changes which could not take effect without enactment of one or more new laws. While DEP does not believe that such changes are necessary to achieve federal approval of the coastal management program, it will work to explore in detail the desirability and feasibility of such changes to improve the effectiveness and efficiency of the Program.

In Options for New Jersey's Developed Coast (March 1979), DEP included for public comment a description of one possible new coastal law (pages 43-49). This is just one of the legislative options DEP will consider. In brief, the issues which DEP will pursue which may require new legislation include the following:

- Protection of sand dunes and restriction of building in areas subject to storm damage.

- Restriction of development which threatens or blocks public access to, or mars the view presented, by the Palisades.

- Consolidation of the three current State coastal permits -- CAFRA, Wetlands and Waterfront Development -- into one permit program. This would include a reevaluation of the types of development subject to DEP regulation so that, for example, environmentally sensitive areas could be regulated more intensively than they now are, while less vulnerable areas would be less intensively regulated.

- Delegation of some DEP regulatory responsibilities to county or municipal governments. This delegation would be proposed only for local governments with adopted plans and ordinances consistent with the New Jersey Coastal Management Program, and only if DEP retained the right to overrule local variances, amendments or modifications to local plans it had certified.

Conclusion

Changes to the program will be fully discused in public before they are adopted, and will be incorporated according to the National Oceanic and Atmospheric Administration Final Regulations for Amendments to and Termination of Approved Management Programs (CFR 9, Chapter IX, Part 923, Subpart 1).

As this Chapter has demonstrated, Federal approval of the New Jersey Coastal Management Program will accelerate, rather than conclude, coastal planning and coastal management in the State.

PART III

DESCRIPTION OF THE NEW JERSEY COASTAL ZONE - AFFECTED ENVIRONMENT

PART III - DESCRIPTION OF THE NEW JERSEY COASTAL ZONE: AFFECTED ENVIRONMENT

Introduction
Delineating the Proposed Boundary
Municipalities Within the Proposed Coastal Zone
Description and Visions of Proposed Coastal Zone
  Northern Waterfront Area
  Bay and Ocean Shore Area
  Delaware River Area

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Introduction

This part of the Draft EIS describes the geographic area affected by the proposed management program for the New Jersey Coastal Zone. The criteria used to delineate a coastal zone will be discussed, followed by a description of the coastal zone as it is today, together with a general vision of what the zone is likely to become following implementation of the Coastal Management Program.

Delineation of the Proposed Boundary

New Jersey's proposed coastal zone extends from the New York border south to Cape May Point and then north to Trenton. It encompasses the waters and waterfronts of the Hudson River and related water bodies south to the Raritan Bay, the Atlantic Ocean and some inland areas from Sandy Hook to Cape May, the Delaware Bay and some inland areas, and the waterfront of the Delaware River and related tributaries. The proposed coastal zone encompasses areas in which the State, through the Department of Environmental Protection, has the authority to regulate land and water uses that have a significant impact on coastal waters. These authorities include the Coastal Area Facility Review Act (CAFRA), the Wetlands Act, the Waterfront Development Law, riparian statutes, and the Hackensack Meadowlands Reclamation and Development Act.

The inland boundary for the portion of the coast traditionally regarded as the "Jersey Shore" from Sandy Hook to Cape May, plus adjacent areas along Raritan Bay and Delaware Bay (consisting of parts of Middlesex, Monmouth, Ocean, Burlington, Atlantic, Cape May, Cumberland and Salem Counties) is defined as:

> the landward boundary of the Coastal Area as defined in the Coastal Area Facility Review Act (CAFRA), or the upper boundary of coastal wetlands located landward of the CAFRA boundary along tidal water courses flowing through the CAFRA area, whichever is more landward, including State-owned tidelands.

In the more developed portions of the State (including portions of Salem, Gloucester, Camden, Burlington, Mercer, Middlesex, Somerset, Union, Hudson, Essex, Passaic and Bergen Counties) the coastal zone boundary is defined as:

> the landward boundary of the State's jurisdiction under the Waterfront Development Act (N.J.S.A. 12:5-3) or the Wetlands Act (N.J.S.A. 13:9A-1), or the landward boundary of State-owned tidelands, whichever extends farthest inland.

The boundary in these parts of the coastal zone coincides with the proposed geographic jurisdiction of the Waterfront Development Law (discussed in "Principal Implementation Programs" section of Chapter Three).

The boundary of the Hackensack Meadowlands region is defined as:

> the boundary of the area defined as the Hackensack Meadowlands District by the Hackensack Meadowlands Reclamation and Development Act (N.J.S.A. 13:17-1 et seq.).

The seaward boundary of the coastal zone is the three nautical mile limit of the United States Territorial Sea, and the interstate boundaries of the States of New York, and Delaware and the Commonwealth of Pennsylvania.

A generalized view of the Proposed New Jersey Coastal Zone is shown in Figure 37.

The federal Coastal Zone Management Act establishes the following general standards which states must meet in selecting a coastal zone boundary.

> "'coastal zone' means the coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder), strongly influenced by each other and in proximity to the shorelines of the several coastal states, and includes islands, transitional and intertidal areas, salt marshes, wetlands, and beaches. The zone extends ... seaward to the outer limit of the United States territorial sea. The zone extends inland from the shorelines only to the extent necessary to control shorelands, the uses of which have a direct and significant impact on the coastal waters. Excluded from the coastal zone are 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." (Section 304 (1))

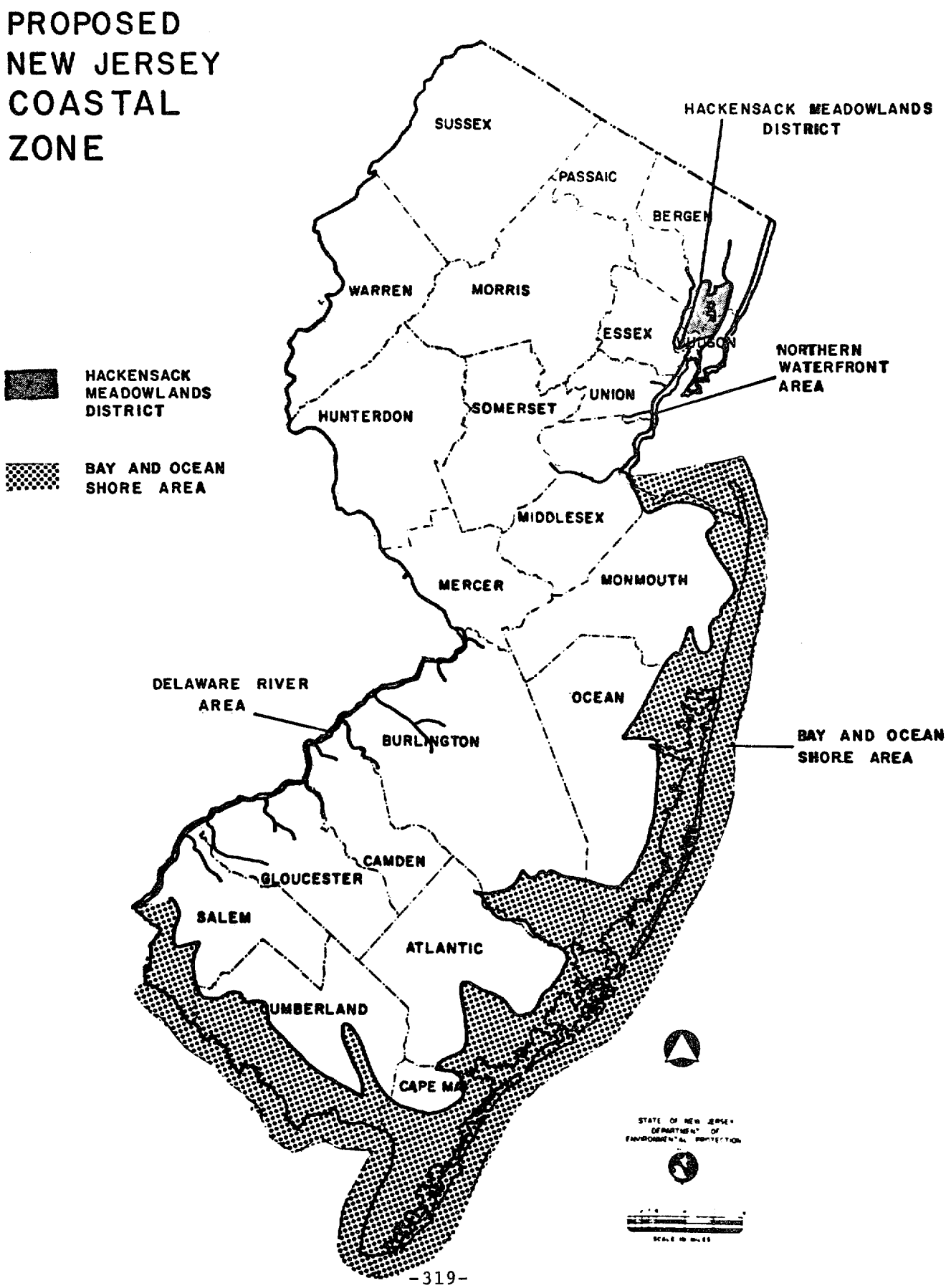
DEP first publicly analyzed the selection of the coastal zone boundary in December 1976 in a staff working paper entitled "Alternative Boundaries for New Jersey's Coastal Zone". This 55 page paper, which was widely circulated and discussed, described possible boundaries and included a preliminary recommendation.

The coastal zone boundary DEP proposes is a detailed refinement of the preliminary recommendation. Comments by interested individuals and groups, particularly County Planning Boards, suggested specific modifications, some of which have been incorporated into the proposal. The most major change has been the restriction of the Coastal Zone to areas over which the Department has jurisdiction.

Coastal Waters include tidal portions of the Atlantic Ocean, Hudson River, Passaic River, Hackensack River, Raritan River, Delaware River, Newark Bay, Upper New York Bay, Raritan Bay, Arthur Kill, Kill Van Kull, Delaware Bay and their tidal tributaries, and other tidal streams of the Coastal Plain.

The upstream extent of coastal waters can be defined either by the limit of waters containing a specified percentage of salinity, the extent of the salt wedge, or tidal influence. DEP has chosen the landward penetration of tidal influence in a watercourse because this provides a readily measurable dividing line for coastal and non-coastal waters. (The tidal limit also coincides with the extent of State-owned tidelands under the tidelands management program). Salinity levels are

Figure 37


PROPOSED NEW JERSEY COASTAL ZONE
HACKENSACK MEADOWLANDS DISTRICT
BAY AND OCEAN SHORE AREA
SUSSEX
PASSAIC
BERGEN
WARREN
MORRIS
ESSEX
HUDSON
UNION
HUNTERDON
SOMERSET
MIDDLESEX
MERCER
MONMOUTH
OCEAN
BURLINGTON
CAMDEN
GLOUCESTER
SALEM
ATLANTIC
CUMBERLAND
CAPE MAY
HACKENSACK MEADOWLANDS DISTRICT
NORTHERN WATERFRONT AREA
DELAWARE RIVER AREA
BAY AND OCEAN SHORE AREA

highly variable geographically throughout the seasons and from year-to-year, and therefore not appropriate for fixed boundaries, given the complexity and diversity of New Jersey's estuaries.

Two methods have been used to define the upstream limit of tidal activity. First, the approximate tidal limits specified in the annual Compendium of New Jersey Fish Laws, published by DEP's Division of Fish, Game and Wildlife have been used where available. These limits are typically defined as bridges or dams. Second, the point where the 20 foot contour interval crosses the water course is used to define the approximate limit of tidal influence along other tidal water courses. The 20 foot contour line criterion was suggested by DEP's Office of Environmental Analysis, since most of tidal influence is within the first 20 foot elevation.

The Office of Environmental Analysis is currently working to define precisely and legally New Jersey's tidal limits and also the State's claim to tide-flowed lands. This delineation is now complete for the Hackensack Meadowlands District. When this work is completed for other parts of the coastal zone, DEP will consider amendments to the coastal zone boundary. The Appellate Division of the Superior Court of New Jersey recently upheld DEP's method for delineation in the case of City of Newark v. Natural Resource Council (May 24, 1979).

Tidal influence makes the Delaware River region immediately adjacent to these waters "coastal" in the sense intended by the federal Coastal Zone Management Act. Although the Coastal Area Facility Review Act (CAFRA) boundary stops south of the Delaware Memorial Bridge, the tidal influence on the Delaware River extends 60 miles further north to Trenton. Because of the flat topography of the Coastal Plain, tidal tributaries from the Delaware River extend up to 10 miles inland. NOAA-OCZM does not require inclusion of the Delaware River within New Jersey's coastal zone as the quantity of seawater is less than five parts per thousand. However, the State of New Jersey does today manage the wetlands and riparian lands along this part of the coast and DEP recommends inclusion of these areas within the proposed coastal zone because they can benefit from the application of the Coastal Resource and Development Policies to State decisions and from the increased attention and funding available to areas within the coastal zone.

As part of their contracts with DEP, several coastal county planning boards suggested a coastal zone boundary for their county. These suggestions were summarized and analyzed by DEP in Options for New Jersey's Developed Coast.

One other comment on the boundary is worthy of note. That is the boundary modification suggested by the Wave Hill Center for Environmental Studies, the Waterfront Coalition of Hudson and Bergen, and others, to include the Palisades area in the coastal zone. This area, extending from the New York-New Jersey boundary on the north, could be defined in several ways to include the magnificent cliffs which can be seen from the Hudson River and New York and which provide a fine waterfront view from New Jersey. DEP has not included this area in the coastal zone because it lacks authority to regulate or manage development affecting the view presented by the Palisades. This area is, however, discussed in the "Next Steps" chapter of Part II (Chapter Five).

DEP intends to review and consider additional revisions to the boundary which may be suggested as a result of public review of this document.

Municipalities Within the New Jersey Coastal Zone

The proposed coastal zone includes at least a small part of a total of 242 municipalities in seventeen of New Jersey's twenty-one counties. Only Hunterdon, Morris, Sussex, and Warren counties have no coastal waters and are entirely excluded from the coastal zone. This relatively large zone, united by the presence of coastal waters, is quite diverse, stretching from the port at Camden to the vast wetlands along Delaware Bay, to the beaches of the barrier islands along the ocean, to the industrialized waterfront of northern New Jersey.

The municipalities are listed below by region and by county beginning with the Northern Waterfront Area (which includes the Hackensack Meadowlands District) continuing into the Bay and Ocean Shore area and then into the Delaware River Area.

NORTHERN WATERFRONT AREA

Bergen County

Alpine Borough
Bogota Borough
Carlstadt Borough
East Rutherford Borough
Edgewater Borough
Englewood Cliffs Borough
Fairview Borough
Fort Lee Borough
Garfield City
Hackensack City
Little Ferry Borough
Lodi Borough
Lyndhurst Township
Moonachie Borough
New Milford Borough
North Arlington Borough
Oradell Borough
Ridgefield Borough
Ridgefield Park Village
River Edge Borough
Rutherford Borough
Teaneck Township
Teterboro Borough
Wallington Borough

Essex County

Belleville Town
Newark City
Nutley Town

Hudson County

Bayonne City
East Newark Borough
Guttenberg Town
Harrison Town
Hoboken City
Jersey City
Kearny Town
North Bergen Township
Secaucus Town
West New York Town

Middlesex County

Carteret Borough
East Brunswick Township
Edison Township
Highland Park Borough
New Brunswick City
Old Bridge Township
Perth Amboy City
Piscataway Township
Sayreville Borough
South Amboy City
South River Borough
Woodbridge Township

Passaic County

Clifton City

Passaic City

Somerset County

Franklin Township

Union County

Elizabeth City
Linden City

Rahway City

BAY AND OCEAN SHORE AREA

Atlantic County

Absecon City
Atlantic City
Brigantine City
Corbin City
Egg Harbor City
Egg Harbor Township
Estell Manor Township
Galloway Township
Hamilton Township
Linwood City
Longport Borough
Margate City
Mullica Township
Northfield City
Pleasantville City
Port Republic City
Somers Point City
Ventnor City
Weymouth Township

Burlington County

Bass River Township
Washington Township

Cape May County

Avalon Borough
Cape May City
Cape May Point Borough
Dennis Township
Lower Township
Middle Township
North Wildwood City
Ocean City
Sea Isle City
Stone Harbor Borough
Upper Township
West Cape May Borough
West Wildwood Borough
Wildwood City
West Wildwood Crest Borough
Woodbine Borough

Cumberland County

Bridgeton City
Commercial Township
Downe Township
Fairfield Township
Greenwich Township
Hopewell Township
Lawrence Township
Maurice River Township
Millville City
Stow Creek Township

Middlesex County

Old Bridge Township (Madison)
(Also in Northern Waterfront Area)

Monmouth County

Aberdeen Township (Matawan)
Matawan Borough
Allenhurst City
Asbury Park City
Atlantic Highlands Borough
Avon-by-the-Sea Borough
Belmar Borough
Bradley Beach Borough
Loch Arbour Village
Long Branch City
Manasquan Borough
Middletown Township
Monmouth Beach Borough
Neptune City
Neptune Township
Ocean Township

Monmouth County - Cont.

Brielle Borough
Deal Borough
Eatontown Borough
Fair Haven Borough
Hazlet Township
Highlands Borough
Holmdel Township
Interlaken Borough
Keansburg Borough
Keyport Borough
Little Silver Borough
Oceanport Borough
Red Bank Borough
Rumson Borough
Sea Bright Borough
Sea Girt Borough
Shrewsbury Borough
South Belmar Borough
Spring Lake Borough
Spring Lake Heights Borough
Union Beach Borough
Wall Township
West Long Branch Borough

Ocean County

Barnegat Light Borough
Barnegat Township (Union)
Bay Head Borough
Beach Haven Borough
Beachwood Borough
Berkeley Township
Brick Township
Dover Township
Eagleswood Township
Harvey Cedars Borough
Island Heights Borough
Pine Beach Borough
Point Pleasant Beach Borough
Point Pleasant Borough
Seaside Heights Borough
Seaside Park Borough
Jackson Township
Lacey Township
Lakehurst Borough
Lakewood Township
Lavallette Township
Little Egg Harbor Township
Long Beach Township
Manchester Township
Mantoloking Borough
Ocean Gate Township
Ocean Township
Ship Bottom Borough
South Toms River Borough
Stafford Township
Surf City Borough
Tuckerton Borough

Salem County

Alloway Township (not in CAFRA Area)
Elsinboro Township
Lower Alloways Creek Township
Mannington Township
Pennsville Township
Quinton Township
Salem City
Carneys Point Township (Upper Penns Neck)

DELAWARE RIVER AREA

Burlington County

Beverly City
Bordentown City
Bordentown Township
Burlington City
Burlington Township
Chesterfield Township
Cinnaminson Township
Delanco Township
Delran Township
Edgewater Park Township
Fieldsboro Borough
Florence Township
Hainesport Township
Lumberton Township
Mansfield Township
Maple Shade Township
Medford Township
Moorestown Township
Mount Holly Township
Mount Laurel Township
Palmyra Borough
Riverside Township
Riverton Borough
Southampton Township
Westhampton Township
Willingboro Township

Camden County

Audubon Borough
Barrington Borough
Bellmawr Borough
Brooklawn Borough
Camden City
Cherry Hill Township
Gloucester City
Gloucester Township
Haddon Township
Hi-Nella Borough
Laurel Springs Borough
Lindenwold Borough
Magnolia Borough
Mount Ephraim Borough
Pennsauken Township
Runnemede Borough
Somerdale Borough
Stratford Borough

Gloucester County

Deptford Township
East Greenwich Township
Greenwich Township
Mantua Township
National Park Borough
Paulsboro Borough
Swedesboro Borough
Wenonah Borough
West Deptford Township
Westville Borough
Woodbury City
Woolwich Township

Mercer County

Hamilton Township
Trenton City

Salem County

Carneys Point Township*
Mannington Township*
Oldmans Township
Pennsgrove Township
Pilesgrove Township
Pennsville Township*

* Also in Bay and Ocean Shore Area

Description and Visions of the Proposed Coastal Zone

This Chapter describes the character of the geographic area addressed by this report and presents visions of the future which DEP considers both desirable and achievable through implementation of the proposed Coastal Management Program. It should be noted at the outset that the visions represent subjective judgements based upon visits to the areas, discussions with local residents and officials, and review of previously prepared reports, studies and plans.

The length and diversity of the coast suggests that it be described in segments. In this section, the Northern Waterfront Area is discussed first, followed by the Bay and Ocean Shore Area, and then the Delaware River Area.

The Northern Waterfront Area

The Northern Waterfront is marked by diversity in its 60-mile stretch from Piscataway Township in Middlesex County to Alpine Borough in Bergen County. Present vistas of the waterfront range from high-rise apartments above the Palisades to broad tidal wetlands along the Raritan and South Rivers. The only common feature of the Northern Waterfront is that it has all been touched by human activity. The Coastal Management Program for the Northern Waterfront will seek to maintain the diverse character which sets apart the different sections of the waterfront, but it will also promote some changes in the use of the waterfront.

Much of the waterfront is currently occupied by underutilized or abandoned industrial or transportation facilities. Some of these sites will be assembled for new labor-intensive industrial uses while others will be redeveloped as park land or for commercial use. Much more of the waterfront should be made accessible to the public, while water quality should be improved to allow recreational boating at many points. Residential areas near the waterfront would then become more desirable places to live, both because of improved access to a cleaner waterfront and because of buffering from industrial and transportation facilities.

The Northern Waterfront will be addressed in this section by first traveling down the outer waterfront from the Palisades to Raritan Bay and then moving up the tidal portions of the region's rivers. Although the character of the northern waterfront can change dramatically in a short distance, segments of different rivers often show similar characteristics. The Upper New York Bay and Arthur Kill-Newark Bay regions -- the core area of the Northern Waterfront -- are similar industrial port districts which have known better days, but they are physically separated by the residential waterfront of Bayonne. The Upper Hackensack, Passaic and Rahway River segments, likewise, have similar urban/suburban waterfronts, while the Elizabeth and Perth Amboy Waterfronts have a similar urban residential character.

The Hudson River Region - The Hudson River shoreline from the New York State line to the George Washington Bridge, a distance of ten miles, is protected from development as part of the Palisades Interstate Park. In the future, it will remain unspoiled and continue to provide a spectacular vista of the Palisades Cliffs as they rise from the river.

Below the George Washington Bridge, the northern waterfront takes on a two-tiered character, with uses on top of the Palisades entirely different from those below. For the twelve miles from the Bridge to Liberty State Park in Jersey City, the narrow waterfront between the cliffs and river is in large part the scene of

railroad yards and docks, many of them underutilized or abandoned. One town, the Borough of Edgewater, is also below the cliffs. At the top of the cliffs are suburban-type residential neighborhoods with an increasing number of high-rises. Because not all of the waterfront area is needed for rail and ship transportation facilities or for new industrial facilities, the creation of waterfront parks to meet the recreational needs of the densely populated neighborhoods atop the cliffs is both desirable and feasible. Because of severe traffic congestion on top of the cliffs and the lack of a mass transit system, an end to the indiscriminate construction of high rises in this area is desirable. In particular, some have suggested that no new high rises should be constructed between Route 505 (Boulevard East) and the River, as such construction would further limit public access to the waterfront. As noted above, the Coastal Management Program will not contain the authority to prevent such construction.

Liberty State Park in Jersey City, already the most popular facility of the state park system, will continue to be a chief recreational facility for the inner core of the Northeast New Jersey Metropolitan Region. Planning is underway for future recreational development of the park and for the transformation of the abandoned Central Railroad of New Jersey terminal within the Park into an activity center, as part of the revitalization of surrounding residential development in Jersey City. The City of Hoboken is pursuing similar plans for the Erie-Lackawanna terminal.

Upper New York Bay Region - South of the Park, the waterfront is much the same as it is to the north except that the transportation-oriented waterfront area is wider and the residential sections of Jersey City are separated from the waterfront by the New Jersey Turnpike. For these reasons, this segment of the waterfront may be an appropriate area for industrial redevelopment as suggested by the Port Authority of New York and New Jersey. Further south, in Bayonne, industrial facilities and oil storage tanks occupy the Kill Van Kull waterfront, with residential neighborhoods in close proximity. In this area, buffering of residential from industrial uses will be the best way to improve the quality of the urban neighborhood. Along Bayonne's western waterfront of Newark Bay and also along part of Kill Van Kull, residential neighborhoods are adjacent to the water's edge. Also, two parks line the bayfront. This area is likely to be little changed in the future, although the parks, which offer a place to watch the busy commercial activities of Newark Bay, may be improved and possibly expanded. At the northern end of Newark Bay in Jersey City, a regional shopping center and other business occupy the waterfront. As the water quality of the Bay is improved, the waterfront should change from a parking lot to an asset attracting people to these businesses.

Newark Bay-Arthur Kill Region - Newark Bay divides into the Hackensack and Passaic Rivers between Jersey City and Newark. Along the two-mile stretch before both rivers enter the Hackensack Meadowlands District, the shorelines are heavily industrialized with the exception of the half-mile waterfront of Lincoln Park in Jersey City. Because of the proximity of these rivers to the Newark and Jersey City labor force, this area should continue to be a good location for industry.

On the western shore of Newark Bay is the City of Newark. Most of its bay frontage consists of the rundown vestiges of an industrial waterfront. The waterfront is separated from Newark's residential neighborhoods by several blocks but is near enough to the City's labor force to make it a prime location for industrial redevelopment. At the southern end of Newark's waterfront and the northern end of

Elizabeth's is a modern container port. It is a major employer and an example of the potential of a modernized waterfront. South of the container port in Elizabeth is a large tract of vacant waterfront served by rail. This land is being considered by the Port Authority of New York and New Jersey for promotion under its industrial park development program.

Continuing south, Newark Bay gives way to Arthur Kill. The northernmost three-fourths of a mile of the Kill is bordered by an old, urban residential neighborhood within the City of Elizabeth. Creation and enhancement of public open space in the narrow sector between homes and the Kill will enhance this neighborhood and encourage its preservation. From Elizabeth south to the Middlesex County boundary (City of Linden), the shoreline of the Kill has considerable amounts of wetlands which have been developed. Petroleum tank farms are the most prevalent developed use. In the future, this portion of waterfront is likely to have continued industrial use, but stronger measures to preserve those wetlands which are undeveloped (all the undeveloped coastal wetlands in Linden are owned by adjacent industries) are desirable.

Middlesex County has docks and warehouses along the shoreline, but also about as much vacant land as in Union County. Wetlands are found primarily along Woodbridge Creek, a small tidal tributary. Also, as in Union County, water dependent industry is the major use for the waterfront, but lands not needed by industry should be preserved in order to maintain the estuarine ecosystem. In the City of Perth Amboy is a site which is being evaluated for its potential as a support base for offshore oil and gas operations. Further south in Perth Amboy, residential neighborhoods and a park extend to the waterfront.

Across the Raritan River, the entire Raritan bayfront, with the exception of a residential neighborhood in South Amboy, consists of vacant land separated from residential neighborhoods by the North Jersey Shore rail line. Because of its proximity to existing residential neighborhoods and public transportation, this land has potential for residential, commercial or industrial development (if properly buffered from residences), as well as for public open space.

At the end of this sector of vacant land along Raritan Bay is the beginning of the Bay and Ocean Shore Segment. This analysis will, therefore, turn to the tidal portions of the rivers which flow into this "outer" northern waterfront.

Upper Hackensack River Region - Beginning in the north, the first river is the Hackensack which is tidal to Oradell, Bergen County. For the first 4 1/2 miles from Oradell to Hackensack, the river is surrounded by suburban residential neighborhoods with some commercial uses. Some people have suggested a cycling or hiking path in this area, and Bergen County is considering plans for impoundment of the river at Hackensack to create a lake-park complex.

Where the Hackensack River enters the Meadowlands District it is joined by the Overpeck Creek, a tributary which is tidal for the four miles to Leonia. For the upper two miles, the shoreline is public open space -- Overpeck Park. From the park to the river's juncture with the Hackensack, land uses along the creek include industry, a small amount of commercial and residential property and a large percentage of vacant land. This vacant land, like vacant land on the nearby portion of the Hackensack, will provide for recreation such as boat launching or fishing provided that water quality is brought up to state standards. It could also be a site for water-oriented commercial uses, or minimally polluting industries.

Passaic River Region - The Passaic River is tidal from the Dundee Dam at Clifton to Newark Bay. North of Newark the river is bordered by suburban and urban residential neighborhoods, but much of the immediate waterfront is given over to industries, especially textiles and related printing and dyeing. On the west bank, public access is also denied by State Highway 21. Wherever possible along this stretch of river, public access will be acquired, and where feasible a foot or cycling path system will be developed to enhance the recreational opportunities of the densely populated cities and towns along the banks, while water-dependent industries would continue to provide employment. The Saddle River which flows into the Passaic at the Garfield-Hasbrouck Heights border is tidal for about two miles. The shores of this river are largely undeveloped although residential and commercial uses do encroach certain sections. Because of its less developed shoreline, this river segment has more potential than the Passaic for ecologically sound, planned development, which will encompass a number of different but compatible uses. As the Passaic River reaches Newark, industrial uses become dominant although much of the immediate waterfront is vacant or is occupied by abandoned structures. Revitalization of industry and commerce where possible, and development of small parks or river access paths elsewhere is a desirable future for the Passaic as it passes between Newark on the west and Kearny, East Newark and Harrison on the east.

Elizabeth River Region - In the City of Elizabeth, the Elizabeth River is tidal for two miles as it flows into Arthur Kill, although the length of tidal waters may be diminished by a current U.S. Army Corps of Engineers flood control project. There is some riverfront park land as well as vacant land along the shore, but for the most part homes and apartments line its banks, limiting the potential for public access. In the future, parks will be improved and public access provided where feasible, although greater improvement in the river's environment will be a result of improvement in water quality.

Rahway River Region - The Rahway River is tidal for five miles from Grand Avenue in Rahway to the Arthur Kill. Above Grand Avenue on the non-tidal portion of the river, Union County has acquired the river corridor for public open space, and the river provides opportunities for canoeing, hiking and other forms of recreation. In the tidal portion of the river, however, there is a wide assortment of land uses, few of which take advantage of the river. In Rahway itself, single-family homes, commercial establishments, and a marina line the river, while closer to the Arthur Kill the shoreline becomes marshy and vacant with the exception of some tank farms which do not appear to be water dependent. In the future, the wetlands near the Kill should be preserved, and improvements should be made along the riverfront in Rahway to make it more of an asset to adjacent neighborhoods and businesses.

Raritan River Region - The Raritan River's tidal reach extends inland to Interstate Route 287 in Piscataway Township. From Route 287 to New Brunswick, the Raritan is paralleled on the south by the Delaware and Raritan Canal. On the north, much of the land is park land, although in some areas the riverfront is residential. Under the direction of the Delaware and Raritan Canal Commission, DEP and the Middlesex County Park Department, the canal should be restored and the Park maintained. Access to the riverfront will, however, be limited in some areas by construction designed to make State Highway 18 a limited access highway. In New Brunswick, the riverfront has already been separated from urban neighborhoods by

Route 18, but a pedestrian bridge provides access to public open space along the banks. Public and private emphasis should be placed on assuring continued public access despite highway construction.

East of New Brunswick is an extensive river wetland area. The area extends along the Raritan and up its tributary, the South River. This wetland should be preserved as an open space resource for surrounding residential neighborhoods, as well as for a source of nourishment for the Raritan estuary system.

Further east, the south bank of the Raritan is the scene of shipping and industrial facilities, many of them abandoned. On the north bank is a former arsenal which is being redeveloped as an industrial park. Industry is likely to remain the dominant use of the area near the mouth of the Raritan in this vision of the future Northern Waterfront.

Hackensack Meadowlands District - Within the Northern Waterfront Area is the Hackensack Meadowlands District, a thirty-one square mile area of tidal wetlands, fresh water wetlands and upland located along the Hackensack River six miles west of midtown Manhattan. Until 1968, the District was largely undeveloped except for huge landfills, warehouses, and some light industry and electrical generating facilities. In that year, the Legislature created the Hackensack Meadowlands Development Commission (HMDC), a state agency intended to direct the orderly and comprehensive development of this area. In the ten years of the Commission's existence, the Meadowlands Sports Complex, consisting of a football/soccer stadium and a racetrack, and new commercial and light industrial buildings have been erected on the west bank of the Hackensack River. On the east bank, the Harmon Cove area, including a planned unit residential development, the Meadowlands Hilton Hotel and several office and industrial buildings, have been developed. Much of the Meadowlands, however, still remains undeveloped.

A vision for the Meadowlands has already been created by the HMDC, which was given full planning and zoning authority for the District by its enabling legislation. In 1972, the HMDC introduced a master plan which foresees the development of additional planned residential-commercial-office complexes designed to both take advantage of the wetlands environment and preserve it to the maximum extent possible. The plan also calls for the preservation of several large wetlands preserves and the creation of one major and several smaller parks. The Commission's Open Space Plan calls for the preservation of 6,210 acres of open space, of which 3,001 acres are wetlands.

The Master Plan was substantially amended in 1977 and will no doubt be amended in the future. DEP proposes the adoption of this evolving vision, as the vision of the State's Coastal Management Program.

The Bay and Ocean Shore Area

This Coastal Management Program envisions a future Bay and Ocean Shore Area which will reflect the historic development of the region as part intense recreation area, part natural, undeveloped area, and part built-up area. The patterns and intensity of development will be better managed in the future. For example, to minimize conflict between noncompatible uses, similar activities will be located near each other. New developments will be designed to take advantage of increased understanding of natural, as well as economic and social, processes and will therefore have a greater net positive impact on the coast and the entire State than some past development.

New developments will be heavily concentrated in, or immediately adjacent to, existing developed areas. Recreation and tourism will continue to be the largest industry in the coastal zone, and will perhaps expand as a result of development in Atlantic City. Other urban areas in the coastal zone may be revitalized as well, as a result of efforts to concentrate new construction, to develop urban waterfronts, and to encourage expansion of recreational activities in urban areas.

Other industries will be located in inland parts of the coast. Single family detached housing will continue to be common, but the coastal zone will have increasing numbers of cluster developments, contributing to more efficient settlement patterns.

The ocean waterfront from Sandy Hook to Cape May will be devoted almost exclusively to recreation and commercial fishing. An exception is the possible location of offshore pipeline crossings in a very small number of shorefront areas. The inland areas of the coastal zone nearest the ocean will continue to provide housing and commercial services for seasonal and year round residents. Portions of the coastal zone further inland will also provide housing and locations for some industries, as well as land for agriculture, preservation of plant and wildlife, and recreation.

As this program is implemented and this vision becomes reality, some positive results will be immediate and directly visible, such as the halt in the indiscriminate high-rise construction along the Atlantic Ocean shoreline. Other changes in the coastal zone will be less visible, and perhaps take more time, such as changes in water quality making possible renewed swimming in now polluted waters, and a revised public attitude towards the value and need to protect the ocean and the coast.

Barrier Beach Region - The Barrier Beach Region includes the Sandy Hook Spit south to Monmouth Beach, headlands from Monmouth Beach to Bayhead, and the barrier island chain of Island Beach, Long Beach, Little Beach, Brigantine, Absecon, Pecks, Ludlum Beach, Seven Mile Beach, and Four Mile Beach Island. The inland boundary of the parts of the Barrier Beach Region that do not have a west waterbody is the first cultural feature.

The islands, headlands, and spits are considered one region due to their oceanfront locations. The issues associated with these areas far outweigh the differences between them. The ocean shorefront in the northern part of the segment, for example, although it is not strictly speaking a barrier island, responds to development and natural events in a manner similar to the barrier island locations adjacent to the ocean or bay.

The future of the Barrier Beach Region will be a continuation of the present. Recreation will be the dominant use of this part of the coastal zone, and only small amounts of new development directly associated with recreation will be constructed. Such development will be located on sites which have been previously developed; undeveloped sites in this region will, for the most part, remain as open space. The focus of shore protection efforts will continue to shift from structural to nonstructural measures, including a halt to development most likely to be destroyed by storms or floods.

Northern Shore Region - The Northern Shore Region includes all of the CAFRA area north of the Manasquan River (the boundary between Monmouth and Ocean Counties), exclusive of the Barrier Island Region described above.

This section of the coastal zone is part of a more general suburban ring in the New York-Northern New Jersey Metropolitan area. Once a relatively undeveloped place of seasonal homes with a tourism-oriented economy, this region, like much of Monmouth and parts of Middlesex counties, became a "bedroom" suburb after World War II for more mobile and affluent people working in New York City. More recently, as industry and commerce have also suburbanized, this area has developed an economic base of its own. The region includes Asbury Park and Long Branch, which have experienced some of the decline typical of older Northeastern cities.

While designated a High Growth Region (see Part II, Chapter 3, Section 3.5.3), this region is likely to change little in the foreseeable future. New developments will include housing development, possibly senior citizen developments, and light industry, and will occupy suitable sites which fill in largely developed areas. Initiatives at all levels of government may stimulate increased activity in Asbury Park and Long Branch.

Central Region - The Central Region is bounded in the north by the Monmouth-Ocean County Boundary, on the west by State Highway 37 and the Garden State Parkway in the south by Cedar Creek, and in the east by the back bay waters. Since 1950, this High Growth Region has held the position of the fastest growing area in the state. Relatively young, formerly urban families and senior citizens have constituted the bulk of Ocean County's population growth over the past twenty years. Population is currently growing faster than employment. Retail trade for both summer visitors and year round residents is the largest single source of employment.

Due to the availability of large, easy to develop and relatively low cost tracts of land, the region is still experiencing a housing boom. This type of largely residential, commercial, and light industrial development is likely to continue. The pattern of development in the region will one day form a relatively smooth transition between the densely populated Northern Region and the less developed Barnegat Corridor Region.

Western Ocean Region - Located west of the Garden State Parkway and southwest of State Highway 37, this small region has both large undeveloped, forested lands, large-scale senior citizen communities and areas devoted to ilmenite mining. New development in this region is expected to extend slowly beyond the current reach of development, avoiding the heavily forested Central Pine Barrens areas.

The Barnegat Corridor - This Moderate Growth region, located south of Cedar Creek (the boundary between Berkeley and Lacey townships), north of State Highway 72, west of the back bay systems and east of the Garden State Parkway has experienced pockets of new development in the past decade. A regional sewage treatment system with collector systems to serve existing settled areas is under construction. Designation of this area as a Moderate Growth Region recognizes that a gradual pace of infill and some extension development is appropriate here, rather than the more intense and scattered development pattern acceptable in central and northern Ocean County. Additional residential development attracted by the regional center of Toms River is likely in the Barnegat Corridor and Western Ocean regions.

Mullica-Southern Ocean County Region - This Low Growth Region is bounded to the north by Route 72, to the west by the CAFRA boundary, to the south by Route 561 in Atlantic County, and to the east by the back bay systems. This is the largely undeveloped Mullica Watershed and Southern Ocean County. The environmental value of the watershed and the inclusion of parts of the Pine Barrens and rural southern

Ocean County suggest that this area should remain largely undeveloped. Limited amounts of new development may occur near existing development along U.S. Route 9 and the Garden State Parkway interchanges.

Absecon-Somers Point Region - The Absecon-Somers Point Region is bounded on the north by Route 561, to the west by the Garden State Parkway, to the south by the County Road Alternate 559 and to the east by the back bay water systems. This High Growth Region is likely to experience the most change of any part of the Bay and Ocean Shore Region if casino gambling in Atlantic City is successful in revitalizing the area. The Region will be devoted to housing, tourist industries and other light to moderate industry. Because the existing infrastructure of Atlantic City once supported a population much larger than the present population, new development in this region will be able to locate primarily in already developed, downtown areas of Atlantic City. Unless land prices in this Region reverse the upward trend which began after the Casino Referendum passed, housing and support facilities for people who work in Atlantic City may have to be located in surrounding towns.

Great Egg Harbor River Basin Region - This Low Growth Region includes those portions of Atlantic County southwest of County Road Alternate 559 and those portions of Cape May County east of State Highway 50, north of County Road 585, and west of U.S. Route 9. In both its current and likely future character, it resembles the Mullica-South Ocean Region. It is a largely natural area which provides environmental benefits to the surrounding area and is unlikely to change significantly. As with both the Mullica-South Ocean and Absecon Regions, extensive success and growth of the casino industry could lead to unexpected rates of growth.

Southern Region - The Southern Region is all of Cape May County within the CAFRA Area except that portion in the Great Egg Harbor River Basin Region and Barrier Island Region. Tourism accounts for approximately 90 percent of this Moderate Growth Region's economic base, and has also played a major role in the region's development pattern. The region's ocean front municipalities and, to a lesser extent, several of its Delaware Bay shore municipalities are very highly developed, while haphazard, low density sprawl is the rule on the mainland. Due to the region's relative isolation and the absence of economic bases other than tourism, there is little year-round employment. This seasonality accounts for the region's low annual income. The Southern Region will be relatively unchanged. Small amounts of new development will fill in pockets of vacant land, and tourism will continue to be the dominant industry. A modest trend of converting summer homes into year-round housing, particularly for senior citizens, may expand.

Bayshore Region - The Bayshore Region encompasses all of the Bay and Ocean Shore Area in Cumberland and Salem Counties and, except for the Urban Aid Cities of Bridgeton and Millville which are proposed to be designated High Growth, is designated a Low Growth Region. This region is the least developed part of the Bay and Ocean Shore Area and includes large expanses of wetlands along Delaware Bay. These parts of the state are too far from major employment centers to have developed as suburbs. Unlike most other parts of the coastal zone, tourism has never played an important role in this area's economy. The Region is largely agricultural land, forests and wetlands, and sparsely populated with little existing infrastructure. The population and economic activity in these counties are concentrated in the small, manufacturing-oriented cities of Millville, Bridgeton and Salem, which lie on the inland boundary of the coastal zone.

This region is likely to remain largely undeveloped, and to continue to rely on agriculture and sand mining as major industries. Efforts to clean up the Delaware Bay and River may also revitalize the fish and shellfish industries. If additional energy facilities requiring location remote from large population centers are built in New Jersey, this Region offers potential sites. The Region will accommodate construction of small numbers of housing adjacent to existing development and possibly several larger developments and new industries. The large expanses of agricultural land, wetlands, forests, and the historical community of Greenwich will remain largely unchanged.

The Delaware River Area

The Delaware River Area resembles the Northern Waterfront Area in size and diversity in its 60 mile stretch from Trenton to Pennsville. Like the Northern Waterfront, it has an urban center with densely populated residential areas, industry and shipping; it has abandoned piers and factories; it has residential suburbs; and it has undeveloped land and undisturbed wetlands. The difference between this area and the Northern Waterfront lies in the proportion of land devoted to different uses. The urban/industrial area centered in Camden is relatively limited, while the amount of undeveloped land is relatively large. The Delaware River Area also tends to extend further inland than the Northern Waterfront Area, due to the greater penetration of tidal water up the numerous creeks which flow into the Delaware from the Coastal Plain. The Coastal Zone extends several miles up such major streams as Crosswicks Creek, Rancocas Creek, Cooper River, Big Timber Creek and Oldmans Creek.

The same basic policies will be applied to the Delaware River Area as to the Northern Waterfront Area. These policies will be designed to maintain the present diversity of uses with each use in its optimal location. The following analysis examines what this means for the specific regions of the Delaware River Area, starting at Trenton and moving southward.

The Burlington-Mercer Region - The Burlington-Mercer Region includes all of the coastal zone along the Delaware River north of the Camden-Philadelphia metropolis. This region, traversed by Route 130, Interstate 295 and the N.J. Turnpike, has been extensively suburbanized.

The waterfront is primarily residential, with the most intensive residential use in Trenton and from Burlington City southward. Much of the coastal zone here is a very narrow strip of shoreland rising from the river to the first road. Landward of that road are private homes. A few parks, public facilities and industrial facilities (some abandoned) also front the river. The coastal zone in this region also includes the shores of most tributaries. Some open space, as well as most of the Region's wetlands, remain near the mouths of these streams.

The principal tributary in this region is Rancocas Creek. The proposed coastal zone along this stream is quite wide in some places. Much of it is undeveloped upland or wetlands, although some suburban residential development is also present. The stream corridor could be preserved both for the sake of water quality and to meet the recreational needs of this growing suburban region. The creek has great potential for canoeing and hiking, as well as for development of small parks and picnic areas along its banks.

North of Burlington is the Crosswicks Creek, a stream which flows through extensive marshland. Part of this wetland, known as the Trenton Marsh, is in the Mercer County Park system. Preservation of portions of the marsh which are not presently under public ownership will be an objective of the Coastal Management Program.

In addition, plans of the New Jersey Department of Transportation call for completion of Interstate Highways 195 and 295 and State Highway 29 through this area. A final decision on routing will be made after completion of an Environmental Impact Statement to be forthcoming during 1980.

For the most part, the future of the Burlington-Mercer Region should mirror its present. New industry will locate in or near the areas used by existing industrial facilities. Additional residential development will be built as infill, as higher density replacement in existing residential areas, or as new planned clustered unit developments.

The most important changes foreseen are preservation of open space along the Delaware and its tributaries, including those narrow shorelands where people can walk along and see the river; encouraging more widespread public access to the river and riverfront; and increasing recreational opportunities on the river and related lands for boating, fishing, picnicking and, when water quality permits, swimming.

The Camden Region - This region consists of the three Camden County waterfront municipalities of Camden, Pennsauken and Gloucester City as well as several suburban communities located along tributaries of the Delaware. It includes a densely developed, urbanized riverfront which currently accommodates significant shipping and industrial activities. The region also includes the high density residential areas between the Ben Franklin and Betsy Ross Bridges and suburban housing along Pennsauken Creek, Big Timber Creek, and the Newton Creek further inland.

The proposed Coastal Policies would encourage and reinforce city and county waterfront redevelopment programs in Camden. These programs are designed to help create new industrial, shipping and wholesale commercial activities; to rejuvenate existing, but underutilized or vacant industrial sites; and to improve the City's waterfront parkland. The policies of the Coastal Management Program will also encourage other uses on the waterfront in appropriate places, including new high-density housing, commercial and retail activities, and new parks and recreation opportunities. The suggested Coastal Policies would also encourage increased public access to the riverfront, provided the public is not endangered and access does not interfere with other legitimate activities. The preservation of the few remaining areas still relatively open and undisturbed in the Region will also be a goal of the Coastal Program. These include the lower reaches of Big Timber Creek, the marina area on the Cooper River, and Fisherman's Cove, which could be maintained as natural areas for carefully managed recreational activities.

The Gloucester - Salem Region - This region extends south from the Big Timber Creek to the boundary of the Bay and Ocean Shore Segment in Salem County. Most of the riverfront area in this region is industrially owned. The northern part of Gloucester's coastal zone includes two major refineries, extensive bulk storage facilities and large petro-chemical complexes. Further south, a few heavy industries are located intermittently along the riverfront, including large DuPont and Monsanto facilities in Gloucester and another DuPont complex in Salem County.

Yet this region is by far the least developed and most sparsely populated area outside the Bay and Ocean Shore Segment. Between National Park in Gloucester County and Penns Grove in Salem County, the active energy and industrial complexes are typically separated by large tracts of vacant land including extensive wetlands and lowland forests. Although the Delaware River lies within one to three miles of Interstate 295, road access to the waterfront is almost non-existent. In the entire stretch from Paulsboro in Gloucester County to Penns Grove in Salem County, there are no public sewer systems in place immediately adjacent to the Delaware River, although the region's areawide waste treatment management plans call for sewering a two-mile stretch of riverfront in Greenwich Township.

The central portion of this region, for the most part, contains industrial activities and vacant undeveloped tracts. The region's population, focused at the two ends, can be seen as extensions of two large metropolitan areas -- the Camden-Philadelphia Area to the north and the Wilmington area to the south. Parts of the southern area, which includes Penns Grove, Pennsville and Salem City, have recently lost industry -- creating high unemployment and leaving behind vacant or underutilized facilities. New waterfront industry and port development would be most appropriate in those areas where there are existing infrastructure, an available labor force and underutilized industrial facilities. Vacant land along the waterfront and close to the population centers must also be evaluated in terms of its potential for meeting the recreational needs of the people living in these areas.

The central part of the Gloucester-Salem region is quite wide due to the inland penetration of coastal streams. Demand for industrial, residential and commercial development is expected a few miles inland of the waterfront along Routes 130 and 295. The proposed Coastal Policies would have this development take place in concentrated form and as infill rather than sprawling the entire length of the Camden/Philadelphia - Salem/Wilmington corridor. In addition, the many stream corridors, wetlands and lowland forests in this region would be preserved. The stream corridors, the undeveloped portion of the Delaware River waterfront and other undeveloped lands are suitable for parks, campgrounds and perhaps new marinas, while wetlands, lowland forests and other sensitive areas should be preserved as natural areas.

PART IV

ENVIRONMENTAL, ECONOMIC AND INSTITUTIONAL CONSEQUENCES OF FEDERAL APPROVAL

PART IV - ENVIRONMENTAL, ECONOMIC AND INSTITUTIONAL CONSEQUENCES OF FEDERAL APPROVAL

Introduction
Direct Effects
  Environmental Consequences
  Economic Consequences
  Institutional Consequences
Possible Conflicts Between Coastal Program and the Plans or
  Policies of Local Governments, Regional and Interstate Agencies

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INTRODUCTION

This part of the environmental impact statement examines the environmental, economic and institutional consequences of federal approval of the proposed New Jersey Coastal Management Program. Such an analysis is valuable because it indicates any general changes that will take place in the coastal zone, as a result of federal approval of the program. It cannot predict, however, specific effects likely to be felt by particular individuals or at particular locations.

Environmental Impact Statements are traditionally prepared for individual projects and examine the impacts of one defined action on an immediate and defined area. A state coastal program covers a large and diverse area of land and water, and the impacts of the program vary greatly from one location to another depending on the type of particular activity taking place or proposed. The consequences of all these activities of the program can only be discussed, therefore, in general terms since the number of combinations of possible individual actions is far too great to consider.

As suggested by the Federal regulations for implementing the procedural provisions of the National Environmental Policy Act, this part of the EIS does not repeat the Coastal Resource and Development Policies, but discusses the general effects on the coastal zone. It examines the effects of federal approval on the environment including both direct affects such as preservation, conservation, and development of particular areas, and indirect effects, such as increased pressure for development in areas outside the coastal zone, and the economic effects, including the indirect effects of redistributing jobs and growth in the coastal zone. Lastly, the institutional effects are examined. These include increased cooperation between federal, state and local agencies and co-ordinated decision-making at the state level.

DIRECT EFFECTS

Environmental Consequences

The proposed federal action will result in approval of a coastal management program for New Jersey. The criterion for assessing the environmental consequences of this action should be the CZMA's declaration of policy: "to achieve wise use of land and water resources of the coastal zone giving full consideration to ecological, cultural, historic and aesthetic values as well as the need for economic development".

Protection of the coastal zone is to be achieved through the implementation of the Coastal Resource and Development Policies in the New Jersey Coastal Management Program. These policies do not affect the operation of existing facilities, but guide future activities within the coastal zone.

Specifically, coastal resources, such as fish and shellfish spawning grounds, sanctuaries, beaches, wetlands, high risk beach erosion areas, dunes, historic resources, specimen trees, endangered species habitats and farmland conservation areas are termed "Special Areas" in the Coastal Management Program. Approval and implementation of the program will protect these areas and discourage further inappropriate development in hazardous areas which could result in destruction of property and loss of life.

The Coastal Resource and Development Policies will help preserve the coast's aesthetic qualities for public enjoyment and promote various types of recreational opportunities along the shore and waterfronts. The policies are intended to preserve natural processes and resources; however, DEP also recognizes that the coast will continue to experience significant new growth. Water dependent energy development, off-shore mineral mining, and port and harbor development with their attendant dredging, spoil disposal and bulkheading activities will be permitted in certain locations and under certain conditions. The potential impacts of these activities, which must be controlled before New Jersey will approve the activity, include a possible reduction in water quality, a possible reduction in fishery productivity as a result of habitat destruction and increased water turbidity, deterioration of coastal aesthtetic amenities, and potential interference with recreational uses of the waterfront.

Regional environmental consequences of the program will result from planned growth patterns for the coastal zone, with development largely concentrated in existing developed areas and with preservation of areas which are now primarily open space. The secondary impacts policy will help to control sprawl through prohibiting new infrastructure which would induce growth incompatible with coastal policies. Large scale development will conform to the Coastal Policies, thus preserving sensitive environmental areas from destruction. Prevention of construction on flood plains and the consequential reduction in flood potential will have beneficial environmental consequences for the surrounding region. Additional regional benefits are discussed under economic consequences.

The Location Policies include a methodology for determining the acceptability of a site for development. Implementing this method should have a positive long term environmental impact by preserving unique, exceptionally productive or irreplaceable resources and assuring that development will be compatible with the environment in which it is located. In particular, development will be restricted in areas with a high potential to degrade water quality.

The implementation of this Proposed Coastal Management Program will most likely involve a reduction in the development or destruction of relatively scarce coastal natural resources and an increase in the development of inland natural resources, which are less sensitive to such development and more abundant. Thus, the location of activities away from the coast will require the commitment of resources in other parts of New Jersey outside the coastal zone.

Under the Use Policies, most types of major development located in the coastal zone will be regulated by the State of New Jersey. However, the policies leave land use decisions of predominantly local impact to the discretion of local governments. For example, the regulation of housing developments of 24 units or less, outside the jurisdiction of the waterfront development law and not on coastal wetland locations, will remain the responsibility of local governments. Thus, residential or commercial developments that may not be detrimental individually and are not regulated by the State could well have cumulative adverse impacts on the coastal zone. This problem is not remedied by the Proposed Coastal Management Program, but is discussed in the program's proposed "Next Steps" in Chapter Five of Part II.

The Resource Policies address the prevention or mitigation of adverse environmental impacts on both natural and cultural resources. Implementating these policies should result in long-term beneficial environmental impacts related to protecting water quality and water supply, preventing the loss of prime agricultural land through erosion, protecting air quality, protecting historic sites and other recreational attractions, and increasing effective management of fisheries and wildlife resources.

The implementation of these policies may help to direct future development away from currently undeveloped portions of the coastal zone and into already developed portions of both the coastal zone and inland areas. Resultant concentration of development should have a long-term positive impact by decreasing energy use for transportation and the energy supply of scattered housing, and consequently decreasing transportation related and energy generation related pollution. Pollution sources may locate in already developed areas to a greater extent than without the coastal management program, thus making it more difficult for these already stressed areas to attain or maintain ambient air and water quality standards. In some cases it may be necessary to strengthen emissions or effluent controls as a mitigating measure. Conversely, there should be a long-term beneficial effect in presently less developed areas, making it easier for these areas to maintain compliance with environmental standards.

New development inevitably has environmental consequences which differ in urban and rural areas. In rural areas, environmental effects are focused on the land, and air water quality. In urban areas, impacts on the land are less because the area is already built-up, but reductions in air and water quality will occur. In areas where there is substantial development and the area is designated as high growth, these impacts may adversely affect day to day living. The policies in the Proposed Coastal Management Program are intended to mitigate these impacts; air and water quality standards will be enforced to prevent significant environmental damage, but some adverse impacts of development will be unavoidable.

Federal approval of the Coastal Program will give New Jersey federal funds under the CZMA to ensure that effective monitoring and inspection of sites can occur where development may be subject to State regulation or where coastal permits have been granted.

Economic Consequences

The Coastal Resource and Development Policies of the proposed New Jersey Coastal Management Program have been designed to conserve and protect key renewable natural resources and recreational areas while encouraging new development to locate in existing built up areas. The implementation of these policies will not

locate in existing built up areas. The implementation of these policies will not reduce development pressures or the statewide rate of growth in New Jersey. Policy implementation will, however, encourage development to locate in the more developed areas of New Jersey's coastal zone, and some developers may seek to avoid the actual or imagined restrictions of the Coastal Management Program by building more intensively in non-coastal parts of the State.

Landowners will receive medium and long-term positive benefits from the consequences of owning land adjacent to well planned development. Development which has not been controlled by the Coastal Resource and Development Policies may, for example, cause flooding or run-off on adjacent land, thus leading to detrimental effects. Conversely, land that has been developed in an environmentally sensitive fashion, or where open space has been preserved can raise the property values of surrounding sites.

Development subject to regulation under the Coastal Management Program also benefits from that regulation. In many cases, conditions placed upon a coastal permit decrease the costs of owning and maintaining the development by, for example, requiring that the development be built near adequate infrastructure and that energy conservation techniques be considered. Project design policies related to buffers and compatibility of uses, scenic resources, design and others are likely to make developments more aesthetically pleasing places to live or work. In fact, at least one coastal developer, after receiving a multi-conditioned CAFRA permit used these conditions as a marketing product by promoting the project as an "environmentally sensitive" development. His promotional material boasted of the specific features added to the project as a result of the DEP CAFRA permit review process.

The encouragement of growth in developed areas, and the conservation of more sensitive land areas will have an effect on land values both in and, to a lesser extent, outside the coastal zone. Areas that are particularly sensitive will be protected from most development and consequently the land values will in many instances decrease. Development is likely to be attracted to areas designated as medium and high growth areas, raising land values in these areas. In addition, development may be directed to areas outside the coastal zone as some developers seek to avoid regulation. Encouragement of growth in some areas while restricting it in others will have indirect economic consequences such as redirecting jobs and industry, but these effects are impossible to calculate in any meaningful way for such a large area.

Shifting land values and economic activity are a constant factor in the development of every area. State programs concerning a large area will add to the changing pattern of development pressures. The unplanned and rapid development which has taken place in New Jersey over the last few decades has resulted in pollution of the air and water and destruction of valuable natural resources. The costs of cleaning up this pollution must be borne by residents of the state, and will directly effect some residents more than others. Individual people and towns will benefit while others may lose, but the net effect should be beneficial to the State.

One price of the Coastal Management Program is that some land owners may not realize the economic return that they had expected from their land. But so long as some reasonable use of the land may be made, the consititutional rights of land owners are protected. There is a distinction between the reasonable use of land and the speculative gain that a buyer may have hoped to receive.

Institutional Consquences

Approval of the the proposed New Jersey Coastal Management Program will have implications for federal, state and local decision making processes. Federal approval of the program requires that Federal projects and permits must conform to the state's coastal program. In New Jersey, federal consistency now applies in the Bay and Ocean Shore Segment and will apply throughout the entire coastal zone when the Proposed Coastal Management Program is approved. This will create greater communication and consistency between federal and state agencies and actions.

At a state level, the approved coastal management program will serve as a focal point for all State agency actions in or affecting the coast. Rather than just responding on a case by case basis to crises or other events, all state agencies will be able to refer to adopted Coastal Resource and Development Policies. These policies will be most important for the activities of the Department of Environmental Protection where they provide uniform, predictable, binding policies for CAFRA, Wetlands, and Waterfront Development permits.

One major institutional change made possible by the formulation of these policies is the reorganization of the Division of Marine Services into the Division of Coastal Resources. The reorganized division has one permit review office, instead of three, which will lead to more efficient and less confusing processing of development applications.

A second major change is the addition of a narrow upland area to the jurisdiction of the Waterfront Development Permit Law. This addition, which is in the form of a proposed regulation (see Appendix D), would have the effect of requiring the first development upland from the water's edge to get a permit from DEP. This change would only affect development outside the area regulated by CAFRA. Much of this area is quite built-up already, so that the anticipated number of added development proposals requiring a Waterfront Development Permit is not great. Since such permit applications will also be reviewed on the basis of the Coastal Resource and Development Policies, DEP will be able to review efficiently these proposal as soon as the change takes effect.

The Coastal Resource and Development Policies also give the State a basis for working cooperatively with local governments, and responding to local initiatives and proposals. Previously, a local agency seeking State advice or assistance on acceptable coastal development would not have known where to turn and might have been given conflicting advice depending on the people consulted. The Coastal Policies provide a written, consistent standard which can be used by a local government, with State assistance when requested, to design a site-specific environmentally acceptable waterfront plan.

Adverse institutional impacts will be minimal. Some land owners in the Delaware River and Northern Waterfront areas will now need a Waterfront Development Permit for developments along the water's edge, but otherwise the Coastal Management Progam will not increase the number of permits needed by any one. The adoption of the Coastal Policies as Administrative Rules and the reorganization of the Division of Marine Services will have solely beneficial institutional impacts.

POSSIBLE CONFLICTS BETWEEN COASTAL PROGRAM AND PLANS OR POLICIES OF LOCAL GOVERNMENTS, REGIONAL AND INTERSTATE AGENCIES

Introduction

The final sections of Part IV indicate New Jersey's compliance with Section 923.56(a) of the Federal Regulations for the federal Coastal Zone Management Act, requiring states to consider the consistency of their coastal programs with federal, regional, state and local land use plans, policies and controls. This Part of the EIS analyzes consistency with local, regional, and interstate agencies; consistency with federal programs is discussed in the National Interest Section of Chapter Four of Part II and consistency with other state programs is discussed in the Management System Section of Chapter Two of Part II.

Local Governments

The New Jersey Department of Environmental Protection has conducted a review of the zoning and land use ordinances of municipalities in the proposed coastal zone to identify possible conflicts with the Proposed New Jersey Coastal Management Program, as well as to identify techniques used by local governments to implement goals compatible with the program.

This study represents, in large part, a re-evaluation of reports received from ten coastal counties under the State-County Coordination Program funded by NJ DEP with funds awarded New Jersey from Section 305 of the CZMA. In these reports the County Planning Boards and, in one case, County Environmental Agency, supplied a summary of municipal master plans and zoning ordinances. Additional information was obtained from county land use studies and plans, and through a review of municipal plans and ordinances on file with County Planning Boards. The results of this review appears in Figure 38.

Explanation of Chart Categories

The New Jersey Municipal Land Use Law, (N.J.S.A. 40:55D-1) et seq.) authorizes a municipality to enact a zoning ordinance. A land use element of a municipal master plan must first be adopted by the municipal planning board by May 31, 1979, and the zoning ordinance must be in "substantial compliance" with the land use element. Master plans that appear outdated on the chart are probably being revised to meet the May 31, 1979 deadline, since the law prevents a municipality without a Master Plan from enacting a zoning ordinance. The information on the chart has been sent to each municipality, and it will be updated in the Final EIS and New Jersey Coastal Management Program.

The Municipal Land Use Law also authorizes the enactment of subdivision and/or site plan review ordinances. Among the required subdivision ordinance elements are provisions for adequate water, drainage, shade trees, sewage facilities and soil protection. Site plan review ordinances must include provisions for the preservation of existing natural resources, screening and landscaping. Discretionary elements of these ordinances include the designation of open space areas, the regulations of flood areas, and design standards. These ordinances provide some assurance that environmental features will be conserved.

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

MUNICIPAL GOVERNMENT POLICIES

Figure 38

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
County - Atlantic										
Absecon	+	78	-	-	+	-	-	-		High-rise restrictions
Atlantic City	+	78	+	+	-	-	+	-	+	Clustering
Brigantine	+	78	+	-	-	+	-	-	+	High-rise restrictions
Corbin City	+	78	+	-	-	-	-	-		High-rise restrictions
Egg Harbor City	+	75	+	-	-	-	-	-		High-rise restrictions
Egg Harbor Twp.	+	75	+	+	-	-	-	-		PUD
Estell Manor	+	77	+	-	-	-	-	-		
Galloway Twp.	+	78	+	-	+	-	-	-		Natural Resource Inventory, Clustering, PUD, High-rise restrictions
Hamilton Twp.	+	67	+	+	+	-	-	-		Conservation district, High-rise restrictions
Linwood	+	78	+	+	-	-	-	-		High-rise restrictions
Longport	+	76	+	+	-	-	-	-	+	High-rise restrictions
Margate	+	78	+	+	-	-	-	-	+	Clustering, High-rise restrictions
Mullica	+	67	+	+	-	-	-	-		High-rise restrictions
Northfield	+	78	+	+	-	-	-	-		High-rise restrictions
Pleasantville	+	71	+	+	-	-	-	-		Preservation of natural features, High-rise restrictions
Port Republic	D	78	+	-	-	-	-	-		
Somers Point	D	78	+	+	+	-	+	-		High-rise restrictions

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Figure 38

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
Ventnor	+	63	-	-	-	-	+	-	+	Clustering, PUD
Weymouth Twp.	+	76	+	-	-	-	-	-		High-rise restrictions
County - Bergen										
Alpine Borough	+	78	+	+	-	N.A.	N.A.	-	+	High-rise restrictions, EIS required
Bogota Borough	+	69	+	-	-	N.A.	N.A.	-	+	High-rise restrictions
Carlstadt Borough	+	78	+	-	-	N.A.	N.A.	-		
East Rutherford Boro	+	67	+	-	+	N.A.	N.A.	-		High-rise restrictions
Edgewater Borough	D	66	+	+	-	N.A.	N.A.	-	+	
Englewood Cliffs Borough	+	78	+	+	-	N.A.	N.A.	-	+	
Fairview Borough	+	78	-	-	-	N.A.	N.A.	-		
Fort Lee Twp.	+	78	+	+	+	N.A.	N.A.	-	+	
Garfield City	+	56	+	+	-	N.A.	N.A.	-		High-rise restrictions, Buffer requirements
Hackensack City	+	76			-	N.A.	N.A.	-		
Little Ferry Boro.	+	64	+	-	-	N.A.	N.A.	-		High-rise restrictions
Lyndhurst Twp.	+	79	+	+	+	N.A.	N.A.	-	+	High-rise restrictions
Moonachie Borough	+	78	+	+	-	N.A.	N.A.	-		Buffer requirements
New Milford Boro.	P	78	+	+	+	N.A.	N.A.	-		
North Arlington Boro	+	71	+	-	+	N.A.	N.A.	-	+	High-rise restrictions

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
Oradell Borough	+	78	+	-	+	N.A.	N.A.	-		High-rise restrictions, Conservation/ Recreation zone
Ridgefield Borough			+	+	+	N.A.	N.A.	-	+	High-rise restrictions, EIS
River Edge Borough	+	71	+	-	-	N.A.	N.A.	-	+	
Rutherford Borough	+	77	+	+	+	N.A.	N.A.	-		High-rise restrictions, Buffer requirements
Teaneck Twp.	+	78			-	N.A.	N.A.	-	+	
Teterboro Borough	+	77	+	+	-	N.A.	N.A.	-		
Walington Borough	+	60	+	+	-	N.A.	N.A.	-		
County - Burlington										
Bass River Twp.	+	75	+	+	P	N.A.	P	-		Environmental Impact Statements, County Natural Resource Inventory
Beverly City	P	77	-	-	-	N.A.	-	-	+	
Bordentown City	+	58	+	-	-	N.A.	-	-	+	Buffer requirements
Bordentown Twp.	+	78	+	+	-	N.A.	-	-		Buffer requirements,cluster provision
Burlington City	+	66	+	+	-	N.A.	-	-	+	
Burlington Twp.	+	75	+	+	-	N.A.	-	-	-	
Chesterfield Twp.	+	73	+	+	-	N.A.	-	-	-	
Cinnaminson Twp.	+	65	+	+	+	N.A.	-	-	+	Buffer requirements
Delanco Twp.	+	76	+	+	-	N.A.	-	-	-	
Delran Twp.	+	79	+	+	-	N.A.	-	-	-	

Figure 38

Figure 38

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
Edgewater Park Twp.	+	78	+	+	-	N.A.	-	-	-	
Fieldsboro Borough	+	78	-	-	+	N.A.	-	-	-	Conservation District
Florence Twp.	+	76	+	+	-	N.A.	-	-	+	
Hainesport Twp.	D		+	+	-	N.A.	-	-	+	
Lumberton Twp.	P	77	+	+	+	N.A.	N.A.	-	-	
Mansfield Twp.	+	78	+	P	-	N.A.	-	-		
Maple Shade Twp.	+	78	+	+	-	N.A.	-	-	+	Flood plain zone
Medford Twp.	+	75	+	+	+	N.A.	-	-		Clustering; High-rise restrictions, Buffer requirements, Natural Features Protection
Moorestown Twp.	+	76	+	+	-	N.A.	-	-		
Mount Holly Twp.	+	78	+	-	-	N.A.	-	-	+	
Mount Laurel Twp.	+	79	+	+	+	N.A.	-	-	+	PUD, Flood Plain Protection (through conservation district)
Palmyra Borough	+	79	+	+	+	N.A.	-	-	-	
Riverside Twp.	+	78	+	+	+	N.A.	-	-	-	
Riverton Borough	-	-	-	-	-	N.A.	-	-	+	
Southhampton Twp.	-	-			-	N.A.	-	-		
Washington Twp.	+	78	+	P	P	N.A.	P	P		
Westhampton Twp.	+	79	+	+	+	N.A.	-	-	+	
'llingboro Twp.	-	-	+	+	+	N.A.	-	-	+	

Figure 38

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
County - Camden										
Audubon Borough						N.A.	-	-		
Bellmawr Borough	+	77	+	-	-	N.A.	-	-	+	High-rise restrictions
Brooklawn Borough	-	-	-	-	-	N.A.	-	-	-	High-rise restrictions
Camden City	+	78	+	+	-	N.A.	-	-	+	Clustering, Buffer requirements
Cherry Hill Twp.	+	66	-	+	+	N.A.	-	-	+	Clustering, Buffer requirements
Gloucester City	+	65	+	-	-	N.A.	-	-	-	High-rise restrictions
Gloucester Twp.	+	78	-	-	+	N.A.	+	-	-	Clustering, Buffer requirements
Haddon Twp.	+	75	-	+	+	N.A.	-	-	+	Buffer requirements, High-rise restriction
Hi-Nella Borough	-	-	-	-	-	N.A.	-	-	-	High-rise restrictions
Lindenwold Borough	+	61		+	-	N.A.	-	-	-	
Mount Emphraim Boro.	+	69	-	+	-	N.A.	-	-	+	High-rise restrictions, Clustering, Buffer requirements
Pennsauken Twp.	+	69		-	+	N.A.	-	-	+	Clustering, Buffer requirements
Oaklyn Borough							-	-	+	
Runnemede Borough	+	71		+	-	N.A.	-	-	-	Buffer requirements, High-rise restrictions
Stratford Borough	+	67		+	+	N.A.	-	-	-	High-rise restrictions
Woodlynne Borough	-	-			-	N.A.	+	-	-	Buffer requirements, High-rise restrictions

Figure 38

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
County - Cape May										
Avalon	D	78	+	+	+	+	-	+	+	Clustering, High-rise restrictions
Cape May City	+	78	+	+	-	-	-	+	+	Preservation of natural features, Clustering, High-rise restrictions
Cape May Point	+	78	+	-	+	+	-	+	+	High-rise restrictions
Dennis Twp.	+	78	+	+	-	-	+	-		Clustering, Buffer requirements, High-rise restrictions
Lower Twp.	D	78	+	+	-	+	+	+	+	Conservation district, Open space/ cluster development regulations
Middle Twp.	+	69	+	-	-	-	+	-		Clustering, High-rise restrictions
N. Wildwood	D	78	+	-	-	+	-	+	+	Clustering, High-rise restrictions
Ocean City	D	78	+	+	+	+	-	+	+	High-rise restrictions
Sea Isle City	D	78	+	-	+	+	-	+	+	High-rise restrictions
Stone Harbor	+	78	+	-	+	P	-	+	+	High-rise restrictions
Upper Twp.	+	78	+	+	-	N.A.	+	+	+	High-rise restrictions, Clustering, Buffer requirements
W. Cape May	D	78	+	-	+	N.A.	-	-		High-rise restrictions
W. Wildwood	D	78	+	-	-	N.A.	-	+		High-rise restrictions
Wildwood	+	78	+	+	-	N.A.	-	+	+	Clustering
Wildwood Crest	D	78	+	-	+	-	-	+	+	Buffer requirements
Woodbine	+	76	+	-	-	N.A.	N.A.	-		Clustering, High-rise restrictions

Figure 38

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
County - Cumberland										
Bridgeton	+	78	+	+	+	N.A.	-	-	+	Open space
Commercial Twp.	+	78	+	+	+	N.A.	-	-		
Downe Twp.	+	78	+	+	+	N.A.	-	-		Conservation district
Fairfield Twp.	+	78	+	+	P	N.A.	-	-		
Greenwich Twp.	+	78	+	+	+	N.A.	-	-		Alternative energy use design requirement
Hopewell Twp.	+	78	+	+	-	N.A.	+	-		Farmland preservation (proposed), woodlands protection, (clustering)
Lawrence Twp.	D	78	+	-	+	N.A.	+	-	+	
Maurice River Twp.	D	78	+	+	+	N.A.	-	-		
Millville	+	78	+	+	+	N.A.	-	-	+	Land conservation district
Stow Creek Twp.	+	78	+	+	+	N.A.	-	-		
County - Essex										
Belleville Town	+	79	-	+	+	N.A.	N.A.	-	-	High-rise restrictions
Newark City	+	79	+	P	P	N.A.	N.A.	-	+	
Nutley Town	+	76	+	-	+	N.A.	N.A.	-	-	

Figure 38

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
County - Gloucester										
Deptford Twp.	+	77	+	+	-	N.A.	-	-	-	Flood plain provision, Buffer requirements, Clustering
East Greenwich Twp.	D	-	D	-	-	N.A.	-	-	-	
Greenwich Twp.	+	77	+	+	-	N.A.	-	-	+	Conservation district
Logan Twp.	+	79	+	+	-	N.A.	-	-	-	PUD ordinance
Mantua Twp.	+	73	+	+	-	N.A.	-	-	-	Clustering,Flood Plain Provision
National Park Borough	-	-	-	-	-	N.A.	-	-	+	
Paulsboro Borough	D	-	-	-	-	N.A.	-	-	+	
Swedesboro Borough	+	73	+	-	-	N.A.	-	-	-	
Wenohah Borough	+	77	D	D	-	N.A.	-	-	-	
West Deptford Twp.	+	77	+	+	-	N.A.	-	-	-	Cluster Development Provision, Buffer requirements
Westville Borough	+	78	-	-	-	N.A.	-	-	-	Parks & Conservation District
Woodbury City	+	78	+	+	-	N.A.	-	-	+	
Woolwich Twp.	+	78	+	+	+	N.A.	-	-	-	PUD ordinance
County - Hudson										
Bayonne City	+	63	+	+	+	N.A.	N.A.	-	+	Buffer requirements
East Newark Boro.	-	-	-	-	-	N.A.	N.A.	-	-	

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Figure 38

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
Guttenberg Town	-	-	-	-	+	N.A.	N.A.	-	-	
Harrison Town	-	-	-	-	+	N.A.	N.A.	-	-	
Hoboken City	+	78		-	-	N.A.	N.A.	-	-	
Jersey City	+	66	+	-	-	N.A.	N.A.	-	+	Buffer requirements
Kearny Town	+	74	+	+	-	N.A.	N.A.	-	+	Buffer requirements b/w zones
North Bergen Twp.	D	-			+	N.A.	N.A.	-	-	
Weehawken	+	73	+	+	+	N.A.	N.A.	-	-	PUD provision
West New York Town	+		+	-	-	N.A.	N.A.	-	-	Controlled Water Development Zone
County - Mercer										
Hamilton Twp.	+	78	+	+	+	N.A.	-	-	+	Conservation District, Buffer requirements
Trenton City						N.A.	-	-		
County - Middlesex										
Carteret Borough	+	73	+	+	-	N.A.	N.A.	-	+	High-rise restrictions
East Brunswick Twp.	+	76	+	+	+	N.A.	N.A.	-	-	High-rise restrictions, Steep Slopes, PUD, Clustering, Buffer requirements, Historic Sites, Bike or Pedestrian Paths
Edison Twp.	+	78	+	+	-	N.A.	N.A.	-	-	Buffer requirements, High-rise restrictions

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Figure 38

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
Highland Park Boro.	+	69	+	+	-	N.A.	N.A.	-	+	
New Brunswick City	+	79	+	+	-	N.A.	N.A.	-	+	
Old Bridge Twp.	+	78	+	+	+	N.A.	N.A.	+	-	Clustering, PUD, Buffers, High-rise restrictions, Steep Slopes, Natural Features Protection
Perth Amboy City	P	79	+	+	-	N.A.	-	-	+	Buffer requirements
Piscataway Twp.	+	78	+	+	-	N.A.	N.A.	-	+	Clustering, PUD, High-rise restrictions, Bike or Pedestriam Paths, Buffers
Sayreville Borough	+	78			+	N.A.	-	-	-	PUD, High-rise restrictions
South Amboy City	+	77	+	+	-	N.A.	-	-	-	High-rise restrictions
South River Borough	+	79	+	+	+	N.A.	N.A.	-	-	PUD, Clustering, Buffers, High-rise restrictions
Woodbridge Twp.	+	78	+	+	-	N.A.	N.A.	-	+	Pedestrian or Bike Paths, Buffers, High-rise restrictions
County - Monmouth										
Aberdeen Twp. (formerly Matawan)	+		+		+	-	+	-		Clustering, Critical Environmental areas
Matawan Borough	+		+		-	-	-	-		
Allenhurst	+		+		-	-	-	+	+	
Asbury Park	D	78	+		-	-	-	+	+	High-rise restrictions
Atlantic Highlands	+		+		-	-	-	-		High-rise restrictions

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Figure 38

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
Avon by the Sea	D	78	+		-	-	-	+	+	
Belmar	+		+		-	-	-	+	+	
Bradley Beach	+	75	+		-	-	-	+	+	
Brielle	+		+		-	-	-	-		Natural Resource Inventory
Deal Twp.	-		+		-	-	-	+	+	
Eatontown	+	77			-	-	-	-		Clustering
Fairhaven	+				-	-	-	-		
Hazlet Twp.	D				+	-	-	-		PRD
Highlands	+		-		-	-	-	+		
Holmdel	+		-		-	-	-	-		
Interlaken	+		-		-	-	-	-		
Keansburg	+		-		-	-	-	-	+	
Keyport	+		+		-	-	-	-		PRD
Little Silver	+	69			-	-	+	-		
Loch Arbour	+		-		-	-	-	-	+	
Long Branch	+		-		+	-	-	+	+	High-rise restrictions
Manasquan	+		+		-	-	+	+	+	Clustering, PUD, critical areas
Middletown Twp.	+		-		+	-	+	+		Natural Resource Inventory, Clustering, High-rise restrictions, Critical areas

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
Monmouth Beach	+	78	-		-	-	-	+	+	Natural Resource Inventory
Neptune City	D	78	-		-	-	-	-		High-rise restrictions
Neptune Twp.	D				-	-	-	+		
Ocean Twp.	+				-	-	-	-		Clustering, tree removal, Natural Resource Inventory
Oceanport	+	74	-		-	-	-	-	+	
Red Bank	+	78	+	+	-	-	-	-		
Rumson	D	78	-		-	-	-	-		
Sea Bright	+		-		+	-	-	+	+	Preservation of natural areas
Shrewsbury	+		-	+	-	-	-	-		
Spring Lake Boro.	+		+	-	-	-	-	+	+	
Spring Lake Heights	+		+	-	-	-	-	-		High-rise restrictions, PRD
South Belmar	D	78	-	-	-	-	-	-		
Wall Twp.	+		-	-	+	-	-	-		Critical environmental areas, Preservation of natural areas
Union Beach	D	78	-	-	-	-	-	-		
West Long Branch	D	78	-	+	+	-	-	-	+	Soil protection, Preservation of natural features, Critical areas
Sea Girt	+		-	-	-	-	-	+	+	

Figure 38

Figure 38

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
County - Ocean										
Barnegat Light	+	63	+	-	+	+	-	-	+	Rural Preservation District
Barnegat Twp. (Union)	+	73	+	+	-	-	-	-		Cluster, Natural Resource Inventory
Bay Head	+	63	+	+	+	-	-	-	+	
Beach Haven	+	68	+	+	+	+	-	-	+	
Berkeley	+	74	+	+	+	-	-	-	+	Soil erosion, Shade trees, Cluster
Brick Twp.										Environmental Impact Assessment for sub-divisions, Tree cutting, Shade tree
Eagleswood Twp.	+	74	+	-	+	-	-	-		Tree cutting
Harvey Cedars	D	78	-	-	+	-	+	-	+	
Island Heights	+	70	-	-	-	-	-	-		
Dover Twp.	+	75	+	+	+	-	+	+	+	Cluster, Natural Resource Inventory, Tree cutting, Open Space
Jackson Twp.	+	69	-	-	+	-	-	-		
Lacey Twp.	D	78	+	+	+	-	-	-		
Lakehurst	+	78	+	+	+	-	-	-		
Lakewood Twp.	+	76	+	+		-				
Lavallette	+	77	+	-	+	-	-	-	+	Natural Resource Inventory
Little Egg Harbor	+	78	+	+	+	-	-	-		
Long Beach Twp	+	71	+	+	+	+	+	-	+	

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
Manchester	+	67	+	+	+	-	-	-		
Mantoloking			-	-	+	-	-	-	+	
Ocean Gate	D	78	+	+	-	-	-	-		
Ocean Twp.	+	73	+	+	-	-	-	-		
Pine Beach	-		-	+	-	-	-	-		
Point Pleasant	+	62	+	+	-	-	-	-	+	
Point Pleasant Beach	+	63	+	+	+	-	-	-	+	
Seaside Heights	-		-	-	-	-	-	-	+	
Seaside Park	-		-	-	-	-	-	-	+	
Ship Botton	D		+	+	-	-	-	-	+	
South Toms River	+	72	+	-	+	-	-	-		
Stafford Twp.	+	76	+	+	-	-	-	-	+	Tree cutting
Surf City	+	70	+	-	-	+	-	-	+	
Tuckerton	D	78	+	-	+	-	-	+		
Beachwood	+	78		+						
County - Passaic										
Clifton City	+	78	+	+	-	N.A.	N.A.	-	-	Buffer requirements, High-rise restrictions
Passaic City	+	78	+	+	-	N.A.	N.A.	-	+	PUD,High-rise restrictions

Figure 38

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Figure 38

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
County - Salem										
Lower Alloways Creek Twp.	+	79	+	+	+	-	-	-	-	Wildlife sanctuary
Carney's Point Twp.	+	79	+	+	-	-	-	-	-	Conservation district, Flood Plain Development Regulations
Elsinboro	+	79	+	+	+	-	-	-	-	Preservation of natural features
Mannington Twp.	+	79	+	+	+	-	+	-	-	Preservation of natural features, Conservation District
Olmans Twp.	+	79	+	+	-	N.A.	-	-	-	Wetland Construction Regulated
Penns Grove Boro.	+	77	+	+	-	N.A.	-	-	+	
Pennsville Twp.	+	77	+	+	-	N.A.	-	-	-	Wildlife Sanctuary
Pilesgrove Twp.	+	77	+	+	-	N.A.	-	-	-	Flood plain development restrictions
Quinton Twp.	+	77	+	+	-	-	-	-		Provisions restricting development on flood plains
Salem City	+	74	+	+	+	-	+	-	-	Historic preservation district, Clustering, Preservation of natural features
County - Somerset										
Franklin Twp.	+	78	+	+	+	N.A.	N.A.	-		Cluster, PUD, Buffer requirements Natural Features Protection

P-proposed (-) No
D-draft N.A.-not applicable
+-yes

Figure 38

Municipality	Master Plan	Date	Subdivision ordinance	Site plan review	Flood plain ordinance	Dune protection	Wetland Protection	Public Access	Waterfront Park	Other features of zoning law compatible w/Coastal Management Program
County - Union										
Elizabeth City	+	78	+	-	+	N.A.	N.A.	-	+	Buffer requirements
Linden City	+	76	+	+	-	N.A.	N.A.	-	-	
Rahway City	+	74	-	+	+	N.A.	N.A.	-	+	Open space zone, Buffer requirements

Five specific policies embodied in the coastal program and considered most likely to conflict with municipal policies are identified: Flood Plain Regulations, Dune Protection, Wetlands Protection, provision for public access to beaches and waterfront areas, and waterfront parks. It must be noted that, in certain cases, the determination as to whether a municipality has a particular ordinance is somewhat subjective. For example, almost all coastal zone municipalities have flood plain ordinances containing construction regulations designed to meet the requirements of the Federal Flood Insurance Program. Only those ordinances which protect the flood plain area itself are indicated on the chart. Similarly, high rise restrictions were noted both if a municipality prohibits high rise housing in the proposed coastal zone or if it has a maximum building height under 60 feet.

Conflicts

The absence of a "+" in any of the four specific categories for a given municipality indicates a potential conflict with the Proposed New Jersey Coastal Management Program, in that a municipality is not prevented from approving projects inconsistent with the Coastal Resources and Development Policies.

There may be additional conflicts with the program in the areas of waterfront uses, acceptable density levels, and development effect on various man-made and natural resources. However, identifying such conflicts would require an exhaustive examination of every zoning district of every municipality in the coastal zone. Such analysis will be part of DEP's future work with individual municipalities.

Conflict Resolution

The major mechanism for conflict resolutions is the direct state authority available through the state riparian laws, the Waterfront Development Law, the Wetlands Act of 1970, and the Coastal Area Facility Review Act. The Coastal Resource and Development Policies shall apply to these areas of DEP regulatory authority, as well as to other management actions of DEP affecting the coastal zone, to the extent statutorily permissible.

Planning assistance and cooperation by the Division of Coastal Resources with local governments may also prove to be an effective method of conflict resolution. The present revision of most municipal master plans is occuring with the assistance of county planning officials, who have worked closely with DEP on coastal policies. Local officials received the DEP-OCZM Interim Land Use and Density Guidelines - 1976 and subsequent documents, including the State of New Jersey Coastal Management Program - Bay and Ocean Shore Segment (August 1978) which, in turn, were based in large part on county planning information. Furthermore, the Municipal Land Use Law requires that the land use element take into account natural conditions including but not limited to "topography, soil conditions, water supply, drainage, flood plain areas, marshes and woodlands", as well as the other master plan elements, including a "conservation element" providing for "the preservation, conservation and utilization of natural resources, including, to the extent appropriate, open space, waters, forests, soil, marshes, wetlands, harbors, rivers and other waters, fisheries, wildlife and other natural resources ..." [N.J.S.A. 55D-19(a)(8)]. As municipalities include these considerations in their master plans, conflicts between local and state policies will be minimized.

NJ DEP will continue to work with counties and will increase its efforts to work with individual municipalities to maximize the consistency between state and local plans and decisions.

Regional and Interstate Agencies

Local governments designated pursuant to regulations established under Section 204 of the Demonstration Cities and Metropolitan Development Act of 1966 and regional and interstate agencies with plans affecting the coastal zone are listed on the next page. Coordination has been carried out with each of these agencies in development of Coastal Policies. Agencies and counties receiving the draft Coastal Management Program are listed in Appendix H.

The county governments have limited authority to regulate development in accordance with their plans. There is no conflict between their use of this authority and coastal zone management (See Figure 39). Coordination of county policies with Coastal Policies is discussed in Chapter Two. The three regional planning agencies with A-95 review functions in the proposed Coastal Zone have no regulatory authority. Each was given an opportunity to comment on possible Coastal Policies presented in this proposed Coastal Management Program and plans for their regions. The Delaware River Basin Commission holds significant regulatory authority for implementing its Comprehensive Plan. NJ DEP has conducted a coordination project with DRBC which found no inconsistencies between the DRBC Comprehensive Plan and the Coastal Policies.

Potential Regional Government Conflicts--Figure 39

Local Governments Which Function as A-95 Clearinghouses and Regional and Interstate Agencies	Plan	Regulatory Authority	Conflicts with Plans of a Regulatory Nature
County of Atlantic	County Master Plan	Authority to review all subdivisions of land within the county and to approve those subdivisions affecting county roads or drainage facilities N.J.S.A. 40:27-6.2	None
County of Cape May	County Master Plan		None
County of Cumberland	County Master Plan		None
County of Ocean	County Master Plan		None
Delaware Valley Regional Planning Commission	Land Use Plan Open Space Plan Housing Allocation Plan Water Supply Plan Transportation Plans	None	None
Tri-State Regional Planning Commission	Regional Development Guide, 1977-2000	None	None
Wilmington Metropolitan Area Planning Coordination Council	Regional Land Use Plan	None	None
Delaware River Basin Commission	Comprehensive Plan for the Delaware River Basin	Intrastate Allocation of Delaware River Basin Waters Review authority over proposed facilities with the potential for significant impact on water quality in the Basin. Enforcement authority over effluent standards required to attain water quality standards described in the Comprehensive Plan.	No conflicts discovered through coordination project with DRBC.

PART V

ALTERNATIVES TO THE PROPOSED ACTION

PART V - ALTERNATIVES TO THE PROPOSED ACTION

The proposed action is federal approval of the New Jersey Coastal Management Program. The federal alternatives are to delay or deny approval. In determining whether or not to approve the Coastal Management Program as submitted, the Assistant Administrator must determine whether the Program meets the requirements of the Coastal Zone Management Act as specified in the twenty-six findings needed for Program approval. This determination ultimately requires that discretion be used in interpreting the intent of Congress as expressed in the Act. This environmental impact statement and public comments are intended to assist the Assistant Administrator in determining the adequacy of the Proposed Program.

This discussion of alternatives will first consider the generalized impacts that would result from delay or denial of approval for any reason. It will next consider possible reasons for denial.

Delay or denial, for whatever reason, would not prevent New Jersey from implementing the proposed Coastal Program. It would not prevent the State from enforcing its Coastal Resource and Development Policies which meet a number of federal concerns such as preservation of natural and cultural resources and adequate consideration of the national interest in the siting of facilities of greater than local importance. It would, however, limit the State's ability to fully implement its Coastal Management Program by curtailing funds for program implementation and removing the requirement that federal actions be consistent with State coastal policies:

1. Loss of Federal Funds to Administer the Program

If approval of the program is delayed or denied, New Jersey will lose an estimated $1.5 million per year in program implementation funds, beginning in September, 1980. Loss of these funds would prevent adequate staffing of the permit programs which are the backbone of the Coastal Management Program. The State might be unable to implement the Waterfront Development Permit program over a reinterpreted jurisdiction. The State would also be forced to curtail its coastal planning activities, making it more difficult to revise coastal policies as new problems are identified. It might not be possible to implement whatever recommendations result from the federally funded Cumulative Impact study. Finally, delay or denial of program approval would mean an estimated annual loss of up to $6 million in CEIP funds for planning to deal with the impacts of offshore energy production.

2. Loss of Consistency of Federal Action With New Jersey's Coastal Resource and Development Policies

Denial or delay of program approval would render ineffective Section 307(c) of the CZMA, which requires that Federal actions in or affecting New Jersey's Coastal Zone be consistent with State coastal policies.

The Assistant Administrator has made a preliminary determination that New Jersey has met the requirements for approval under Section 306 of the Coastal Zone Management Act, but to insure that the Assistant Administrator's initial decision is correct this section identifies possible deficiencies in the Coastal Program which might require delay or denial of program approval:

Alternative 1: The Assistant Administrator could delay or deny approval if the proposed boundary is not adequate to meet the requirements of Section 304(1) - definition of coastal zone and 923.31(a) of the CZM regulations - inland boundaries.

Section 304(1) of the Coastal Zone Management Act states that the coastal zone shall extend inland from the shoreline only to the extent necessary to control shoreland uses which have a direct and significant impact on coastal waters. The state has proposed a boundary in the area north of the Raritan Bay (except for the Hackensack Meadowlands District) and north of the Delaware Memorial Bridge on the Delaware River which would extend 100 to 500 feet inland of all tidal waters through the administration of the Waterfront Development Act (N.J.S.A. 12:5-3). Specifically, the boundary in these areas is a minimum of 100 feet inland and a maximum of 500 feet, or an intervening property line or cultural feature, e.g. a road or railroad if one lies between 100 and 500 feet inland. Within the area from the Raritan Bay to the Delaware Memorial Bridge, which is subject to the Coastal Area Facility Review Act, the State proposes a boundary with the same jurisdiction as that of CAFRA or the Wetlands Act, whichever is farther landward. While the CAFRA boundary varies considerably, it extends inland no less than one half mile and averages about six miles in width. The boundary of the coastal zone in the Hackensack Meadowlands will be the same as that of the HMDC District.

The issue can be raised of the adequacy of regulating in urban areas only up to 100 feet from the shoreline. CZMA regulations 923.31(c) (general comments), however, clearly allow for a narrower boundary in urban areas by stating that "in many urban areas or where the shoreline has been modified extensively, natural system relationships between land and water may be extremely difficult, if not impossible, to define in terms of direct and significant impact". Because of the nature of the New Jersey coastline in the area north of the Raritan Bay, and along the Delaware River, its extensive bulkheading, high density, existence of infrastructure, and generally built-up character, the administrator has preliminarily determined that the State will be regulating in an area adequate to cover all uses that have a direct and significant impact on coastal waters. In addition to the Waterfront Development Permit Program, the State will regulate activities through the Wetland Act N.J.S.A. 13:9A-1 et seq. and tidelands grants, leases and licenses. The procedures for review of activities within the boundary is outlined in further detail in Chapter 4 of the DEIS/Program document. Reviewers of this DEIS are especially encouraged to comment on any land uses which could occur inland of this boundary, which may have direct and significant impact on coastal waters.

Alternative 2: The Assistant Administrator could delay or deny approval if the inclusion of the Hackensack Meadowlands Commission's policies on wetlands violate the provisions of 923.3(b)(ii) - regarding wetlands and flood plains.

CZMA regulations 923.3(b)(ii) state that a program must include policies that address uses of or impacts on wetlands and floodplains and that these policies shall minimize the destruction, loss or degradation of wetlands and preserve and enhance their natural values in accordance with the purposes of Presidential Executive Order 11990 - pertaining to wetlands. The Hackensack Meadowlands Development Commission's (HMDC) Master Plan allows for the possible filling of 36% (1,700 acres) of the remaining wetlands for water dependent activities and housing. About 64% (3,000 acres) of the wetlands are to be preserved under the plan. The acreage of wetlands proposed for possible filling, however, amounts to a small

percentage of the overall coastal wetlands in the coastal zone. The State presently has an estimated 245,000 acres of wetlands under the direct jurisdiction of the state CZM program. The 1,700 acres identified by the HMDC for possible filling represent approximately 0.7% of the entire State's regulated wetlands. The Commission will allow selected filling of wetlands in accordance with the District Master Plan, adopted in 1972, and last amended in January, 1980, after a thorough review of alternative sites.

The issue has been raised as to whether the policies of the Hackensack Meadowlands Development Commission violate the provisions of the CZMA, or the President's Executive Order on Wetlands. In regard to the CZMA, Section 303 and Regulation 923.3 do not prohibit all filling of wetlands, but call for programs to minimize the destruction, loss or degradation of wetlands. It is the preliminary conclusion of the Assistant Administrator that the Hackensack Meadowlands plan minimizes the destruction of wetlands. The President's Executive Order on Wetlands applies to Federal activities in wetlands; it will come into effect when federal permits, such as permits under Section 404 of the Clean Water Act are applied for.

It is important to note that the Hackensack Meadowlands Commission Plan is not a special management plan of the type allowed for in Section 230.10(a)(3)(ii) of the 404(b)(1) guidelines to the Clean Water Act. The Hackensack Meadowlands plan was prepared without necessarily meeting the comprehensive planning process called for in those guidelines. It is expected that decisions for 404 permits will continue to be made by federal agencies on a case-by-case basis, taking into account the wetland values and responsibilities under the Executive Order.

CZM regulation 923.21 allows for the designation as an Area of Particular Concern of any area where there are regulatory or permit requirements which apply only to that area. The State has designated the HMDC as an Area of Particular Concern based on the particular policies adopted by the Commission, and upon the Commission's regulatory jurisdiction. The plan adopted by the Commission calls for the creation of unified marshland preservation districts and restored shoreline buffer areas, and requires improvements to existing water quality facilities. Chapter 5 of the DEIS/Program document details the regulations of the HMDC.

Alternative 3: The Assistant Administrator could delay or deny approval if the proposed interpretation of the Waterfront Development Permit Program does not meet the requirements of Section 306(c)(7) - adequate authorities necessary to implement program.

CZMA regulations 923.41(b)(1) allow for the Assistant Administrator to request a State Attorney General's opinion when there is a need for verification of an interpretation of any of the authorities proposed to be part of the management program. An Attorney General's opinion was requested on the interpretation of the Waterfront Development Permit Program's jurisdiction to regulate all uses in the coastal zone up to 500 feet inland of tidal waters, or to the first property line, road or railroad, whichever is less extensive, subject to a minimum jurisdiction of 100 feet. The Attorney General responded to this request and his opinion is in Appendix D of the DEIS/Program document.

The Attorney General's opinion states that DEP does have the legal authority to define the jurisdiction of the Waterfront Development Permit Program to regulate all uses in the coastal zone up to a minimum of 100 and a maximum of 500 feet inland. Based on the Attorney General's opinion, OCZM will require that this interpretation of the Waterfront Development Permit Program be adopted in regulations prior to the program approval. This opinion is contained in draft form in Appendix D of the DEIS/Program document.

APPENDICES

APPENDIX A - THE COASTAL PLANNING PROCESS: 1973-1979

The proposed New Jersey Coastal Management Program is based on DEP staff research, contractual studies by private consultants, university research teams, and state and local government agencies, and considerable public debate, suggestions, questions, and comments over the past six years. The most tangible evidence of the coastal planning process are the federally-approved Coastal Management Program - Bay and Ocean Shore Segment, Options for New Jersey's Developed Coast and other coastal reports published by DEP. Many of the planning reports produced and widely distributed by DEP are available upon request from the Division of Coastal Resources, while others, intended as in-house working documents, are available for review by interested people. Other evidence of the coastal planning process may be less visible, but just as significant as printed documents. This appendix sketches some of the highlights of the coastal planning process to date, both the clearly tangible reports and the public participation efforts.

The coastal management program has been prepared in two segments. The first, addressing the Bay and Ocean Shore Segment, received approval from the National Oceanic and Atmospheric Administration in September 1978. The proposed program is based on studies prepared for the entire coast during the past six years.

Major Planning Documents

Since 1975, DEP has prepared seven major coastal planning reports which were widely shared with public groups, individuals, and agencies. These reports and the reaction to them have shaped the direction and policies of the Coastal Program.

In September 1975, DEP published an Inventory of the New Jersey Coastal Area which defines and discusses the diverse resources, problems and opportunities of New Jersey's coast in order to indicate the range of issues that constitute the agenda for coastal zone management.

In July 1976, DEP released Interim Land Use and Density Guidelines for the Coastal Area of New Jersey, prepared with the assistance of Rivkin Associates of Washington, D.C. This document classifies land and water features in the coastal area in terms of relative suitability for development. The Interim Guidelines and the companion publication, Guiding the Coastal Area of New Jersey -- The Basis and Background for Interim Land Use and Density Guidelines, provided an advance indication to developers, municipal officials, and others, of the likely decision on CAFRA permit applications, and have also served as a focal point for discussion and debate in the development of the Coastal Management Strategy (September 1977), the Coastal Management Program - Bay and Ocean Shore Segment (August 1978) and Options for New Jersey's Developed Coast (March 1979).

In October 1976, Alternatives for the Coast - 1976 was published to indicate the scope of policy alternatives DEP was evaluating for the coastal zone, their implications and the principles that helped shape them. DEP expanded upon the policy alternatives in twenty-two issue papers published between November 1976 and early 1977. The topics covered were: Agriculture and the Coast, Air Resources, Cultural Resources, Flooding, Groundwater Quantity and Quality in the New Jersey Coastal Zone, Housing, Ocean Resources (Living, Mineral, and Physical Resources), Sand Movement and the Shoreline, Solid Waste and the Coast, Surface and Coastal

Water Resources of New Jersey, Upland Living Resources (Endangered, Threatened and Rare Animals, Endangered and Rare Vegetation, and Upland Wildlife Habitats), and Upland Mineral Resources and the Coast. A separate paper on the value of Atlantic White-Cedar Stands was completed in May 1976.

In December 1976, DEP released Alternative Boundaries for New Jersey's Coastal Zone. This report presented ten possible coastal zone boundaries and served as a basis for debate on the issue.

DEP submitted the Coastal Management Strategy for New Jersey-CAFRA Area to the Governor, Legislature, and public in the fall of 1977. The Strategy introduced the Coastal Location Acceptability Method (CLAM), a method of coastal resource management developed by DEP-OCZM in 1976-1977 using a pilot study area in lower Cape May County. Prepared in part to satisfy the statutory mandate of the Coastal Area Facility Review Act of 1973 that called for the selection of an environmental management strategy for the coastal area in four years, the document also served as a discussion draft of the Coastal Management Program for the Bay and Ocean Shore Segment. DEP distributed 3,000 copies of the Coastal Management Strategy, conducted eight public meetings throughout the state to discuss and debate the coastal program, held twenty additional informal meetings with public agencies and received nearly one hundred written statements with comments on the Strategy. DEP then revised the Strategy substantially in the course of preparing the Draft EIS for the Bay and Ocean Shore Segment document.

The formal federal approval process for New Jersey's coastal program began in May 1978 with the publication of the Coastal Management Program - Bay and Ocean Shore Segment and Draft Environmental Impact Statement. DEP distributed more than 3,000 copies of the draft document, and held numerous meetings with various interest groups to discuss and debate the coastal program. In addition, DEP with NOAA-OCZM convened three public hearings to receive testimony on the DEIS. The Final Environmental Impact Statement (August 1978) was the result of revisions made to the May 1978 document, based on public comment gathered at the hearings, in informal meetings, and in written statements, and was approved by NOAA in September 1978. Options for New Jersey's Developed Coast (March 1979) provides a basis for further discussion of a coastal boundary, management system and policies as the coastal management program is expanded to encompass the coastal zone of the entire State.

Public Shorefront Access and Erosion

DEP's Office of Coastal Zone Management served as staff to the Commissioner of DEP in his capacity as an active ex-officio member of the New Jersey Beach Access Study Commission. In 1976-1977, DEP staff helped prepare the Commission's report to the Governor and Legislature on beach access in April 1977. This report, entitled Public Access to the Oceanfront Beaches, examined beach use, budgets, and fees and ownership.

A study on shoreline erosion was prepared under contract to DEP by Rutgers University - Center for Coastal and Environmental Studies. The Coastal Geomorphology of New Jersey, in two volumes printed in December 1977, deals with the management techniques, strategies, and the technical basis and background for shoreline erosion management strategies. The study was a large step forward in understanding how to make decisions regarding development along the shoreline. Its influence is seen in many of the policies (high risk erosion, shore protection, dune protection) of the Coastal Resource and Development Policies.

Energy

In December 1975, the Department of Environmental Protection invited energy industry representatives to provide basic information on coastal energy siting to be used in preparing the energy facility element of New Jersey's coastal zone management program. The results of this "Call for Information" were published by DEP in March 1977. The state's three major electric utilities responded in considerable depth to the "Call".

DEP's concern with the development of coastal energy facilities is further reflected in two contractual studies undertaken by research groups at Princeton and Rutgers Universities. The study by Princeton's Center for Environmental Studies, entitled Who's in Charge? - Governmental Capabilities to Make Energy Siting Decisions in New Jersey, received financial support from the Federal Energy Administration, which sponsored a similar effort in each of the states associated with the Mid-Atlantic Governors Coastal Resources Council (New York, New Jersey, Delaware, Maryland and Virginia). It was published in September 1977. The Rutgers study, prepared by the Center for Coastal and Environmental Studies and entitled Onshore Support Bases for Offshore Oil and Gas Development: Implications for New Jersey, was released in February 1978. In addition, DEP staff completed a report entitled Energy Facility Siting Issues in New Jersey's Coastal Zone, which was released for distribution in December 1977. DEP staff also prepared a brief "Fact Sheet on Offshore Drilling in New Jersey" in June 1978, and a report on OCS activities in New Jersey (1974-1979) in November 1979.

Legal Framework

In June 1976, DEP compiled "An Inventory of Environmental Law in New Jersey", which includes a description of major New Jersey land use, water quality, air pollution, and living resources laws related to coastal zone management. This is an in-house working document.

In June 1977, DEP completed "Areawide (208) Water Quality Planning and the New Jersey Coastal Zone Management Program: Opportunities for Interagency Coordination," a paper detailing the relationship between coastal zone management planning and water quality planning being conducted in New Jersey under Section 208 of the Federal Water Pollution Control Act.

Economics and Land Use

NJ DEP had contracts in 1975 and 1976 with the New Jersey Department of Community Affairs (DCA) and the Department of Labor and Industry (DLI) to prepare background land use and socio-economic studies about the coast. DCA produced information concerning: "Coastal Zone Housing Issues", County Land Use Issues in Atlantic, Cape May, Cumberland, Monmouth, Ocean and Salem Counties (six papers), "Growth Centers and Their Implications", "Sewerage Facilities", "Transportation Systems", and "Water Supply".

The Department of Labor and Industry prepared the following papers: "Background Paper: Economic Perspectives on New Jersey Tourist Industry", "Economic Inventory", "Economic Issues and Problems in Northeastern Region of New Jersey Coastal Zone", "Some Taxes", "Economic Profiles" on Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Monmouth, Ocean, and Salem Counties (nine papers), and "Municipalities in Burlington and Middlesex Counties".

Information Systems

In February, 1975, in cooperation with the American Arbitration Association, DEP began an experiment to validate the environmental data for the Coastal Program. This experiment involved two large public meetings and several subsequent workshops. By January 1976, agreement was reached on data in nine natural resource categories. The categories are: bathymetry, flood areas, geology, groundwater, land use, slope, soils, tidal wetlands and vegetation.

NJ DEP also tested the development of information packages on an automated basis, in cooperation with the American Arbitration Association, Rockefeller Foundation, Rutgers University, and Princeton University. The 1976-1977 project, called the "Intuitive-Interactive Model", produced draft information packages on air pollution, construction noise, physical impact, industrial energy demand, odor pollution, residential energy demand, solid waste and waste demand, and urban runoff. One distinctive feature of the model is the ability of interested users such as developers or municipal officials to work directly, or "interact", with the computer. The findings of the project are being used by DEP in considering the ultimate design of an information system to assist coastal and perhaps statewide land and water use decision-making.

Nominated Areas of Public Concern

In December 1977, NJ DEP completed a report for public release entitled Nominated Areas of Public Concern in the New Jersey Coastal Zone. The report describes 176 areas of the state nominated by 140 interested individuals and organizations in 1976-1977, in response to DEP's invitation that the public suggest sites and areas for preservation, development, historic, recreation, visual, or other purposes.

The enthusiastic public response to this invitation led to detailed and wide ranging nominations, which were used in part to confirm and refine the DEP-OCZM staff recommendations on Special Land Areas and Special Water Areas in preparing the Location Policies in the Coastal Management Program - Bay and Ocean Shore Segment and this document. DEP also distributed its report describing the nominations to other state, county and municipal agencies which can make decisions affecting the sites. Finally, the information DEP gained about specific sites through the Nominated Areas of Particular Concern program has been used in the past and will be used in the future as supplemental information to be reviewed in individual coastal permit decisions.

Coastal Awareness

Rutgers University Center for Coastal and Environmental Studies, under contract to DEP, produced four booklets on coastal issues for public distribution in 1976-1977. The booklets, which are available from DEP are: "State Government and Coastal Zone Management", "Coastal Zone Legislation", "Oil Spills Reaction and Responsibility in New Jersey", and "New Jersey's Fishing Industry".

Mapping

During 1976-1978 DEP published several coastal map series, which are available to the public. The Inventory of the New Jersey Coastal Area - 1975 describes where these maps are located and how to use them. The Third Year Coastal Zone Management Program Development Grant Application provides a detailed list of the mapping in

the first two years of the program. During the third year (1976-1977), extensive mapping was also done as part of DEP's pilot study in lower Cape May County, which resulted in the publication of A Method for Coastal Resources Management (July, 1978).

The Interim Land Use and Density Guidelines also includes maps of developed and selected environmentally sensitive areas in the Bay and Ocean Shore Segment. Wetlands maps are on file with each county recording officer and are also available for public inspection or purchase in DEP's Bureau of Coastal Planning and Development. Flood hazard area maps, as delineated by DEP's Division of Water Resources, are available for public inspection.

In addition, DEP funded a study by Rutgers University - Center for Coastal and Environmental Studies to develop an underwater aerial photographic methodology suitable for surveying submerged vegetation in the coastal estuaries of New Jersey. The study culminated in the report, entitled Analysis and Delineation of the Submerged Vegetation of Coastal New Jersey: A Case Study of Little Egg Harbor (January 1978), which describes the aerial underwater photographic method, identifies and maps distributions of species, and discusses the ecological functions and associated problems of each of the dominant species.

In July 1978, DEP released a staff working paper entitled Definition of the Preliminary Coastal Zone Boundary for the Delaware River and Northern Waterfront Regions of New Jersey's Coastal Zone. This paper identifies the process used by DEP to prepare an initial boundary for the coastal zone outside of the Bay and Ocean Shore Segment.

In September 1978, DEP held an all day mapping workshop to begin planning a coordinated effort by state agencies and other interested groups to identify mapping and other data needs, and to devise a system for obtaining, storing, and using the information.

Public Participation

DEP's Division of Coastal Resources is committed to wide public participation by law, by practicality, and by principle. The Division's involvement efforts have two objectives, to raise the level of public awareness regarding both threats to, and attributes of the coast, and to identify and meet with individuals and groups who can contribute knowledge and opinions to coastal planning efforts.

The Division works to involve people early in the planning process and continues to encourage such involvement. Draft documents are made available. Possible policies are discussed in public long before they are even formally proposed, much less adopted. The objective is for the DEP staff to be exposed to as much information as possible, and for initial staff ideas and work products to receive a wide and critical reading. The reason is simple: a coastal zone management program cannot be prepared just from Trenton. The state's coastal zone is too large and too diverse. Public input and feedback is critical. Ideas which appear attractive on a planner's desk may be impossible to apply.

The Division of Coastal Resources uses varied forums and publications to hear and explore varied information and viewpoints. To attract coastal residents, DEP convened several series of public meetings in coastal counties during 1975-1978. The first meetings, held in Toms River and Trenton in February and May 1975, were

focused on introducing the program and DEP's Data Validation Project. A second series of meetings were held in the summer of 1976 following publication of the Interim Land Use and Density Guidelines for the Coastal Area. A third series of seven meetings were held in the early winter of 1976 after release of Alternatives for the Coast. A fourth series of eight public meetings took place around the state in November-December 1977, following public release of the Coastal Management Strategy. These public meetings often began with a slide presentation and talk by a DEP staff member and then turned to the specific concerns of the assembled. Discussion at these meetings flows from the questions, and many topics are each discussed relatively briefly. In addition, DEP holds periodic workshops focused on specific, pre-announced subjects. Workshops on Agriculture, for example, were held in October 1976 in two locations (Bridgeton and New Brunswick). Additional workshops were held in February 1977 in Trenton and Toms River on Biological Resources, Physical Resources, Housing, Air Resources and Transportation, and Recreation and Boating.

Upon publication and distribution of the Draft Environmental Impact Statement on the Bay and Ocean Shore Segment in May 1978, DEP held numerous workshops throughout the state with municipal officials, environmentalists, and industry and trade representatives prior to the document's more formal review at public hearings in June. The workshops were held primarily to further acquaint participants with the Coastal Location Acceptability Method (CLAM). DEP staff used a step-by-step process with illustrations to work through a CLAM case study. The workshops also provided a forum for additional comments about the document, so that interested parties could receive clarification on specific points within the document, or suggest and discuss particular issues in greater detail than is possible at hearings. DEP, in conjunction with NOAA-OCZM, then held three public hearings on the Coastal Management Program in June 1978 in Bridgeton, Toms River, and Trenton. Approximately 180 people attended the hearings at which a total of 35 persons offered testimony. DEP presented a slide show at the start of each hearing to serve as an introduction to the coastal program.

Following publication and distribution of Options for New Jersey Developed Coast, another series of public meetings were held in June, 1979. These public meetings explored the issues raised in Options and discussed the implications of completing the coastal management program for the developed parts of the coast.

In the Delaware River Area, DEP has held public meetings in Camden, in 1976, 1977, 1978, and 1979; in Gloucester in 1978 and 1979; and in Burlington in 1979. Speakers from DEP's Office of Coastal Zone Management (OCZM) have attended additional meetings in Gloucester County and Burlington County. DEP-OCZM has shared drafts of documents with the Delaware River Port Authority throughout the planning process and undertook a contract for joint coastal planning with the Delaware River Basin Commission.

In the Northern Waterfront Area of the Developed Coast, DEP-OCZM held public meetings in Hoboken in 1976, New Brunswick in 1976, 1978 and 1979; Jersey City in 1977 and 1978; Hackensack, Edison and Elizabeth in 1978; and Newark in 1979. In 1977, DEP-OCZM met with municipal officials in Hudson and Bergen counties. DEP-OCZM staff have also spoken to environmental, civic and business groups in the area. Drafts of documents have been shared with the New York and New Jersey Port Authority, and DEP-OCZM has a working arrangement with the Hackensack Meadowlands Development Commission to exchange views on planning efforts.

As an additional method of adding local input and perspectives to planning for the Developed Coast, DEP-OCZM passed through two small grants of federal funds available under the Coastal Zone Management Act to coastal counties to conduct studies on energy facility siting, and to provide county suggestions and comments on the direction and content of the State Coastal Management Program. The participating counties in the Developed Coast were Salem, Gloucester, Camden, Burlington (for one year), Middlesex, Union and Hudson.

DEP also meets regularly with representatives of builders and environmental groups. DEP has shared and discussed with these groups early drafts of several coastal reports including the Interim Land Use and Density Guidelines, CAFRA Procedural Rules and Regulations and the Coastal Management Strategy. Prior to the May 1978 publication of the Coastal Management Program - Bay and Ocean Shore Segment and Draft Environmental Impact Statement, DEP distributed 150 copies of a pre-publication version of the document for quick review and comment by other state agencies, coastal county planning boards, builders, and energy, industry and environmental group representatives who had been active in the coastal planning process. Recipients of the pre-publication draft were also invited to a special Saturday review working session.

Since November 1976, DEP has held regular meetings with an Environmental Advisory Group composed of leaders of statewide civic and environmental groups. These meetings have been regularly attended by representatives of the American Littoral Society, American Association of University Women, League for Conservation Legislation, Sierra Club, Association of New Jersey Environmental Commissions, Natural Resources Defense Council, and the League of Women Voters, and occasionally by the Citizens Association to Protect the Environment, New Jersey Audubon Society, New Jersey Conservation Foundation, New Jersey Public Interest Research Group, and the Youth Environmental Society.

DEP also convened a series of workshops on energy involving oil and gas industry representatives from Louisiana and Texas, as well as from the New Jersey Petroleum Council and the American Petroleum Institute in Washington, D.C., county energy planning representatives, researchers from Rutgers and Princeton, fishing groups. As the Newark Star Ledger noted on April 24, 1977, "It comes as somewhat of a surprise to find many of the combatants meeting across tables to discuss the issue informally, almost casually, in New Jersey."

The hearings held by DEP on each CAFRA permit application provide another forum for public input in the Bay and Ocean Shore Segment. The hearings are held near the site proposed for development, and range, depending on the interest aroused by the applicant, from five minute meetings attended only by the applicant to four hour sessions with up to 300 people.

The Coastal meetings and workshops are announced primarily through The Jersey Coast, the Division of Coastal Resources newsletter. This periodical is mailed to all interested persons and organizations known to DEP. The mailing list currently includes more than 7,000 names. Meetings are also announced through press releases and the DEP Bulletin.

The Division recognizes that reliance on a mailing list may neglect many potentially interested persons. To expand interest and knowledge of coastal management issues, the DEP staff have spoken before a wide variety of municipal, county, state, and regional agencies, and civic, interest and professional groups in New Jersey and in other states. This provides an opportunity to talk with many people who may be well aware of some of the problems, but unaware of the coastal zone management program and possible solutions. Through these meetings, proposed policies are debated, interested individuals identified, and new people added to the mailing list who may later contribute to an element of the program.

DEP also participates in other events to raise public awareness of coastal issues and again to identify more people who are interested in participating in the coastal management process. In June, 1976, for example, the DEP Commissioner led federal, state and local officials, interested citizens, and reporters on a six day walk along New Jersey's 125 mile ocean shoreline. This innovative event sparked considerable publicity and interest in the coast both in New Jersey and nationally. The Beach Shuttle experiment operated by DEP in the summer of 1977, and the return of the service in 1978 and 1979, have provided another vehicle for probing public views on selected coastal management issues. In addition, DEP has had exhibits at boat shows and county fairs. In May 1978, DEP developed a portable display describing New Jersey's coastal management program. This display can be easily updated as DEP progresses through the Federal approval process and begins to emphasize different areas of the State's coastal zone. The exhibit has been placed at several environmental and ecological fairs around the state, in libraries, and in the rotunda of the State House.

APPENDIX B - EXCLUDED FEDERAL LANDS

Under the federal Coastal Zone Management Act, lands that are 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 New Jersey's coastal zone. The major federal holdings located within New Jersey's proposed Coastal Zone and, therefore, excluded under federal law, are listed below. "Major" is defined as greater than 100 acres. These areas are indicated in Figure 40. In addition to the areas noted, numerous Coast Guard stations and smaller federal land holdings are excluded from the coastal zone. The listing below notes the federal agency responsible for the land and the county in which it is located.

Army Corps of Engineers

National Park Disposal Area (Gloucester)
Pedricktown Disposal Area (Salem)
Penns Grove Disposal Area (Salem)
Penns Neck Disposal Area (Salem)
Killcohook Spoil Disposal Area (Salem)
Artificial Island Disposal Area (Salem)
Cape May Canal (Cape May)

Army

U.S. Military Reservation - Caven Point Marine Terminal (Hudson)
Military Ocean Terminal (Hudson)
Fort Monmouth (Monmouth)
Highlands Army Air Defense Site (Monmouth)
Philadelphia Air Defense Site - USA Reservation (Salem)

Navy

Leonardo-Earle Naval Ammunition Depot (Monmouth)

Fish and Wildlife Service

Barnegat National Wildlife Refuge (Ocean)
Brigantine National Wildlife Refuge (Atlantic)
Killcohook National Wildlife Refuge (Salem)
Supawana Meadows National Wildlife Refuge (Salem)

National Park Service

Gateway National Recreation Area - Sandy Hook (Monmouth)

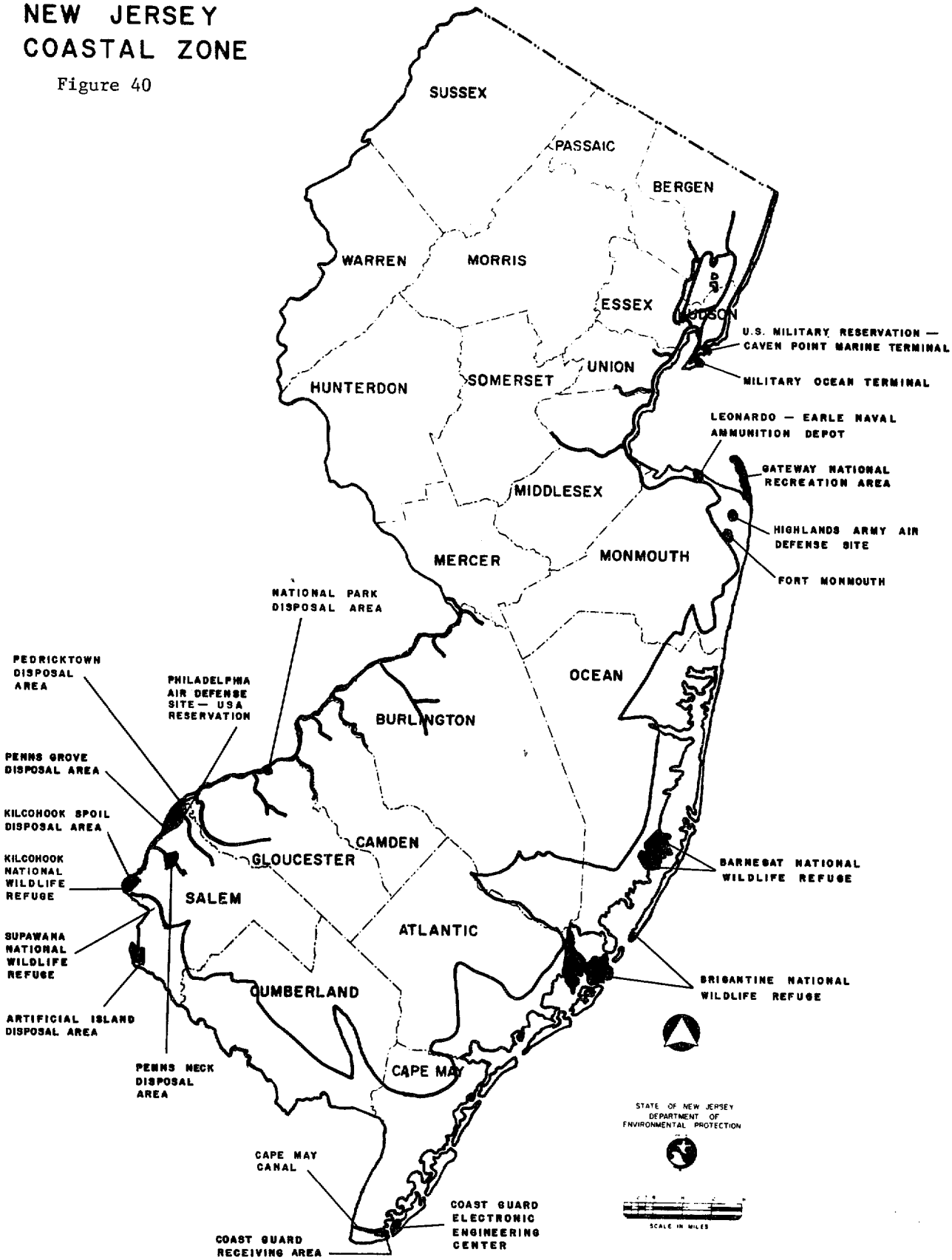
Coast Guard

Coast Guard Receiving Center - Cape May (Cape May)
Coast Guard Electronic Engineering Center (Cape May)

The State of New Jersey considers the acquisition of new federal lands to be a direct federal action subject to the consistency provisions of Section 307 of the federal Coastal Zone Management Act. Also, federal actions on excluded lands that have spillover impacts that significantly affect coastal resources must be consistent with State coastal policies.

MAJOR FEDERAL LANDS EXCLUDED FROM THE NEW JERSEY COASTAL ZONE

Figure 40



APPENDIX C - DOE-DEP MEMORANDUM OF UNDERSTANDING

Memorandum of Understanding
Between
New Jersey Department of Energy
and
New Jersey Department of Environmental Protection
on
Coordination of Permit Reviews

A. Purpose

This Memorandum of Understanding sets forth the areas of responsibilities and operating procedures to be followed effective immediately by the Department of Energy (DOE) and Department of Environmental Protection (DEP) under the State of New Jersey's coastal management program, as developed and as to be administered under the federal Coastal Zone Management Act of 1972 as amended (16 U.S.C. 1451 *et seq.*).

The DOE and DEP agree to the procedures and responsibilities that follow, recognize the statutory limitations of both agencies, and do not intend this Memorandum of Understanding to expand or limit their existing statutory powers in any way.

B. Definitions

As used in the Memorandum of Understanding, the following words and definitions shall have the following meanings unless the context indicates or requires another or different meaning or intent.

1. Complete for Review means that supplemental information requested by either the Department of Environmental Protection and Department of Energy on permit applications has been submitted and both agencies are satisfied as to form and content of such information.

2. Energy Report means the report in form and content specified by the Department of Energy Act N.J.S.A. 52:27F-13(c) or as further specified by Administrative regulation of the Department of Energy.

3. Energy Facility means any facility which produces, converts, distributes or stores energy or converts one form of energy to another consistent with applicable statutory authority and regulations of the DOE and DEP.

4. Final Agency Action means a final decision of the Commissioner of Environmental Protection or designated representative on a pending permit application except as noted in Section F.

5. Permits means administrative regulatory instruments issued by the Department of Environmental Protection on the construction or location of energy facilities, under the Coastal Area Facility Review Act (N.J.S.A. 13:19-1 et seq.), Wetlands Act (N.J.S.A. 13:9A-1 et seq.), and waterfront development permit program (N.J.S.A. 12:5-3). The definition of "Permits" may be extended by mutual agreement between DEP and DOE.

C. Statement of Existing Agency Responsibilities

1. The DEP is responsible for formulating comprehensive policies for the conservation of the natural resources of the State, promoting environmental protection, and preventing pollution of the environment (N.J.S.A. 13:1D-9).

2. The DEP is the agency designated by the Governor to develop and administer the State's coastal management program under Sections 305 and 306 of the federal Coastal Zone Management Act.

3. The DEP has selected and presented to the Governor and Legislature the Coastal Management Strategy for New Jersey - CAFRA Area (September 1977) as required by the Coastal Area Facility Review Act (hereafter CAFRA) (N.J.S.A. 13:19-16).

4. The DEP exercises regulatory responsiblity over the construction of energy facilities in the coastal zone under three coastal permit programs: the Coastal Area Facility Review Act (N.J.S.A. 13:19-1 et seq.), the Wetlands Act (N.J.S.A. 13:9A-1 et seq.), and waterfront development permit program (N.J.S.A. 12:5-3).

5. The Coastal Area Review Board (hereafter CARB), in but not of DEP, may hear appeals of CAFRA permit decisions by DEP (N.J.S.A. 13:19-13, N.J.A.C. 7:7D-1 et seq.). DEP also provides a plenary hearing appeals procedure complying with the Administrative Procedures Act for CAFRA (N.J.A.C. 7:7D-2.8), Wetlands (DEP Administrative Order No. 12, December 8, 1977), and waterfront development (N.J.A.C. 7:1C-1.9(b)) permit decisions by DEP's Division of Marine Services.

6. The DOE is responsible for the coordinated regulation and planning of energy-related matters in the State (C. 146, L. 1977, N.J.S.A. 52:27F-1 et seq.).

7. The DOE, through its Division of Energy Planning and Conservation, is preparing the State Energy Master Plan for the production, distribution, consumption, and conservation of energy in the State, which will include the siting of energy facilities in the coastal zone (N.J.S.A. 52:27F-12).

8. The DOE, Division of Energy Planning and Conservation is empowered and directed to intervene in any proceeding and appeal from any decision of DEP with respect to the siting of energy facilities in the coastal zone. The DOE is a party of interest in any proceeding before DEP on coastal energy facility siting (N.J.S.A. 52:27F-13(a)).

9. The DOE has coextensive jurisdiction with DEP over permit applications on the siting of any energy facility in the State, including the coastal zone. The DEP must solicit the views of DOE prior to making a decision on the siting of an energy facility in the coastal zone. DOE's views must be transmitted to DEP in a report (hereafter Energy Report) within 90 days of DOE's receipt of the application. If the Energy Report differs from the decision of DEP, the conflict shall be referred for resolution to the Energy Facility Review Board (N.J.S.A. 52:27F-13(c)).

10. The DOE is the agency designated by the Governor to administer the State's participation in the Coastal Energy Impact Program (CEIP) under Section 308 of the federal Coastal Zone Management Act. DEP, as the state coastal management agency, must be involved in the CEIP Intrastate Allocation Process.

D. Coastal Planning and Energy Planning

DOE and DEP agree to work together, to the maximum extent practicable, to formulate, review, and revise plans, policies, and guidelines on the siting of energy facilities in the coastal zone, including but not limited to planning documents such as the State Energy Master Plan, Coastal Mangement Strategy for New Jersey - CAFRA Area, and New Jersey Coastal Management Program - Bay and Ocean Shore Segment.

E. Joint DEP-DOE Coastal Permit Application Processing Sequence

DEP and DOE agree that coastal permit applications for energy facilities over which DOE has coextensive jurisdiction shall be processed according to the following sequence of steps and timetable.

1. DEP receives energy facility permit application and begins internal DEP permit application review process.

2. When complete for review, DEP promptly refers a copy of the energy facility permit application to DOE, Division of Energy Planning and Conservation for its review. The Division shall submit an Energy Report on the application to DEP within 90 days of DOE receipt of the complete application. The DOE Energy Report shall be transmitted to DEP at least thirty (30) days prior to the application statutory or regulatory deadline for decisions by DEP on CAFRA, Wetlands, or waterfront development permits (see the 90 Day Construction Permits Law, C. 232, L. 1975, N.J.A.C. 7:1C-1.8) in order to insure both timely consideration by DEP of DOE's views as well as expeditious decision-making on energy facility permit applications. The time period may be extended by mutual consent of both agencies and the applicant as deemed appropriate. Consistent with the provisions of the 90 Day Construction Permits Law C. 232, L. 195, no decision will be made on energy facility permit applications until the DOE Energy Report or a memorandum from the DOE Commissioner that such a report will not be issued, is received by DEP.

3. For CAFRA permit applications, DEP shall request additional information from applicants, as reasonably requested in a timely manner by DOE, prior to declaring an application complete for filing (N.J.A.C. 7:7D-2.3(e)1.), at the required public hearing (N.J.A.C. 7:7D-2.3 (e)5.iv.), or within 15 days after the public hearing (N.J.A.C. 7:7D-2.3 (e)6.i.), prior to declaring the application complete for review (N.J.A.C. 7:7D-2.3(e)6.iii.), to insure that DOE has adequate information to prepare its Energy Report. At its discretion, DOE may submit a Preliminary Energy Report to DEP at least 15 days prior to the date of a scheduled public hearing on a CAFRA permit application, in order to assist DEP in preparing its Preliminary Analysis of the application (N.J.A.C. 7:7D-2.3(e)4.).

4. For Wetlands and waterfront development permit applications, DEP shall request additional information from applicants, as reasonably requested in a timely manner by DOE, before declaring an application complete (N.J.A.C. 7:1C-1.7(a)2.), to insure that DOE has adequate information to prepare its Energy Report.

5. For proposed coastal energy facilities that require a CAFRA permit and either or both of a Wetlands and waterfront development permit, DEP shall coordinate the review process, including review of the adequacy of submitted information, public hearings, and decision documents, under the auspices of the review process for the CAFRA permit application, including its information requirements. Specifically, a Wetlands or waterfront development permit application shall not be declared complete, triggering the 90 day permit decision period under the 90 Day Construction Permits Law (C. 232, L. 1975), until the CAFRA permit application is declared complete for review (N.J.A.C. 7:7D-2.3(e)6.iii.).

6. DEP issues decision on the energy facility permit application. If DOE has submitted an Energy Report in a timely manner, the DEP decision document shall refer to the Energy Report and indicate DEP's reasons for differences, if any, between the DEP decision and the DOE Energy Report.

F. Appeals of DEP Coastal Energy Facility Permit Application Decisions

DEP's decisions on CAFRA, Wetlands, and waterfront development permit applications may be appealed administratively by an applicant or an interested third party. DOE shall refer a DEP decision that differs with DOE's Energy Report to the Energy Facility Review Board for a decision binding upon DEP. Since multiple possible avenues of appeal exist on DEP coastal energy facility permit applications, DEP and DOE agree that appeals shall be heard according to the following procedure, to be incorporated by appropriate regulations of DEP: the Coastal Area Review Board, the Natural Resource Council and the Energy Facility Review Board.

1. DOE may convene the Energy Facility Review Board only if its Energy Report submitted to DEP differs with the DEP decision.

2. If an applicant and/or an interested third party appeals a CAFRA permit decision to the Coastal Area Review Board, or appeals a CAFRA or Wetlands decision by DEP's Division of Marine Services to the Commissioner for a plenary (quasi-judicial) hearing, or appeals a waterfront development permit decision by DEP's Division of Marine Services to the Natural Resource Council (N.J.A.C. 7:1C-1.9(b)), DOE shall be a party of interest at the appeal. If the final decision on appeal of either the Coastal Area Review Board, Commissioner, or Natural Resource Council differs with the DOE Energy Report submitted to DEP before the initial administrative decision, then DOE shall convene the Energy Facility Review Board.

3. The Energy Facility Review Board may affirm, reverse, or modify the initial DEP administrative decision or the decision on appeal. The DOE and DEP members of the Board agree that DOE shall, by September 28, 1978, promulgate regulations to establish the operating procedures of the Board, including, but not limited to a provision binding the Energy Facility Review Board to limit its review to the DEP decision and the

Energy Report, prepared pursuant to Section G of this Memorandum of Understanding, and to follow the New Jersey Administrative Procedures Act.

4. Appellant parties may seek judicial relief as appropriate.

G. Basis of Energy Report

1. DOE and DEP agree to accept the New Jersey Coastal Management Program - Bay and Ocean Shore Segment (and subsequent segment), as approved by the Governor, and particularly its Coastal Resource and Development Policies, and the State Energy Master Plan, as the basis for the formulation of the DOE Energy Report with respect to the siting of energy facilities in the coastal zone.

2. DOE and DEP agree that the DOE Energy Report shall include an evaluation of the need for the proposed energy facility, considering local, state, regional, and national interests, as one of many factors to be considered in preparation of the Energy Report and decision, respectively.

H. Coastal Energy Impact Program

1. DOE and DEP agree to work cooperatively in DOE's administration of the federal Coastal Energy Impact Program in New Jersey.

2. DEP will participate fully in the New Jersey CEIP Intrastate Allocation Committee's deliberations, as the designated lead state agency for coastal zone management.

3. One copy of all CEIP applications submitted to DOE shall be referred by DOE to DEP for an initial review of the application's compatibility or consistency, as appropriate, with the State's developing or approved coastal management programs (15 CFR 932.26(a)(3), Federal Register, Vol. 43, No. 37 - February 23, 1978, p. 7554). .

4. One copy of all final work products and reports prepared with financial assistance under the Coastal Energy Impact Program shall be transmitted to DEP, as a standard condition of CEIP grants passed through to state agencies and units of local governments by DOE.

I. National Interests in Energy Facility Siting

DEP and DOE agree to consider the national interests in New Jersey's coastal zone, as defined in the New Jersey Coastal Management Program - Bay and Ocean Shore Segment, as approved by the Governor, in the DEP permit application processes and the DOE Energy Report preparation process and the DOE State Energy Master Plan. DEP agrees to interpret the opportunity under CAFRA to consider the "public health, safety and welfare" (N.J.S.A. 13:19-4) as sufficient authority to consider these national interests. DOE agrees to interpret its mandate to "... contribute to the proper siting of energy facilities necessary to serve the public interest ..." (N.J.S.A. 25:27F-2) as sufficient authority to consider the national interests in the siting of coastal energy facilities.

J. Federal Consistency

DEP and DOE agree that both agencies shall participate in the State's decision to issue a determination of consistency under Section 307 of the Federal Coastal Zone Management Act for coastal energy facilities. As required by federal regulations (15 CFR 930.18), DEP shall receive, and forward promptly to DOE, all materials necessary for consistency determinations on coastal energy facilities. In the event of a disagreement between DEP and DOE, the Energy Facility Review Board shall be convened and shall make a recommendation to the Governor, who shall make the final determination within the applicable time limit. As required by federal regulations (15 CFR 930.18), DEP will then transmit the final federal consistency determination to the appropriate federal agency.

K. Effective Date

This Memorandum of Understanding shall take effect on September 28, 1978. DOE and DEP agree to continue discussions and agree to agree on a revision of this Memorandum of Understanding to extend its scope to other DEP permits.

Joel R. Jacobson
Commissioner
Department of Energy

AUG 22 1978
Date

Daniel J. O'Hern
Commissioner
Department of Environmental Protection

AUG 22 1978
Date

APPENDIX D - PROPOSED WATERFRONT DEVELOPMENT RULES AND ATTORNEY GENERAL'S OPINION

Proposed Rules on Waterfront Development Permits
N.J.A.C. 7:7-2.1 et seq.

7:7-2.1 Authority: Unless otherwise expressly noted, all provisions of this subchapter were adopted pursuant to authority of N.J.S.A. 12:5-1 et seq.

7:7-2.2 Purpose and Scope: These rules and regulations are intended to implement N.J.S.A. 12:5-3 by defining a boundary for "waterfront" areas and by defining "waterfront development".

7:7-2.3 Definitions: The following words and terms, when used in this subchapter, shall have the following meanings, unless the content clearly indicates otherwise.

"Navigable": Those waters of the State which are subject to the ebb and flow of the tide shoreward to the mean high water line.

7:7-2.4 Waterfront Area Described: The waterfront area to be regulated under these rules shall consist of:

a. A "Water Area", which shall include any navigable waterway or stream of this State and all lands lying thereunder up to the mean high water line and

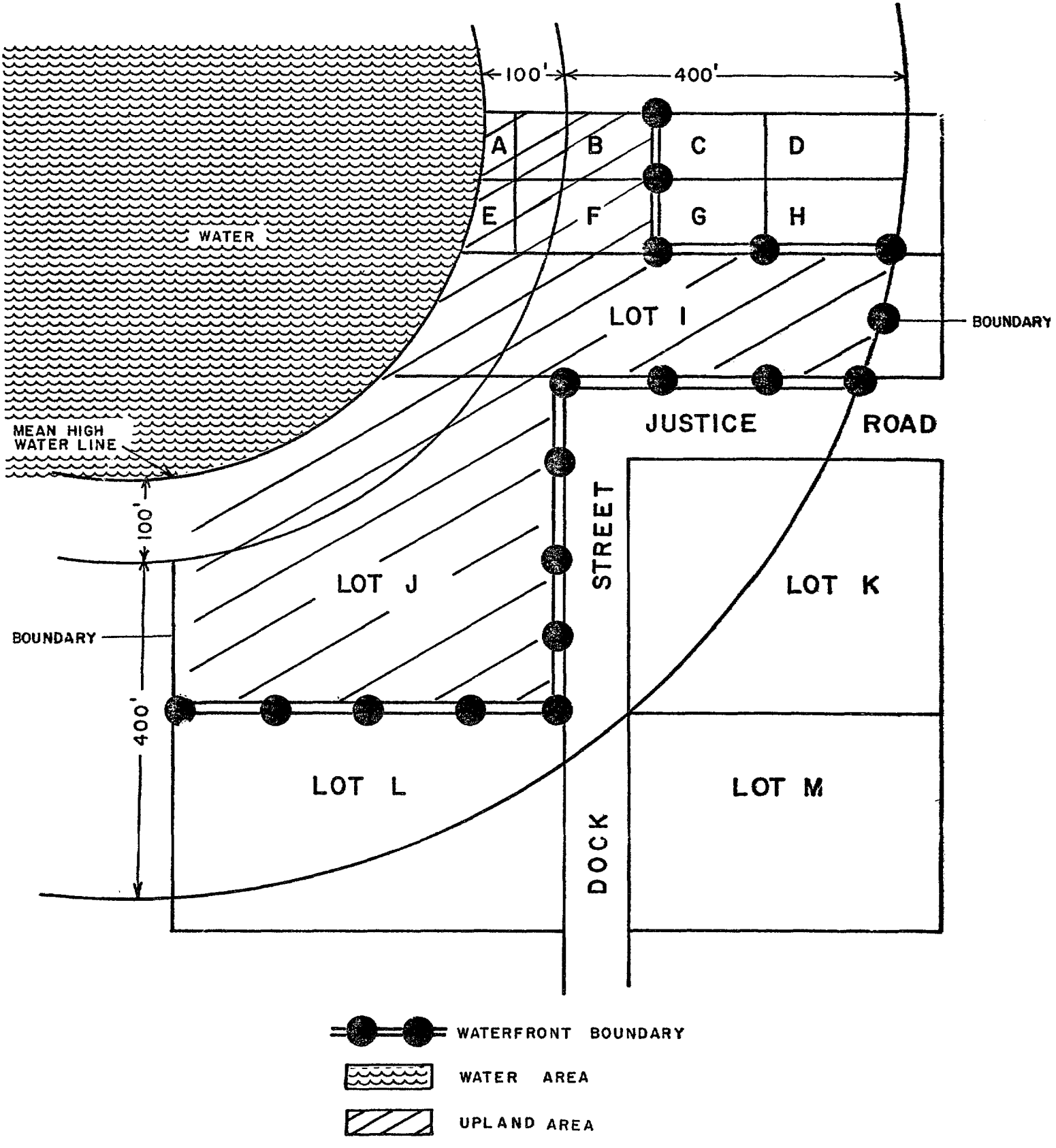
b. An "Upland Area", which shall include all lands extending landward from the mean high water line of such water area to the first surveyable property line existing on the effective date of these Rules, public road, railroad right-of-way, or other cultural feature generally parallel to the waterway; provided that the landward boundary of such area shall be at least 100 feet and no greater than 500 feet from the waterway except where lands formerly flowed by the tide (i.e. tidelands) extend more than 500 feet from the mean high water line. In such cases the boundary of the upland fringe area shall be the upland boundary of such tidelands.

7:7-2.5 Applicability in Man-Made Waterways: These rules shall apply to all man-made waterways and lagoons connected to tidal waters.

7:7-2.6 Inapplicability in Coastal Area and Hackensack Meadowlands Development District. The Upland Area described by this rule shall not include any part of the Coastal Area as defined by the Coastal Area Facility Review Act at N.J.S.A. 13:19-4, or any part of the Hackensack Meadowlands Development District as delineated at N.J.S.A. 13:17-4.1

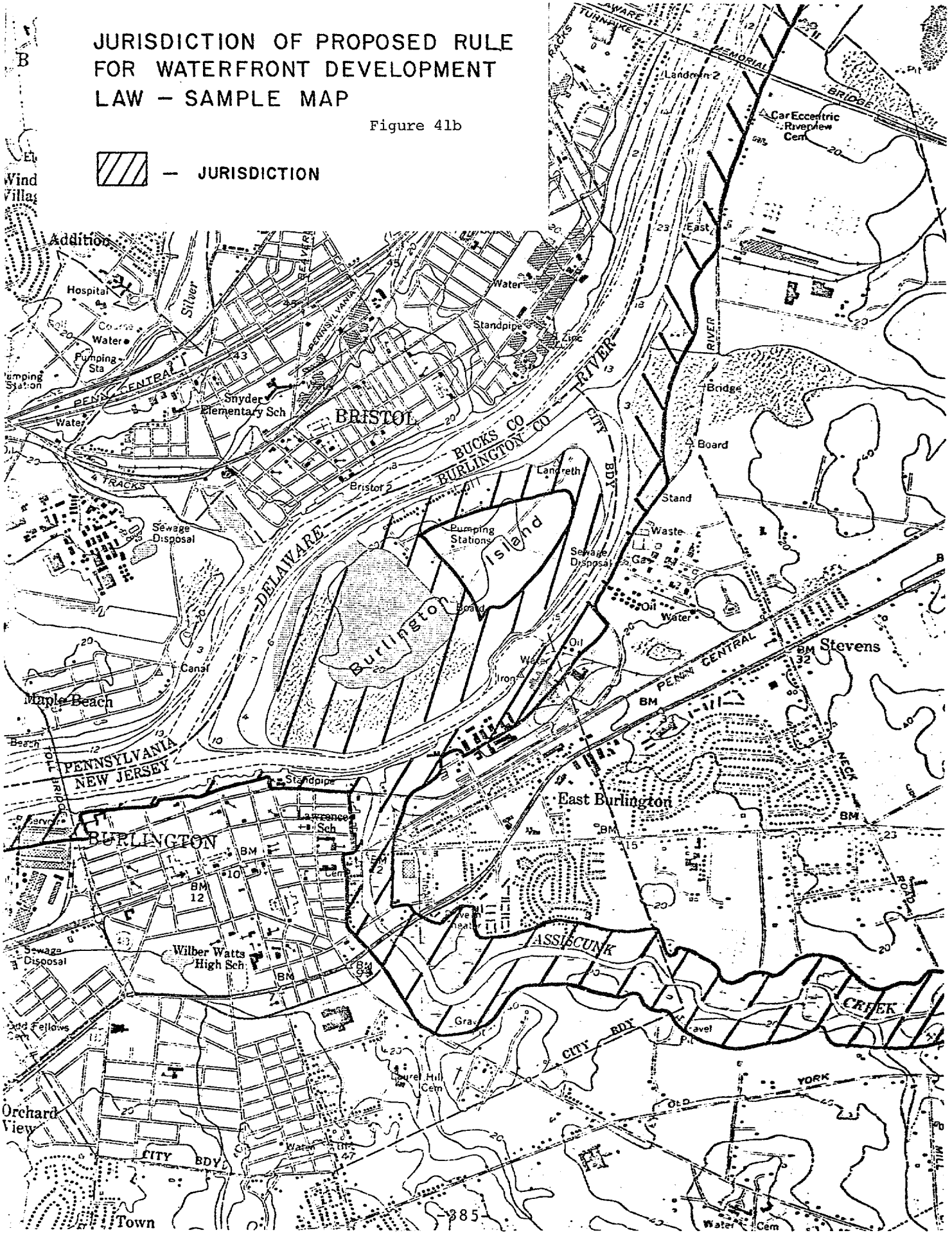
Figure 4

JURISDICTION OF PROPOSED RULE FOR WATERFRONT DEVELOPMENT LAW — SKETCH



JURISDICTION OF PROPOSED RULE FOR WATERFRONT DEVELOPMENT LAW – SAMPLE MAP

Figure 41b



7:7-2.7 Activities Requiring Permits: The following activities will require a permit in the Waterfront:

a. the removal or deposition of Sub-aqueous materials (dredging);

b. the construction or alteration of a dock, wharf, pier, bulkhead, bridge, pipeline, cable, or other similar structure or;

c. the construction, reconstruction, enlargement, or conversion to a different use, of any building or other structure, or of any excavation or landfill.

7:7-2.8 Exemptions for Development in Progress on Effective Date: These rules shall not apply to any development in the Upland Area for which on-site construction, including site preparation, was in progress on or prior to the effective date of these rules.

Any person who believes that a proposed facility is exempt from the requirements of these rules due to on-site construction may request in writing a determination of exemption from the Division of Coastal Resources. Exemptions shall be applied for and considered according to the rules and regulations under the Coastal Area Facility Review Act concerning exemptions (N.J.A.C. 7:7D-2.6).

7:7-2.9 Permits: Any person proposing to undertake or cause to be undertaken any development in the Waterfront Area shall first obtain a permit from the Division of Coastal Resources. Permit application forms may be obtained upon request from the Division of Coastal Resources, Department of Environmental Protection, Box 1889, Trenton, New Jersey 08625.

Permit applications shall be reviewed by the Division in accordance with the 90 Day Construction Permit Rules, N.J.A.C. 7:1C-1.1 et seq.

7:7-2.10 Exemptions Request for Finding on Geographic Applicability: Any person proposing to undertake or cause to be undertaken any development in or near the Waterfront Area may request in writing a determination that that proposal is exempt from the requirements of these Rules on the basis that the proposed facility's site is located outside the Waterfront Area.

The requesting party shall provide the Division with a map depicting the project site in a scale of not less than 1:2,400 (one inch equals 200 feet) and a project description. When the exemption request is based on a proposed facility's location landward of the first surveyable property line more than 100 feet from the waterway, the map shall depict that property line as it is depicted on the official local tax map as of the effective date.

The Division shall, within 30 days of receipt, return the map to the requesting party, indicating on the map the waterfront area boundary and its relationship to the project site.

7:7-2.11 Stream Encroachment Permit Not Required in Waterfront Area.

a. No additional permit for a structure or alteration within the natural and ordinary high water mark of any stream pursuant to the Flood Hazard Area Control Act (N.J.S.A. 58:16A-50 et. seq. as amended by P.L. 1979, c. 359) shall be required in the Waterfront Area.

b. The Division of Coastal Resources shall forward a copy of all permit applications for development on the tidal portion of any stream to the Water Supply and Flood Plain Management Element, Division of Water Resources for review.

7:7-2.12 Procedure for Development Entirely Within Regulated Wetlands: No waterfront development permit shall be required for a proposed development located entirely within a wetland area regulated under the Wetlands Act (N.J.S.A. 13:9A-1 et seq.).

7:7-2.13 Criteria for Permit Decisions: Waterfront Development permit applications shall be approved, modified or denied on the basis of the Rules on Coastal Resource and Development Policies, N.J.A.C. 7:7E-1.1 et seq.

7:7-2.14 Appeals: Appeals of permit decisions shall be taken to the Commissioner in accordance with the 90 Day Construction Permit Rules, N.J.A.C. 7:1C-1.9.

Rationale

The source of the Waterfront Development Law is Chapter 123 of the Laws of 1914, entitled "An Act to Create the New Jersey Harbor Commission and to Define its Powers and Duties." The Commission was to be concerned with "the condition of waterfront and harbor facilities and any other matter incident to the movement of commerce upon all navigable rivers and waters within this state or bounding thereon". (N.J.S.A. 12:5-1). It authorizes the State to regulate land and water uses in the waterfront area, but defines neither the area nor the uses to be regulated with precision. It is left to the Executive branch to establish by rule the parameters of its authority, and to do so in a manner that is reasonably related to the goals established by law.

A. The regulation of waterfront development is an appropriate exercise of the State's police power.

"The legislative history of the Law reveals that it was passed in response to a need for the State to assume a direct role in the regulation of harbor development for competitive economic reasons. In its 1914 Fourth Preliminary Report to the Legislature prior to passage of the legislation, the temporary New Jersey Harbor Commission recommended direct State control over the 'waterfront, the waterways and the upland adjacent thereto'. Fourth Preliminary Report of the New Jersey Harbor Commission, p. 6 (1914). Clearly, then, the perceived need for this remedial law was to regulate uplands as well as water areas."*

The proposed Upland Area encompasses a narrow, largely developed area which is entirely within 500 feet of the water' edge. Because of the restricted size of the waterfront and its proximity to the water's edge, small-scale development can have a proportional impact as great as a major development in other areas of the State, particularly in terms of reducing the range of sites available for other, perhaps competing uses. A small parking lot or commercial development built directly on the water can effectively preclude access to the water's edge and can, in more developed areas, consume the last vacant waterfront site in the immediate area.

* Attorney General's Formal Opinion No. 6 (February 29, 1980), page 2.

Experiences in other cities have shown that the economic vitality of waterfront areas often depends on a well coordinated planning and management program which insures that industrial, maritime and other water-related uses may be accommodated in an orderly fashion, with room left for recreational and other, multipurpose uses.

These factors make it clear that it is necessary to regulate development in the waterfront in order to enforce the intent of the Waterfront Development Law. This will not preclude the concentration of growth in developed areas of the coast and the use of the waterfront for a variety of uses, including well designed commercial activities. Both of these uses are acceptable under the Department's Rules on Coastal Resource and Development Policies for the Bay and Ocean Shore Region (N.J.A.C. 7:7E-1.1 et seq., effective September 28, 1978).

The Rules on Coastal Resource and Development Policies favor the concentration of development away from relatively undeveloped areas. Consequently, many of the types of development described in this rule will seek to locate in the developed coast. The fact that these Rules on Coastal Resource and Development Policies will be in place throughout the coast when these rules take effect means that DEP will have an existing substantive basis for efficiently regulating the activities defined in this proposed rule.

The Coastal Resource and Development Policies were originally developed by DEP as the substantive basis for decision-making under a number of statutes in the State's Bay and Ocean Shore region. They address a variety of considerations, both environmental and economic. Those rules are being amended concurrently with the proposed adoption of these rules, and if adopted will apply throughout the State (see Section 7:7-2.13 of these proposed rules). The amendments are designed to incorporate the purposes of the Waterfront Development Law, by insuring that water-dependent and maritime dependent uses will not be precluded by haphazard waterfront development.

B. The boundary described by this rule is an appropriate delineation of the waterfront area.

A boundary delineation utilizing property lines, cultural features and/or distances determined by measurement is a traditional method of delineation. The CAFRA boundary is delineated in this manner. The proposed boundary accomplishes three things:

1. It encompasses a land area of sufficient width to control the first land use adjacent to the waterway;

2. It encompasses a land area that is sufficiently limited in width as to avoid over-reaching into areas that are not waterfront in character;

3. It describes a boundary which may be readily delineated and mapped.

C. The use of different standards for the regulation of waterfront activities inside and outside the CAFRA area and Hackensack Meadowlands District is reasonable and appropriate.

The Coastal Area Facility Review Act (N.J.S.A. 13:19-1 et seq.) recognizes the special character of New Jersey's Bay and Ocean Shore areas, and seeks to preserve and protect that character by regulating major facilities. The findings made under that Act constitute the State's land use priorities within the defined coastal area, and should, therefore, apply to the Waterfront Development Law as administered in that area.

The Act does not affect the State's authority under N.J.S.A. 12:5-3 outside the CAFRA area, and so the Department may, as part of its concern for "any matter incident to the movement of commerce upon all navigable rivers and waters within this state or bounding thereon" (N.J.S.A. 12:5-1), define appropriate uses for other waterfront areas. Such a dual system is particularly appropriate because the greater portion of the state's commercial or industrialized waterfront is in the Developed Coast, outside the CAFRA area.

Similarly, the Hackensack Meadowlands Reclamation and Development Act (N.J. S.A. 13:17-1.1 et seq.) constitutes the State's land use priorities in the Meadowlands District. It adopts a regional approach to reducing and resolving the development pressures on a seriously strained estuarine system. It applies only in a limited area, and does not affect the State's authority under the Waterfront Development Law outside the District.

State of New Jersey
DEPARTMENT OF LAW AND PUBLIC SAFETY

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February 29, 1980

Jerry F. English, Commissioner
Department of Environmental Protection
P. O. Box 1390
Trenton, New Jersey 08625

FORMAL OPINION NO. 6 - 1980

Dear Commissioner English:

Our advice has been requested on certain questions pertaining to the expanded implementation of the permit requirements of the Waterfront Development Law, N.J.S.A. 12:5-1, et seq. The threshold question is whether the Waterfront Development Law authorizes the Department of Environmental Protection to regulate development on uplands adjacent to navigable waters or streams. It is our opinion that the statute provides jurisdiction to regulate any development on the "water-front" portion of uplands adjacent to navigable waters or streams.

N.J.S.A. 12:5-3, the key operative provision of the law, provides as follows:

> "All plans for the development of any water-front upon any navigable water or stream of this State or bounding thereon, which is contemplated by any person or municipality, in the nature of individual improvement or development or as a part of a general plan which involves the construction or alteration of a dock, wharf, pier, bulkhead, bridge, pipe line, cable, or any other similar or dissimilar water-front

> development shall be first submitted to the Department of Environmental Protection. No such development or improvement shall be commenced or executed without the approval of the Department of Environmental Protection first had and received, or as hereinafter in this chapter provided."

Thus, the statute requires State approval for any "water-front development" that is either similar or dissimilar to the specifically mentioned types of development. The inquiries therefore are, what area is physically encompassed by the term waterfront and what constitutes development.

The Waterfront Development Law was passed in 1914. The legislative history reveals that it was passed in response to a need for the State to assume a direct role in the regulation of harbor development for competitive economic reasons. In its 1914 Fourth Preliminary Report to the Legislature prior to passage of the legislation, the temporary New Jersey Harbor Commission recommended direct State control over the "waterfront, the waterways and the upland adjacent thereto". Fourth Preliminary Report of the New Jersey Harbor Commission, p. 6 (1914). Clearly, then, the perceived need for this remedial law was to regulate uplands as well as water areas.

This conclusion is reinforced by the unambiguous dictionary meaning accorded to the term waterfront. According to Webster's New Collegiate Dictionary (1977 ed.) it means "land, land with buildings, or a section of a town fronting or abutting on a body of water". Black's Law Dictionary (4th ed. 1968), defines waterfront as "land or land with buildings fronting on a body of water". See, City of Long Beach v. Lisenby, 175 Cal. 575, 166 P. 333, 335, cited in Blacks. Thus, without reasonable doubt the term waterfront as used in the Waterfront Development Law, was intended to include the uplands adjacent to navigable waters or streams.

On the ancilliary question of what constitutes "development" requiring a permit, the listing of specific structures in N.J.S.A. 12:5-3 followed by the statement "or any other similar or dissimilar water-front development", can reasonably be viewed as inclusive of all structures of whatever type under the permit requirement. Under this view, the specific examples are seen as merely illustrative of typical waterfront structures, but by no means intended by the Legislature as exhaustive or limiting in any way. In its Fourth Preliminary Report the Harbor Commission

also touched upon this issue and called for State approval of any improvement or construction whatever. Fourth Preliminary Report of the New Jersey Harbor Commission, p. 9 (1914). Thus, consistent with the expressed legislative purpose to remedy the perceived evil of unregulated waterfront development, it may be concluded that the Legislature intended to require a permit for all structures erected in the waterfront area. To conclude otherwise and give the term development a limited meaning would obviously tend to frustrate the essential underlying purpose of the Waterfront Development Law.

Your second inquiry is to what extent does the waterfront extend, and in particular, may the Department extend it by rule or otherwise to 1000 feet from the water. While it is certain that the concept of regulating a waterfront includes regulating development on uplands, the concept or term waterfront is elusive in its precise spatial definition. However, in light of the purpose of the law in promoting and safeguarding water oriented activities and in light of the direct waterfront nature of the specific examples of development mentioned in N.J.S.A. 12:5-3, it must be concluded that the waterfront to be regulated under the law is no larger than the area of the first substantial land use that directly adjoins the water and not an area extending 1000 feet inland. Since regulation of the first substantial land use (or area where that potential use will take place) is enough to promote and protect water oriented activities by insuring access, availability of dockage, etc., and since it is also large enough by definition, to encompass any development as called for by N.J.S.A. 12:5-3, the law does not contemplate regulation extending automatically 1000 feet inland.*

It is also necessary to address the nature of the substantive standards to be adopted by the Department in its administration of the permit requirements of the Waterfront Development Law. The permissible scope of such regulations lies in an understanding of the legislative purpose in enacting the Waterfront

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*More precise definition of the waterfront should be undertaken by administrative rule. For example, a rule regulating at least the first 100 feet would be appropriate since it can reasonably be assumed that the first significant land use will occupy at least that large an area (a typical building lot is in excess of 100 feet deep). Moreover, the rule could indicate that where the potential area for the first significant land use extends more than 100 feet inland, a permit will be required for that entire use of the waterfront, subject to a reasonable maximum distance limitation.

Development Law. That purpose was to promote the development and revitalization as well as to safeguard the port facilities and waterfront resources for the public's overall economic advantage. Fourth Preliminary Report, supra. The Waterfront Development Law therefore justifies the adoption of standards to insure access to the State's waterways for all water-dependent uses and, conversely, standards discouraging nonwater-dependent uses from usurping the waterfront. Furthermore, a variety of other considerations may come into play in the determination of an appropriate use in a particular case so long as they are in furtherance of the essential purposes underlying the Waterfront Development Law. For example, the development of extensive high rise housing on the waterfront would not be consistent with the legislative purpose to insure access to waterways for water dependent uses and at the same time denial of a permit may serve the purpose of protecting the scenic or aesthetic appearances of the waterfront. In summary, therefore, so long as regulations adopted under the Waterfront Development Law are designed to carry out and are in furtherance of the primary intent of the Waterfront Development Law, they may be permissibly used to control the exercise of administrative discretion in the issuance of waterfront development permits.

In summation, it is our advice that the Department may regulate the portion of uplands adjacent to the State's navigable waterways that constitutes the waterfront, but that the waterfront is a relatively narrow strip of land whose precise geographical limit should be defined by rule in accordance with the criteria set forth in this opinion. In addition the substantive standards that are to be used to guide Department permit decisions under the Waterfront Development Law must be in accord with the Legislature's intent to promote the development, revitalization and safeguarding of the waterfront for the public's overall economic wellbeing.

Very truly yours,

JOHN J. DEGNAN
Attorney General

By JM Van Dal
John M. Van Dalen
Deputy Attorney General

JMVD/bc

APPENDIX E - LEGAL AUTHORITIES

Introduction

The New Jersey Coastal Management Program relies upon certain New Jersey State laws and adopted rules for its legal authority and the enforceability of its Coastal Resource and Development Policies. This Appendix briefly describes these key legal authorities and gives the appropriate citation reference to either the New Jersey Statutes Annotated (N.J.S.A.) or the New Jersey Administrative Code (N.J.A.C.). In addition, this Appendix concludes by reprinting four laws in their entirety: the Coastal Area Facility Review Act, the Wetlands Act, the Waterfront Development Law, and the Department of Energy Act. The CAFRA Procedural Rules and Regulations and regulations governing the wetlands and riparian permit processes are also published in the New Jersey Administrative Code and are available upon request from DEP.

Coastal Area Facility Review Act

Law

N.J.S.A. 13:19-1 *et seq.* enacted June 20, 1973; effective September 19, 1973 (reprinted in this Appendix).

Rules

N.J.A.C. 7:7D-1.0 *et seq.* - Coastal Area Review Board; effective November 18, 1975. These rules establish the procedures of the Coastal Area Review Board, a body composed of three cabinet members and created by N.J.S.A. 13:19-13, and which may hear appeals from decisions on CAFRA permit applications by the Director of the Division of Marine Services.

N.J.A.C. 7:7D-2.0 *et seq.* - CAFRA Procedural Rules and Regulations; effective April 5, 1977. These rules establish the permit application and exemption request procedures of DEP under the Coastal Area Facility Review Act.

Administrative Orders

No. 32, November 3, 1975, by DEP Commissioner David J. Bardin; effective November 10, 1975. This Administrative Order delegated decision-making authority on CAFRA permit applications from the Commissioner to the Director, Division of Marine Services (now Coastal Resources).

No. 35, December 4, 1975, by DEP Commissioner David J. Bardin, effective December 8, 1975. This Administrative Order established the Office of Coastal Zone Management in DEP's Division of Marine Services. Under the Administrative Order, the Chief of the Office of Coastal Zone Management reports directly to the DEP Commissioner with respect to planning under N.J.S.A. 13:19-16 and under the Federal Coastal Zone Management Act, but reports to the Director of the Division of Marine Services with respect to the CAFRA permit program. Superceded in part (see the following).

No. 17, June 22, 1979; effective July 3, 1979. Re-organizes the Division of Marine Services into five bureaus and continues its operation as the Division of Coastal Resources.

Wetlands Act

Law

N.J.S.A. 13:9A-1 *et seq.*; effective November 5, 1970 (reprinted in this Appendix)

Rules

N.J.A.C. 7:7A-1.1 *et seq.*; effective April 13, 1972. The New Jersey Wetlands Order Basis and Background, adopted in 1972, defined the rationale for the regulation of coastal wetlands. Independent contractors for DEP prepared maps of wetlands at a scale of 1:2,400 (one inch = 200 feet). DEP then adopted the Wetlands Order, including the maps delineating wetlands areas, on a county-by-county rule-making process, with notice to affected property owners, from 1972-1977 (N.J.A.C. 7:7A-1.2). The order defines regulated activities, and prohibits certain activities on wetlands, while the Procedural Regulations (N.J.A.C. 7:7A-1.3 *et seq.*) establish permit application procedures and project review criteria, and list the wetlands maps.

Administrative Order

No. 12, December 8, 1977, by DEP Commissioner Rocco D. Ricci; effective December 8, 1977. This Administrative Order delegated decision-making authority on Wetlands permit applications from the Commissioner to the Director, Division of Marine Services and specified that appeals of the Director's decision shall be submitted to the Commissioner.

Waterfront Development Permit

Law

N.J.S.A. 12:5-1 through 12:5-11; enacted at various dates beginning 1914. These laws define the procedures and standards for the management of waterfront and harbor facilities, including waterfront development permits (N.J.S.A. 12:5-3, reprinted in this Appendix).

Tidelands Statutes

Law

N.J.S.A. 12:3-1 through 12:3-71; enacted at various dates beginning 1869. These laws define the procedures and standards for leases, grants, and conveyances of tidelands.

N.J.S.A. 13:1B-10, 11, 12; enacted at various dates beginning 1948. These laws define the powers, functions, and duties of the Tidelands Resource Council, which decides tidelands management real estate matters.

N.J.S.A. 13:1B-13; enacted 1948. This law defines the procedure for approval of tidelands leases and grants.

N.J.S.A. 13:1B-13.1 through 13:1B-13.51; enacted 1968. This law, part of the statute creating the Hackensack Meadowlands Development Commission, mandates tidelands delineation studies and the surveys in the Meadowlands and defines procedures for conveyances of State-owned tidelands in the Meadowlands.

90 Day Construction Permit Law

Law

C.232, L. 1975 (supplements N.J.S.A. 13:1D-1 et seq., amends N.J.S.A. 12:5-2, 12:5-3, 58:1-26 and 58:1-27, and repeals N.J.S.A. 12:5-4); enacted October 23, 1975; effective December 22, 1975. The law provides for the approval, conditional approval, or disapproval of applications under five DEP-administered construction permit programs within 90 days of completion of an application, otherwise the application is deemed approved.

Rules

N.J.A.C. 7:1C-1.0 et seq.; effective December 22, 1975; revised October 10, 1977. These rules implement the 90 Day Construction Permits Law, and govern the waterfront development permit process.

Shore Protection

Law

N.J.S.A. 12:6A-1 et seq.; enacted at various dates beginning 1940. The law authorizes DEP to carry out structural and non-structural shore protection programs and undertake dredging of waterways and streams.

Department of Energy

Law

N.J.S.A. 52:27-1 et seq.; enacted and effective July 11, 1977. This law created a new cabinet-level executive department, with co-extensive jurisdiction with other State agencies, including DEP, on energy facility siting. It should be noted that pending State legislation (s-1179) would amend the Department of Energy Act and increase and clarify the authority of the Commissioner of Energy.

N.J.S.A. 40:55D-19; effective August 1, 1976. This section of the municipal Land Use Law empowers the Board of Public Utilities to supercede any local action taken with respect to a public utility if the Board finds the service "necessary for the service, convenience, or welfare of the public".

Rules

N.J.A.C. 14A:8-1.1, effective December 3, 1979. Procedural Rules of the Energy Facility Review Board.

Hackensack Meadowlands Development Commission Law

Law

N.J.S.A. 13:17-1 *et seq.* Creates the Hackensack Meadowlands Development Commission, defines the district, and authorizes development and management activities.

Rules

N.J.A.C. 19:4. District Zoning Regulations and procedural rules.

Reprinted Laws

The Coastal Area Facility Review Act, the Wetlands Act, the Waterfront Development Law, and the Department of Energy Act are reprinted in full on the following pages.

CHAPTER 185

A

AN ACT to provide for the review of certain facilities in the coastal area and making an appropriation therefor.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

C. 13:19-1 Short title.

1. This act shall be known and may be cited as the "Coastal Area Facility Review Act."

C. 13:19-2 Declaration of policy.

2. The Legislature finds and declares that New Jersey's bays, harbors, sounds, wetlands, inlets, the tidal portions of fresh, saline or partially saline streams and tributaries and their adjoining upland fastland drainage area nets, channels, estuaries, barrier beaches, near shore waters and intertidal areas together constitute an exceptional, unique, irreplaceable and delicately balanced physical, chemical and biologically acting and interacting natural environmental resource called the coastal area, that certain portions of the coastal area are now suffering serious adverse environmental effects resulting from existing facility activity impacts that would preclude or tend to preclude those multiple uses which support diversity and are in the best long-term, social, economic, aesthetic and recreational interests of all people of the State; and that, therefore, it is in the interest of the people of the State that all of the coastal area should be dedicated to those kinds of land uses which promote the public health, safety and welfare, protect public and private property, and are reasonably consistent and compatible with the natural laws governing the physical, chemical and biological environment of the coastal area.

B

It is further declared that the coastal area and the State will suffer continuing and over-accelerating serious adverse economic, social and aesthetic effects unless the State assists, in accordance with the provisions of this act, in the assessment of impacts, stemming from the future location and kinds of facilities within the coastal area, on the delicately balanced environment of that area.

The Legislature further recognizes the legitimate economic aspirations of the inhabitants of the coastal area and wishes to encourage the development of compatible land uses in order to improve the overall economic position of the inhabitants of that area within the framework of a comprehensive environmental design strategy which preserves the most ecologically sensitive and fragile area from inappropriate development and provides adequate environmental safeguards for the construction of any facilities in the coastal area.

C. 13:19-3 Definitions.

3. For the purposes of this act, unless the context clearly requires a different meaning, the following words shall have the following meanings:

a. "Commissioner" means the State Commissioner of Environmental Protection.

b. "Department" means the State Department of Environmental Protection.

c. "Facility" includes any of the facilities designed or utilized for the following purposes:

(1) Electric power generation—

Oil, gas, or coal fired or any combination thereof.

Nuclear facilities.

(2) Food and food byproducts—

Beer, whiskey and wine production.

Fish processing, including the production of fish meal and fish oil.

Slaughtering, blanching, cooking, curing, and pickling of meats and poultry.

Trimming, culling, juicing, and blanching of fruits and vegetables.

Animal matter rendering plants.

Operations directly related to the production of leather or furs such as, but not limited to, unhairing, soaking, deliming, baiting, and tanning.

Curing and pickling of fruits and vegetables.

C

Pasteurization, homogenization, condensation, and evaporation of milk and cream to produce cheeses, sour milk, and related products.

Coffee bean and cocoa bean roasting.

(3) Incineration wastes—

Municipal wastes (larger than or equal to 50 tons per day).

Automobile body (20 automobiles per hour or larger).

(4) Paper production—

Pulp mills.

Paper mills.

Paperboard mills.

Building paper mills.

Building board mills.

(5) Public facilities and housing—

Sanitary landfills.

Waste treatment plants (sanitary sewage).

Road, airport, or highway construction.

New housing developments of 25 or more dwelling units or equivalent.

Expansion of existing developments by the addition of 25 or more dwelling units or equivalent.

(6) Agri-chemical production—

Pesticides manufacture and formulation operations or either thereof.

Superphosphate animal feed supplement manufacture.

Production of normal superphosphate.

Production of triple superphosphate.

Production of diammonium phosphate.

(7) Inorganic acids and salts manufacture—

Hydrofluoric acid and common salts.

Hydrochloric acid and common salts.

Nitric acid and common salts.

Sulfuric acid and common salts.

Phosphoric acid and common salts.

Chromic acid, including chromate and dichromate salts.

(8) Mineral products—

Asphalt batching and roofing operations including the preparation of bituminous concrete and concrete.

Cement production, including Portland, natural, masonry, and pozzolan cements.

Coal cleaning.

Clay, clay mining, and fly-ash sintering.

D

Calcium carbide production.

Stone, rock, gravel, and sand quarrying and processing.

Frit and glass production.

Fiberglass production.

Slag, rock and glass wool production (mineral wool).

Lime production, including quarrying.

Gypsum production, including quarrying.

Perlite manufacturing, including quarrying.

Asbestos fiber production.

(9) Chemical processes—

Ammonia manufacture.

Chlorine manufacture.

Caustic soda production.

Carbon black and charcoal production, including channel, furnace, and thermal processes.

Varnish, paint, lacquer, enamel, organic solvent, and inorganic or organic pigment manufacturing or formulating.

Synthetic resins or plastics manufacture including, but not limited to, alkyd resins, polyethylene, fluorocarbons, polypropylene, and polyvinylchloride.

Sodium carbonate manufacture.

Synthetic fibers production including, but not limited to, semi-synthetics such as viscose, rayon, and acetate, and true synthetics such as, but not limited to, nylon, orlon, and dacron, and the dyeing of these semi and true synthetics.

Synthetic rubber manufacture, including but not limited to, butadiene and styrene copolymers, and the reclamation of synthetic or natural rubbers.

The production of high and low explosives such as, but not limited to, TNT and nitrocellulose.

Soap and detergent manufacturing, including but not limited to, those synthetic detergents prepared from fatty alcohols or linear alkylate.

Elemental sulfur recovery plants not on the premises where petroleum refining occurs.

Used motor or other oil or related petroleum product reclamation operations.

Petroleum refining, including but not limited to, distillation, cracking, reforming, treating, blending, polymerization, isomerization, alkylation, and elemental sulfur recovery operations.

Organic dye and dye intermediate manufacturing.

Hydrogen cyanide or cyanide salts manufacture or use.

glue manufacturing operations.

Manufacturing, fabricating, or processing medicinal and pharmaceutical products including the grading, grinding, or milling of botanicals.

(10) Storage—

Bulk storage, handling, and transfer facilities for crude oil, gas and finished petroleum products not on the premises where petroleum refining occurs.

Bulk storage, handling, transfer and manufacturing facilities of gas manufactured from inorganic and organic materials including coal gas, coke oven gas, water gas, producer, and oil gases.

(11) Metallurgical processes—

Production of aluminum oxide and aluminum metal and all common alloys, such as those with copper, magnesium, and silicon.

Production of titanium metal, salts, and oxides.

Metallurgical coke, petroleum coke, and byproduct coke manufacturing.

Copper, lead, zinc, and magnesium smelting and processing.

Ferroalloys manufacture such as, but not limited to, those combined with silicon, calcium, manganese and chrome.

Integrated steel and iron mill operations including, but not limited to, open hearth, basic oxygen, electric furnace, sinter plant, and rolling, drawing, and extruding operations.

Melting, smelting, refining, and alloying of scrap or other substances to produce brass and bronze ingots.

Gray iron foundry operations.

Steel foundry operations.

Beryllium metal or alloy production, including rolling, drawing and extruding operations.

Operations involving silver, arsenic, cadmium, copper, mercury, lead, nickel, chromium, and zinc including, but not limited to, production, recovery from scrap or salvage, alloy production, salt formation, electroplating, anodizing, and metallo-organics compound products preparation.

Stripping of oxides from and the cleaning of metals prior to plating, anodizing, or painting.

(12) Miscellaneous—

Operations involving the scouring, desizing, cleaning, bleaching, and dyeing of wool.

Wood preserving processes which use coal or petroleum based products such as, but not limited to, coal tars and/or creosotes.

Manufacture, use, or distillation of phenols, cresols, or coal tar materials.

Manufacture of lead acid storage batteries and/or storage batteries produced from other heavy metals, such as nickel or cadmium.

Installation of above or underground pipelines designed to transport petroleum, natural gas, and sanitary sewage.

Operations involving the dyeing, bleaching, coating, impregnating, or glazing of paper.

Dyeing, bleaching, and printing of textiles other than wool. Chemical finishing for water repelling, fire resistance, and mildew proofing, including preshrinking, coating and impregnating.

Sawmill and planing mill operations.

Marine terminal and cargo handling facilities.

d. "Person" means and shall include corporations, companies, associations, societies, firms, partnerships and joint stock companies as well as individuals and governmental agencies.

e. "Governmental agencies" means the Government of the United States, the State of New Jersey, or any other states, their political subdivisions, agencies, or instrumentalities thereof, and interstate agencies.

C. 13:19-4 "Coastal area" defined.

4. The "coastal area" shall consist of all that certain area lying between the line as hereinafter described and the line formed by the State's seaward (Raritan Bay and Atlantic ocean) territorial jurisdiction on the east thereof, the State's bayward (Delaware Bay) territorial jurisdiction on the south and southwest thereof, and the State's riverward (Delaware River) territorial jurisdiction on the west thereto. Beginning at the confluence of Cheesequake Creek with the Raritan Bay; thence southwesterly along the center line of Cheesequake Creek to its intersection with the Garden State Parkway; thence southeasterly along the Garden State Parkway to Exit 117 at State Highway 36; thence northeasterly along State Highway 36 to the intersection of Middle Road (County 516); thence easterly along Middle Road to the intersection of Palmer Avenue (County 7); thence northeasterly on Main Street to the intersection of State Highway 36; thence easterly on State Highway 36 to the intersection of Navesink Avenue; thence southerly on Navesink Avenue to the intersection of Monmouth Avenue at Navesink; thence westerly on Monmouth Avenue to its intersection with Browns Dock Road; thence southerly on Browns Dock

Road to its intersection with Cooper Road; thence southwesterly on Cooper Road to the intersection of State Highway 35; thence southerly on State Highway 35 to its intersection with State Highway 71; thence southeasterly on State Highway 71 to its crossing of the Central Railroad of New Jersey tracks; thence southerly along the Central Railroad of New Jersey tracks to its intersection of 6th Avenue (County 2); thence westerly on 6th Avenue (County 2) to the intersection of State Highway 33; thence westerly along State Highway 33 to the crossing of State Highway 18; thence southerly on State Highway 18 to its intersection of Marconi Road; thence southeasterly on Marconi Road to Adrienne Road, continuing south on Adrienne Road to Belmar Boulevard; thence easterly on Belmar Boulevard and 16th Avenue to the intersection of State Highway 71; thence southerly on State Highway 71 to the intersection of State Highway 35; thence northwesterly along State Highway 35 to State Highway 34 at the Brielle Circle; thence northwesterly along State Highway 34 to the Garden State Parkway at Exit 96; thence southwesterly along the Garden State Parkway to the intersection of the Monmouth, Ocean County boundary; thence westerly along said boundary to the intersection of the Central Railroad of New Jersey tracks; thence southwesterly along the tracks of the Central Railroad of New Jersey to its junction with the tracks of the Pennsylvania Railroad near Whiting; thence easterly along the tracks of the Pennsylvania Railroad to its intersection with the Garden State Parkway near South Toms River; thence southerly along the Garden State Parkway to its intersection with County Road 539 at Garden State Parkway exit 58; thence northerly along County Road 539 to its intersection with Martha-Stafford Forge Road; thence westerly along Martha-Stafford Forge Road to its intersection with Spur 563; thence northerly along Spur 563 to its intersection with County Road 563; thence southerly along County Road 563 to its intersection with County Road 542 at Green Bank; thence northwesterly along County Road 542 to its intersection with Weekstown-Pleasant Mills Road; thence southeasterly along Weekstown-Pleasant Mills Road to its intersection with County Road 563 at Weekstown; thence southeasterly along County Road 563 to its intersection with Clarks Landing Road leading to Port Republic; thence easterly along Clarks Landing Road to its intersection with the Garden State Parkway; thence southerly along the Garden State Parkway to its intersection with Alt. 559, and thence northwesterly along Alt. 559 to its intersection with County Road 559 at Gravelly Run; thence

northwesterly along County Road 559 to its intersection with U. S. 40 and S. R. 50 at Mays Landing; thence westerly along combined U. S. 40 and S. R. 50 to its intersection with S. R. 50; thence southerly on S. R. 50 to its intersection with Buck Hill Road near Buck Hill; thence westerly along Buck Hill (River Road) Road to its intersection with S. R. 49; thence southeasterly along S. R. 49 to its intersection with S. R. 50; thence southeasterly along S. R. 50 to its intersection with County Road 585; thence southwesterly along County Road 585 to its intersection with S. R. 47 at Dennisville; thence northwesterly along S. R. 47 to its intersection with State Road 49 at Millville; thence through Millville along State Road 49 to its intersection with County Road 555; thence southerly along County Road 555 to its intersection with County Road 27; thence southerly along County Road 27 to its intersection with County Road 70; thence southerly on County Road 70 to the Center of Mauricetown; thence through Mauricetown westerly on County Road 548 to its intersection with the tracks of the Central Railroad of New Jersey; thence northwesterly on the tracks of the Central Railroad of New Jersey to its intersection with County Road 98; thence easterly along County Road 98 to the intersection with County Road 38; thence northerly along County Road 38 to its intersection with S. R. 49 east of Bridgeton; thence westerly along S. R. 49 through Bridgeton to its intersection with County Road 5 (Roadstown Road); thence westerly along County Road 5 (Roadstown Road) to Roadstown; thence northwesterly along the Roadstown Road to County Road 47; thence southwesterly along County Road 47 to its intersection with County Road 19; thence along County Road 19 northwesterly to Gum Tree Corner; thence northwesterly along County Road 19 from Gum Tree Corner across Stowe Creek to its intersection with Salem County Road 59 (Hancock's Bridge Road); thence northwesterly along County Road 59 to its intersection with County Road 51 at Coopers Branch; thence northeasterly along County Road 51 to its intersection with S. R. 49 at Quinton; thence northwesterly along S. R. 49 to its intersection with County Road 50; thence southwesterly along County Road 50 to its intersection with County Road 58; thence southerly on County Road 58 to its intersection with County Road 24; thence westerly along County Road 24 to its intersection with County Road 65; thence northerly along County Road 65 (Walnut Street) to its intersection with County Road 4; thence westerly along County Road 4 and northerly along

County Road 4 and thence easterly along County Road 4 to its intersection with State Road 49; thence northerly along State Road 49 (Front Street) to its intersection with County Road 57; thence easterly along County Road 57 to its intersection with State Road 45; thence northerly along State Road 45 to its intersection with County Road 540 at Pointers; thence northerly and northwesterly along County Road 540 (Deepwater-Slapes Corner Road) to its intersection with the New Jersey Turnpike; thence westerly along the New Jersey Turnpike to its intersection with County Road 33; thence southerly along County Road 33 to its intersection with State Road 49; thence southeasterly along S. R. 49 to its intersection with County Road 26; thence northwesterly along County Road 26 to the Killcohook National Wildlife Refuge; thence northwesterly along this northeasterly boundary to the limits of the State's territorial jurisdiction on the Delaware River; provided, however, that the coastal area shall not include all that certain area in Cape May County lying within a line beginning at the intersection of S. R. 47 and County Road 54; thence westerly on County Road 54; to the intersection of County Road 3; thence southeasterly on County Road 3 through the intersection of County Road 3 with County Road 13 to the intersection with County Road 47; thence easterly and northerly along County Road 47 to its intersection with State Road 9; thence northerly along State Road 9 to its intersection with State Road 47; thence westerly along State Road 47 to its intersection with County Road 54.

C. 13:19-5 Permit to construct facility.

5. No person shall construct or cause to be constructed a facility in the coastal area until he has applied for and received a permit issued by the commissioner; however, the provisions of this act shall not apply to facilities for which on-site construction, including site preparation, was in process on or prior to the effective date of this act.

C. 13:19-6 Application for permit.

6. Any person proposing to construct or cause to be constructed a facility in the coastal area shall file an application for a permit with the commissioner, in such form and with such information as the commissioner may prescribe. The application shall include an environmental impact statement as described in this act.

C. 13:19-7 Contents of environmental impact statement.

7. The environmental impact statement shall provide the information needed to evaluate the effects of a proposed project upon the environment of the coastal area.

The statement shall include:

a. An inventory of existing environmental conditions at the project site and in the surrounding region which shall describe air quality, water quality, water supply, hydrology, geology, soils, topography, vegetation, wildlife, aquatic organisms, ecology, demography, land use, aesthetics, history, and archeology; for housing, the inventory shall describe water quality, water supply, hydrology, geology, soils and topography;

b. A project description which shall specify what is to be done and how it is to be done, during construction and operation;

c. A listing of all licenses, permits or other approvals as required by law and the status of each;

d. An assessment of the probable impact of the project upon all topics described in a.;

e. A listing of adverse environmental impacts which cannot be avoided;

f. Steps to be taken to minimize adverse environmental impacts during construction and operation, both at the project site and in the surrounding region;

g. Alternatives to all or any part of the project with reasons for their acceptability or nonacceptability;

h. A reference list of pertinent published information relating to the project, the project site, and the surrounding region.

C. 13:19-8 Declaration of completeness of application.

8. a. Within 30 days following receipt of an application, the commissioner shall notify the applicant in writing regarding its completeness. The commissioner may declare the application to be complete for filing or may notify the applicant of specific deficiencies. The commissioner, within 15 days following the receipt of additional information to correct deficiencies, shall notify the applicant of the completeness of the amended application. The application shall not be considered to be filed until it has been declared complete by the commissioner.

b. The commissioner, within 15 days of declaring the application complete for filing, shall set a date for the hearing. The date for the hearing shall be set not later than 60 days after the application is declared complete for filing.

C. 13:19-9 Hearing.

9. a. The commissioner, or a member of the department designated by him, shall hold a hearing to afford interested parties standing and the opportunity to present, orally or in writing, both their

position concerning the application and any data they may have developed in reference to the environmental effects of the proposed facility.

b. The commissioner, within 15 days after the hearing, may require an applicant to submit any additional information necessary for the complete review of the application.

C. 13:19-10 Review of applications; required findings.

10. The commissioner shall review filed applications, including the environmental impact statement and all information presented at public hearings. He shall issue a permit only if he finds that the proposed facility:

a. Conforms with all applicable air, water and radiation emission and effluent standards and all applicable water quality criteria and air quality standards.

b. Prevents air emissions and water effluents in excess of the existing dilution, assimilative, and recovery capacities of the air and water environments at the site and within the surrounding region.

c. Provides for the handling and disposal of litter, trash, and refuse in such a manner as to minimize adverse environmental effects and the threat to the public health, safety, and welfare.

d. Would result in minimal feasible impairment of the regenerative capacity of water aquifers or other ground or surface water supplies.

e. Would cause minimal feasible interference with the natural functioning of plant, animal, fish, and human life processes at the site and within the surrounding region.

f. Is located or constructed so as to neither endanger human life or property nor otherwise impair the public health, safety, and welfare.

g. Would result in minimal practicable degradation of unique or irreplaceable land types, historical or archeological areas, and existing scenic and aesthetic attributes at the site and within the surrounding region.

C. 13:19-11 Grounds for denial of permit application; conditional permit; approval of nuclear electricity generating facility.

11. Notwithstanding the applicant's compliance with the criteria listed in section 10 of this act, if the commissioner finds that the proposed facility would violate or tend to violate the purpose and intent of this act as specified in section 2, or if the commissioner finds that the proposed facility would materially contribute

to an already serious and unacceptable level of environmental degradation or resource exhaustion, he may deny the permit application, or he may issue a permit subject to such conditions as he finds reasonably necessary to promote the public health, safety and welfare, to protect public and private property, wildlife and marine fisheries, and to preserve, protect and enhance the natural environment. In addition, the construction and operation of a nuclear electricity generating facility shall not be approved by the commissioner unless he shall find that the proposed method for disposal of radioactive waste material to be produced or generated by such facility will be safe, conforms to standards established by the Atomic Energy Commission and will effectively remove danger to life and the environment from such waste material.

C. 13:19-12 Notification to applicant.

12. The commissioner shall notify the applicant within 60 days after the hearing as to the granting or denial of a permit. The reasons for granting or denying the permit shall be stated. In the event the commissioner requires additional information as provided for in section 9, he shall notify the applicant of his decision within 90 days following the receipt of the information.

C. 13:19-13 Coastal Area Review Board; creation, membership, voting, powers.

13. There is hereby created the Coastal Area Review Board, in but not of the Department of Environmental Protection, which shall consist of three voting members who shall be the Commissioner of Environmental Protection or his designated representative, the Commissioner of Labor and Industry or his designated representative and the Commissioner of Community Affairs or his designated representative. No vote on a permit request shall be taken unless all voting members are present.

The Coastal Area Review Board shall have the power to hear appeals from decisions of the commissioner pursuant to section 12. The board may affirm or reverse the decision of the commissioner with respect to applicability of any provision of this act to a proposed use; it may modify any permit granted by the commissioner, grant a permit denied by him, deny a permit granted by him, or confirm his grant of a permit. The board shall review filed applications, including the environmental impact statement and all information presented at public hearings and any other information the commissioner makes available to the board prior to the affirmation or reversal of a decision of the commissioner.

C. 13:19-14 Continuance in force of issued permit.

14. In the event of rental, lease, sale or other conveyances by an applicant to whom a permit is issued, such permit, with any conditions, shall be continued in force and shall apply to the new tenant, lessee, owner, or assignee so long as there is no change in the nature of the facility set forth in the original application.

C. 13:19-15 Effect of denial of application.

15. The denial of an application shall in no way adversely affect the future submittal of a new application.

C. 13:19-16 Environmental inventory; alternate environmental management strategies; environmental design for coastal area.

16. The commissioner shall, within 2 years of the taking effect of this act, prepare an environmental inventory of the environmental resources of the coastal area and of the existing facilities and land use developments within the coastal area and an estimate of the capability of the various area within the coastal area to absorb and react to man-made stresses. The commissioner shall, within 3 years of the taking effect of this act, develop from this environmental inventory alternate long-term environmental management strategies which take into account the paramount need for preserving environmental values and the legitimate need for economic and residential growth within the coastal area. The commissioner shall, within 4 years of the taking effect of this act, select from the alternate environmental management strategies an environmental design for the coastal area. The environmental design shall be the approved environmental management strategy for the coastal area and shall include a delineation of various areas appropriate for the development of residential and industrial facilities of various types, depending on the sensitivity and fragility of the adjacent environment to the existence of such facilities. The environmental inventory, the alternate long-term environmental management strategies and the environmental design for the coastal area shall be presented to the Governor and the Legislature within the time frame indicated herein.

C. 13:19-17 Rules and regulations.

17. The department is hereby authorized to adopt, amend and repeal rules and regulations to effectuate the purposes of this act.

C. 13:19-18 Injunctive relief; penalties.

18. If any person violates any of the provisions of this act, rule, regulation or order promulgated or issued pursuant to the provisions of this act, the department may institute a civil action in

the Superior Court for injunctive relief to prohibit and prevent such violation or violations and said court may proceed in a summary manner. Any person who violates any of the provisions of this act, rule, regulation or order promulgated or issued pursuant to this act shall be liable to a penalty of not more than $3,000.00 to be collected in a summary proceeding or in any case before a court of competent jurisdiction wherein injunctive relief has been requested. If the violation is of a continuing nature, each day during which it continues shall constitute an additional, separate and distinct offense. The department is hereby authorized and empowered to compromise and settle any claim for a penalty under this section in such amount in the discretion of the department as may appear appropriate and equitable under the circumstances.

C. 13:19-19 Applicability of act.

19. The provisions of this act shall not be regarded as to be in derogation of any powers now existing and shall be regarded as supplemental and in addition to powers conferred by other laws, including municipal zoning authority. The provisions of this act shall not apply to those portions of the coastal areas regulated pursuant to enforceable orders under the Wetlands Act, C. 13:9A-1 et seq., section 16 however shall apply to the entire area within the boundaries described herein.

C. 13:19-20 Construction of act.

20. This act shall be liberally construed to effectuate the purpose and intent thereof.

C. 13:19-21 Partial invalidity.

21. If any provision of this act or the application thereof to any person or circumstances is held invalid, the remainder of the act and the application of such provision to persons or circumstances other than those to which it is held invalid, shall not be affected thereby.

22. There is hereby appropriated to the Department of Environmental Protection for the purposes of this act the sum of $100,000.00.

23. This act shall take effect 90 days from the date of enactment, except that section 22 shall take effect immediately.

Approved June 20, 1973.

CHAPTER 272

AN ACT concerning the protection of natural resources in coastal wetlands, providing for the designation by the Commissioner of Environmental Protection of certain coastal wetlands after public hearing, and requiring permits from the commissioner prior to the dredging, removing, filling or otherwise altering or polluting coastal wetlands.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

C. 13:9A-1 Legislature's findings and declaration of policy; inventory and mapping of tidal wetlands; filing of maps.

1. a. The Legislature hereby finds and declares that one of the most vital and productive areas of our natural world is the so-called "estuarine zone," that area between the sea and the land; that this area protects the land from the force of the sea, moderates our weather, provides a home for water fowl and for ¾ of all our fish and shellfish, and assists in absorbing sewage discharge by the rivers of the land; and that in order to promote the public safety, health and welfare, and to protect public and private property, wildlife, marine fisheries and the natural environment, it is necessary to preserve the ecological balance of this area and prevent its further deterioration and destruction by regulating the dredging, filling, removing or otherwise altering or polluting thereof, all to the extent and in the manner provided herein.

b. The Commissioner of Environmental Protection shall, within 2 years of the effective date of this act, make an inventory and maps of all tidal wetlands within the State. The boundaries of such wetlands shall generally define the areas that are at or below high water and shall be shown on suitable maps, which may be reproductions or aerial photographs. Each such map shall be filed in the office of the county recording officer of the county or counties in which the wetlands indicated thereon are located. Each wetland map shall bear a certificate of the commissioner to the effect that it is made and filed pursuant to this act. To be entitled to filing no wetlands map need meet the requirements of R. S. 47:1-6.

C. 13:9A-2 Authority to regulate alteration of coastal wetlands; definitions.

2. The Commissioner may from time to time, for the purpose of promoting the public safety, health and welfare, and protecting public and private property, wildlife and marine fisheries, adopt, amend, modify or repeal orders regulating, restricting or prohibiting dredging, filling, removing or otherwise altering, or polluting, coastal wetlands. For the purposes of this act the term "coastal wetlands" shall mean any bank, marsh, swamp, meadow, flat or other low land subject to tidal action in the State of New Jersey along the Delaware bay and Delaware river, Raritan bay, Barnegat bay, Sandy Hook bay, Shewsbury river including Navesink river, Shark river, and the coastal inland waterways extending southerly from Manasquan Inlet to Cape May Harbor, or at any inlet, estuary or tributary waterway or any thereof, including those areas now or formerly connected to tidal waters whose surface is at or below an elevation of 1 foot above local extreme high water, and upon which may grow or is capable of growing some, but not necessarily all, of the following: Salt meadow grass (Spartine patens), spike grass (Distichlis spicata), black grass (Juncus gerardi), saltmarsh grass (Spartina alterniflora), saltworts (Salicornia Europaea, and Salicornia bigelovii), Sea Lavendar (Limonium carolinianum), saltmarsh bulrushes (Scirpus robustus and Scirpus paludosus var. atlanticus), sand spurrey (Spergularia marina), switch grass (Panicum virgatum), tall cordgrass (Spartina pectinata), hightide bush (Iva frutescens var. oraria), cattails (Typha angustifolia, and Typha latifolia), spike rush (Eleocharis rostellata), chairmaker's rush (Scirpus americana), bent grass (Agrostis palustris), and sweet grass (Hierochloe odorata). The term "coastal wetlands" shall not include any land or real property subject to the jurisdiction of the Hackensack Meadowlands Development Commission pursuant to the provisions of P. L. 1968, chapter 404, sections 1 through 84 (C. 13:17-1 through C. 13:17-86).

C. 13:9A-3 Adoption, change or repeal of order; hearing, notice; recording, indexing and filing of order; mailing.

3. The commissioner shall, before adopting, amending, modifying or repealing any such order, hold a public hearing thereon in the county in which the coastal wetlands to be affected are located, giving notice thereof to each owner having a recorded interest in such wetlands by mail at least 21 days prior thereto addressed to his address as shown in the municipal tax office records and by publication thereof at least twice in each of the 3 weeks next preceding the date of such hearing in a newspaper of general circulation in the municipality or municipalities in which such coastal wetlands are located.

Upon the adoption of any such order or any order amending, modifying or repealing the same, the commissioner shall cause a copy thereof, together with a plan of the lands affected, including reference to the filed wetlands map or maps on which the same are shown and a list of the owners of record of such lands, to be recorded in the office of the county clerk or register of deeds, where it shall be indexed and filed as a judgment, and shall mail a copy of such order and plan to each owner of record of such lands affected thereby.

C. 13:9A-4 "Regulated activity" defined; permit; application; contents; inspection; effect of work to be considered.

4. a. For purposes of this section "regulated activity" includes but is not limited to draining, dredging, excavation or removal of soil, mud, sand, gravel, aggregate of any kind or depositing or dumping therein any rubbish or similar material or discharging therein liquid wastes, either directly or otherwise, and the erection of structures, drivings of pilings, or placing of obstructions, whether or not changing the tidal ebb and flow. "Regulated activity" shall not include continuance of commercial production of salt hay or other agricultural crops or activities conducted under section 7 of this act.

b. No regulated activity shall be conducted upon any wetland without a permit.

c. Any person proposing to conduct or cause to be conducted a regulated activity upon any wetland shall file an application for a permit with the commissioner, in such form and with such information as the commissioner may prescribe. Such application shall include a detailed description of the proposed work and a map showing the area of wetland directly affected, with the location of the proposed work thereon, together with the names of the owners of record of adjacent land and known claimants of rights in or adjacent to the wetland of whom the applicant has notice. All applications, with any maps and documents relating thereto, shall be open for inspection at the office of the Department of Environmental Protection.

d. In granting, denying or limiting any permit the commissioner shall consider the effect of the proposed work with reference to the public health and welfare, marine fisheries, shell fisheries, wildlife, the protection of life and property from flood, hurricane and other natural disasters, and the public policy set forth in section 1. a. of this act.

C. 13:9A-5 Restraint of violations.

5. The Superior Court shall have jurisdiction to restrain violations of orders issued pursuant to this act.

C. 13:9A-6 Filing of complaint; determination of issue exclusive.

6. Any person having a recorded interest in land affected by any such order or permit, may, within 90 days after receiving notice thereof, file a complaint in the Superior Court to determine whether such order or permit so restricts or otherwise affects the use of his property as to deprive him of the practical use thereof and is therefore an unreasonable exercise of the police power because the order or permit constitutes the equivalent of a taking without compensation. If the court finds the order or permit to be an unreasonable exercise of the police power, the court shall enter a finding that such order or permit shall not apply to the land of the plaintiff; provided, however, that such finding shall not affect any other land than that of the plaintiff. Any party to the suit may cause a copy of such finding to be recorded forthwith in the office of the county clerk or register of deeds, where it shall be indexed and filed as a judgment.

The method provided in this section for the determination of the issue shall be exclusive, and such issue shall not be determined in any other proceeding.

C. 13:9A-7 Certain powers and duties not to be restricted.

7. No action by the commissioner under this act shall prohibit, restrict or impair the exercise or performance of the powers and duties conferred or imposed by law on the State Department of Environmental Protection, the Natural Resource Council and the State Mosquito Control Commission in said Department, the State Department of Health, or any mosquito control or other project or activity operating under or authorized by the provisions of chapter 9 of Title 26 of the Revised Statutes.

C. 13:9A-8 Riparian rights or obligations not affected.

8. Nothing in this act or any permit issued hereunder shall affect the rights of the State in, or the obligations of a riparian owner with respect to, riparian lands.

C. 13:9A-9 Liability in event of violations; penalty.

9. Any person who violates any order by the commissioner, or violates any of the provisions of this act, shall be liable to the State for the cost of restoration of the affected wetland to

its condition prior to such violation insofar as that is possible, and shall be punished by a fine of not more than $1,000.00, to be collected in accordance with the provisions of the Penalty Enforcement Law (N. J. S. 2A:58-1 et seq.).

C. 13:9A-10 Short title.

10. This act may be cited as "The Wetlands Act of 1970."

11. This act shall take effect immediately.

Approved November 5, 1970.

WATERFRONT DEVELOPMENT LAW

12:5-3. Submission to board of plans for water-front development

All plans for the development of any water-front upon any navigable water or stream of this State or bounding thereon, which is contemplated by any person or municipality, in the nature of individual improvement or development or as a part of a general plan which involves the construction or alteration of a dock, wharf, pier, bulkhead, bridge, pipe line, cable, or any other similar or dissimilar water-front development shall be first submitted to the Department of Environmental Protection. No such development or improvement shall be commenced or executed without the approval of the Department of Environmental Protection first had and received, or as hereinafter in this chapter provided.

Amended by L.1975, c. 232, § 8.

1977 Senate No. 3179 (*Official Copy Reprint*)

AN ACT concerning the production, distribution, conservation, and consumption of energy, establishing a Department of Energy as a principal department in the Executive Branch of State Government **and repealing parts of the statutory law**.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

1. This act shall be known and may be cited as the "Department of Energy Act."

2. The Legislature hereby finds and determines that a secure, stable, and adequate supply of energy at reasonable prices is vital to the State's economy and to the public health, safety, and welfare; that this State is threatened by the prospect of both near- and long-term energy shortages; that the existing dispersion of responsibilities with respect to energy and energy-related matters among various State departments, divisions, agencies, and commissions inhibits comprehensive and effective planning for our future energy needs; and that the State government does not now possess either sufficient information or adequate authority to provide for and insure the wise and efficient production, distribution, use, and conservation of energy.

The Legislature further finds and determines that only an agency with comprehensive powers can collect, collate, and analyze the information necessary to determine the amount of energy that is or may be available; develop mechanisms to insure a fair and equitable distribution of existing supplies; conduct the long-term planning and management needed to eliminate or alleviate the potential adverse effects of a supply of energy insufficient to meet legitimate needs or from practices of production, distribution, and consumption detrimental to the quality of life or the environment; **contribute to the proper siting of energy facilities necessary to serve the public interest;** coordinate New Jersey's energy policies and actions with Federal energy policies; and secure for New Jersey the maximum amount of Federal funding available for energy related research, development, and demonstration projects.

The Legislature further finds and determines that shortages of energy have the potential at certain times and in certain places to so seriously affect the public interest that it is necessary for State government to possess emergency powers sufficient to prevent or minimize health disasters and grave economic disruptions which could occur during said times.

The Legislature, therefore, declares it to be in the best interest of the citizens of this State to establish a principal department in the Executive Branch of State Government to coordinate authority*, *regulation** and planning by the State in energy related matters.

3. As used in this act:

a. "Commissioner" means the Commissioner of the Department of Energy;

b. "Department" means the Department of Energy established by this act;

c. "Distributor" means and includes each person, wherever resident or located, who imports into this State fuels for use, distribution, storage, or sale in this State after the same shall reach this State; and also each person who produces, refines, manufactures, blends, or compounds fuels and sells, uses, stores, or distributes the same within this State. In no case, however, shall a retail dealer be construed to be a distributor;

d. "Energy" means all power derived from, or generated by, any natural or man-made agent, including, but not limited to, petroleum products, gases, solar radiation, atomic fission or fusion, mineral formations, thermal gradients, wind, or water.

e. "Energy facility" means any plant or operation which produces, converts, distributes or stores energy or converts one form of energy to another; in no case, however, shall an operation conducted by a person acting only as a retail dealer be construed as an energy facility;

f. "Energy information" means any statistic, datum, fact, or item of knowledge and all combinations thereof relating to energy;

g. "Energy information system" means the composite of energy information collected by the office;

EXPLANATION—Matter enclosed in bold-faced brackets [thus] in the above bill is not enacted and is intended to be omitted in the law.

h. *[**"Energyy"**]* *"*Energy** industry" means any person, company, corporation, business, institution, establishment or other organization of any nature engaged in the exploration, extraction, transportation, transmission, refining, processing, generation, distribution, sale or storage of energy;

i. "Fuel" means coal, petroleum products, gases and nuclear fuel, including enriched uranium, U235 and U238, and plutonium, U239;

j. "Gases" means natural gas, methane, liquefied natural gas, synthetic natural gas, coal gas and other manufactured gases;

k. "Person" means natural persons, partnerships, firms, associations, joint stock companies, syndicates and corporations, and any receiver, trustee, conservator or other officer appointed pursuant to law or by any court, State or Federal; "person" also means the State of New Jersey, counties, municipalities, authorities, other political subdivisions, and all departments and agencies within the aforementioned governmental entities;

l. "Petroleum products" means and includes motor gasoline, middle distillate oils, residual fuel oils, aviation fuel, propane, butane, natural gasoline, naphtha, gas oils, lubricating oils and any other similar or dissimilar liquid hydrocarbons;

m. "Public building" means any building, structure, facility or complex used by the general public, including, but not limited to, theaters, concert halls, auditoriums, museums, schools, libraries, recreation facilities, public transportation terminals and stations, factories, office buildings, business establishments, passenger vehicle service stations, shopping centers, hotels or motels and public eating places, owned by any State, county or municipal government agency or instrumentality or any private individual, partnership, association or corporation;

n. "Purchase" means and includes, in addition to its ordinary meaning, any acquisition of ownership or possession, including, but not limited to, condemnation by eminent domain proceedings;

o. "Retail dealer" means any person who engages in the business of selling fuels from a fixed location such as a service station, filling station, store, or garage directly to the ultimate users of said fuel;

p. "Sale" means and includes, in addition to its ordinary meaning, any exchange, gift, theft, or other disposition. In such case where fuels are exchanged, given, stolen, or otherwise disposed of, they shall be deemed to have been sold;

q. "Supplier of fuel" means any refiner, importer, marketer, jobber, distributor, terminal operator, firm, corporation, wholesaler, broker, cooperative or other person who supplies, sells, consigns, transfers, or otherwise furnishes fuel. In no case, however, shall a retail dealer be construed to be a supplier of fuel;

r. "Trade secret" means the whole or any portion or phase of any scientific, technical or otherwise proprietary information, design, process, procedure, formula or improvement which is used in one's business and is secret and of value; and a trade secret shall be presumed to be secret when the owner takes measures to prevent it from becoming available to persons other than those selected by the owner to have access thereto for limited purposes;

s. "Wholesale dealer" means any person who engages in the business of selling fuels to other persons who resell the said fuel. In no case shall a retail dealer be considered as a *[**whoesale**]* **wholesale** dealer.

4. There is hereby established in the Executive Branch of the State Government a principal department which shall be known as the Department of Energy.

5. The administrator and chief executive officer of the department shall be a commissioner who shall be a person qualified by training and experience to perform the duties of his office. The commissioner shall be appointed by the Governor with the advice and consent of the Senate, and shall serve at the pleasure of the Governor and until the appointment and qualification of the commissioner's successor. He shall devote his entire time to the duties of his office and shall receive such salary as shall be provided by law. Any vacancy occurring in the office of the commissioner shall be filled in the same manner as the original appointment.

**5.1.a. There is hereby established in the department the Board of Public Utilities; provided, however, that such board shall be independent of any supervision or control by the department or by any officer or employee thereof, except as otherwise expressly provided in this act.*

b. The Department of Public Utilities is abolished and its functions, powers and duties are hereby transferred to the Board of Public Utilities, except as provided in section 25 of this act.

c. The Board of Public Utility Commissioners and the positions of president and commissioners thereof shall be continued as the Board of Public Utilities and the president and commissioners thereof in the Board of Public Utilities. This act shall not affect the terms of office of, nor the salaries received by, the present mem-

bers of the Board of Public Utility Commissioners, or of any officers or employees thereof. The Department of Civil Service shall not reclassify any title or position transferred from the Department of Public Utilities pursuant to this act without the approval of the board. The President and Commissioners of the Board of Public Utilities shall be appointed in the manner provided by existing law for the appointment of the President and Commissioners of the Board of Public Utility Commissioners, and shall receive such salaries as shall be provided by law.

d. All functions, powers and duties now vested in the Board of Public Utility Commissioners and in the positions of president and commissioners thereof are hereby transferred to and assumed by the Board of Public Utilities and the president and commissioners thereof.

e. Whenever in any law, rule, regulation, order, contract, document, judicial or administrative proceeding or otherwise, reference is made to the Department of Public Utilities or the Board of Public Utility Commissioners, the same shall mean and refer to the Board of Public Utilities.

5.2.a. There is hereby established in the department the Division of Energy Planning and Conservation.

*b. The Division of Energy Planning and Conservation shall be under the immediate supervision of a director who shall be appointed by the Governor, with the advice and consent of the Senate, and who shall serve at the pleasure of the Governor during the Governor's term of office and until the appointment and qualification of his successor. The director shall receive such salary as shall be provided by law.**

6. The commissioner shall organize the work of the department and establish therein such administrative subdivisions as he may deem necessary, proper and expedient. He may formulate and adopt rules and regulations and prescribe duties for the efficient conduct of the business, work and general administration of the department. He may delegate to subordinate officers or employees in the department such of his powers as he may deem desirable to be exercised under his supervision and control.

7. Subject to the provisions of Title 11 of the Revised Statutes, and within the limits of funds appropriated or otherwise made available, the commissioner may appoint such officers and employees of the department as he may deem necessary for the performance of its duties, fix and determine their qualifications, duties, and compensation and retain or employ engineers and

private consultants on a contract basis or otherwise for rendering professional or technical assistance.

8. **a.** The commissioner shall make an annual report to the Legislature and the Governor of the department's operations and render such other reports as they shall from time to time request or as may be required by law. These reports shall include, but not be limited to, an analysis of existing problems and guidelines relating to future energy use and availability.

b. Within 6 months of the effective date of this act, the commissioner, after consultation with the Director of the Division of Energy Planning and Conservation, the Board of Public Utilities, the Attorney General, and the commissioners of appropriate executive departments, including but not necessarily limited to the Departments of Environmental Protection and Transportation, shall prepare and submit a report to the Legislature and the Governor identifying (1) those functions and duties currently exercised by other departments, divisions, agencies, commissoins, councils, boards, or bureaus of State Government relating to energy that might be appropriately transferred to the department; and (2) those functions and duties transferred to the department pursuant to the provisions of this act that might be appropriately transferred to other departments. Such transfers may be effectuated by executive order or law, as the case may be.

9. The commissioner shall, **[by and]** on behalf of the department ***through the Division of Energy Planning and Conservation***:

a. Manage the department as the central repository within the State Government for the collection of energy information;

b. Collect and analyze data relating to present and future demands and resources for all forms of energy;

c. Have authority to require all persons, firms, corporations or other entities engaged in the production, processing, distribution, transmission or storage of energy in any form to submit reports setting forth such information as shall be required to carry out the provisions of this act;

d. Have authority to require any person to submit information necessary for determining the impact of any construction or development project on the energy and fuel resources of this State;

e. Charge other State Government departments and agencies involved in energy-related activities*, *including the Board of Public Utilities,** with specific information gathering goals and require that said goals be fulfilled;

f. Establish an energy information system which will provide all data necessary to insure a fair and equitable distribution of available energy, to permit a more efficient and effective use of available energy, and to provide the basis for long-term planning related to energy needs;

g. Design, implement, and enforce a program for the conservation of energy in commercial, industrial, and residential facilities, which program shall provide for the evaluation of energy systems as they relate to lighting, heating, refrigeration, air-conditioning, building design and operation, and appliance manufacturing and operation; and may include, but shall not be limited to, the requiring of an annual inspection and adjustment, if necessary, of oil-fired heating systems in residential, commercial and industrial buildings so as to bring such systems into conformity with efficiency standards therefor prescribed by the department; the setting of lighting efficiency standards for public buildings; the establishment of mandatory thermostat settings and the use of seven-day, day-night thermostats in public buildings; the development of standards for efficient boiler operation; and, the preparation of a plan to insure the phased retrofitting of existing gas furnaces with electric ignition systems and to require that new gas **[furnaces,]** ranges**[,]** and dryers be equipped with electric ignition systems*, *and new gas furnaces with electric ignition systems and automatic vent-dampers**;

h. Conduct and supervise a State-wide program of education including the preparation and distribution of information relating to energy conservation;

i. Monitor prices charged for energy within the State, evaluate policies governing the establishment of rates and prices for energy, and make recommendations for necessary changes in such policies to other concerned Federal and State agencies*, *including the Board of Public Utilities,** and to the Legislature;

j. Have authority to conduct and supervise research projects and programs for the purpose of increasing the efficiency of energy use, developing new sources of energy, evaluating energy conservation measures, and meeting other goals consistent with the intent of this act;

k. Have authority to distribute and expend funds made available for the purpose of research projects and programs;

l. Have authority to enter into interstate compacts in order to carry out energy research and planning with other states or the Federal Government where appropriate;

m. Have authority to apply for, accept, and expend grants-in-aid and assistance from private and public sources for energy programs; notwithstanding any other law to the contrary, the commissioner is designated as the State official to apply for, receive, and expend Federal and other funding made available to the State for the purposes of this act;

n. Require the annual submission of energy utilization reports and conservation plans by State Government departments and agencies, *including the Board of Public Utilities,* evaluate said plans and the progress of the departments and agencies in meeting these plans, and order changes in the plans or improvement in meeting the goals of the plans;

o. Carry out all duties given him under other sections of this act or any other acts;

p. Have authority to conduct hearings and investigations in order to carry out the purposes of this act and to issue subpenas in furtherance of such power. Said power to conduct investigations shall include, but not be limited to, the authority to enter without delay and at reasonable times the premises of any energy industry in order to obtain or verify any information necessary for carrying out the purposes of this act;

q. Have authority to adopt, amend or repeal, pursuant to the "Administrative Procedure Act" (C. 52:14B-1 et seq.) such rules and regulations necessary and proper to carry out the purposes of this act;

r. Administer such Federal energy regulations as are applicable to the states, including, but not limited to, the mandatory petroleum allocation regulations and State energy conservation plans.

s. Have authority to sue and be sued;

t. Have authority to acquire by purchase, grant, contract or eminent domain title to real property for the purpose of demonstrating facilities which improve the efficiency of energy use, conserve energy or generate energy in new and efficient ways;

u. Have authority to construct and operate, on an experimental or demonstration basis, facilities which improve the efficiency of energy use, conserve energy or generate power in new and efficient ways;

v. Have authority to contract with any other public agency or corporation incorporated under the laws of this or any other state for the performance of any function under this act;

w. Determine the effect of energy and fuel shortages upon consumers, and formulate proposals designed to encourage the lowest

possible cost of energy and fuels consumed in the State consistent with the conservation and efficient use of energy;

x. Keep complete and accurate minutes of all hearings held before the commissioner or any member of the *[department]* *Division of Energy Planning and Conservation* pursuant to the provisions of this act. All such minutes shall be retained in a permanent record and shall be available for public inspection at all times during the office hours of the department.

10. There is created in the *[department]* *Division of Energy Planning and Conservation* an Advisory Council on Energy *Planning and Conservation* which shall consist of *[10]* *15* members representing the following: the natural gas industry, the bottle gas industry, the home heating oil and coal industry, terminal operators, oil refiners, gasoline retailers, electrical utilities, nuclear fuel suppliers, *[the Department of Public Utilities and the consuming public]* *environmental organizations, the solar energy industry, manufacturing industrial consumers, commercial consumers, residential consumers, the transportation industry and the academic community*. Members shall be appointed by the Governor, with the advice and consent of the Senate, and as practicably as possible represent the several geographical areas of the State.

The council shall elect a chairman, vice chairman and secretary from its membership. Of the members first appointed, **[three]** **five** shall serve for terms of 2 years, **[three]** **five** for terms of 3 years and **[four]** **five** for terms of 4 years. Thereafter all appointments shall be made for terms of 4 years. Members shall serve after the expiration of their terms until their respective successors are appointed and shall qualify, and any vacancy occurring in the membership of the council by expiration of term or otherwise, shall be filled in the same manner as the original appointment for the unexpired term only.

Members of the council shall serve without compensation but shall be reimbursed for expenses actually incurred in attending meetings of the council and in performance of their duties as members thereof. The council shall meet at least four times each year, at the call of its chairman, and at such other times, at the call of the commissioner, as he deems necessary.

11. The Advisory Council on Energy *Planning and Conservation* is empowered to:

a. Request from the commissioner *and from the Director of the Division of Energy Planning and Conservation* such energy information as it may deem necessary;

b. Consider any matter relating to the production, distribution, consumption or conservation of energy;

c. From time to time submit to the commissioner any recommendations which it deems necessary for the long-term planning and management of energy;

d. Study energy programs and make its recommendations thereon to the commissioner;

e. Review, prior to their promulgation, proposed rules and regulations of the department, and make its recommendations thereupon, except such rules and regulations determined by the commissioner to be emergency measures essential to preserve the public health, safety, or welfare.

f. Hold public hearings in regard to existing statutes and regulations governing the production, distribution, consumption or conservation of energy.

12. a. The department, *through the Division of Energy Planning and Conservation,* within 1 year of the effective date of this act, shall prepare or cause to be prepared, and, after public hearings as hereinafter provided, adopt a master plan for a period of 10 years on the production, distribution, consumption and conservation of energy in this State. Such plan shall be revised and updated at least once every 3 years. The plan shall include long-term objectives but shall provide for the interim implementation of measures consistent with said objectives. The department may from time to time and after public hearings amend the master plan. In preparing the master plan or any portion thereof or amendment thereto the department shall give due consideration to the energy needs and supplies in the several geographic areas of the State, and shall consult and cooperate with any Federal or State agency having an interest in the production, distribution, consumption or conservation of energy.

b. Upon preparation of such master plan, and each revision thereof, the department shall cause copies thereof to be printed, shall transmit sufficient copies thereof to the Governor and the Legislature, for the use of the members thereof, and shall advertise, in such newspapers as the commissioner determines appropriate to reach the greatest possible number of citizens of New Jersey, the existence and availability of such draft plan from the offices of the department for the use of such citizens as may request same. In addition, the department shall:

(1) Fix dates for the commencement of a series of public hearings, at least one of which shall be held in each geographical area delineated in the master plan. Each such public hearing shall concern the overall content of the plan and those aspects thereof that have relevance to the specific geographical area in which each such public hearing is being held;

(2) At least 60 days prior to each public hearing held pursuant to this section, notify each energy industry and each State department, commission, authority, council, agency, or board charged with the regulation, supervision or control of any business, industry or utility engaged in the production, processing, distribution, transmission, or storage of energy in any form of the time and place for the hearing and shall publish such notice in a newspaper of general circulation in the region where the hearing is to be held, and in such newspapers of general circulation in the State as the commissioner determines appropriate to reach the greatest possible number of citizens of New Jersey.

c. Upon the completion of the requirements of subsection b. of this section, the department shall consider the testimony presented at all such public hearings and adopt the energy master plan, together with any additions, deletions, or revisions it shall deem appropriate.

d. Upon the adoption of the energy master plan, and upon each revision thereof, the department shall cause copies thereof to be printed and shall transmit sufficient copies thereof to the Governor and the Legislature, for the use of the members thereof, and to each State department, commission, authority, council, agency, or board charged with the regulation, supervision or control of any business, industry or utility engaged in the production, processing, distribution, transmission, or storage of energy in any form. In addition, the department shall advertise in the manner provided in subsection b. of this section the existence and availability of the energy master plan from the offices of the department for the use of such citizens of New Jersey as may request same; provided, however, that the department may charge a fee for such copies of the energy master plan sufficient to cover the costs of printing and distributing same.

13. a. The *[department]* *Division of Energy Planning and Conservation* is *[further]* empowered and directed to intervene in any proceedings before, and appeals from, any State department, *division,* commission, authority, council, agency or board (hereinafter referred to as "State instrumentalities") *including the Board of Public Utilities* charged with the regulation, supervision or control of any business, industry or utility engaged in the production, processing, distribution, transmission or storage of energy in any form, when, in the discretion of the commissioner, such intervention is necessary to insure the proper consideration by such State instrumentalities of the State energy master plan, or any part or aspect thereof, adopted by the department pursuant to section 12 of this act, or any rule or regulation promulgated by the department pursuant to the provisions of this act. To facilitate the intervention provisions of this section, each such State instrumentality shall consider the department a party of interest in any proceedings before such instrumentality with respect to energy and shall give the same notice to the department as is given to every other party of interest in such proceedings of any meeting, public hearing or other proceeding of such instrumentality in implementing its regulatory, supervisory or control powers, responsibilities and duties with respect to such businesses, industries or utilities.

b. It being the intention of the Legislature that the actions, decisions, determinations and rulings of the State Government with respect to energy shall to the maximum extent practicable and feasible conform with the energy master plan adopted by the department pursuant to section 12 of this act, the department shall prepare, periodically revise and distribute to each State instrumentality charged with the regulation, supervision or control of any business, industry or utility engaged in the production, processing, distribution, transmission or storage of energy in any form, such guidelines as the department determines to be relevant to assist each such instrumentality in conforming with said energy master plan in implementing its regulatory, supervisory or control powers, responsibilities and duties with respect to such businesses, industries or utilities.

c. With respect to the siting of any energy facility in any part of New Jersey, the department shall, the provisions of any law to the contrary notwithstanding, have jurisdiction coextensive with that of any other State instrumentality, and to that end, no State instrumentality with the power to grant or deny any permit for the construction or location of any energy facility shall exercise its powers without referring to the Division of Energy Planning and Conservation, for its review and comments, a copy of such application and all papers, documents and materials appurtenant thereto filed by the applicant with such State instrumentality. Prior to making a final decision with respect to any such application, the State instrumentality with power of approval over such application shall solicit the views of the department thereupon. Such views

shall be communicated to the State instrumentality with the power of approval over such application in the form of a report describing the findings of the department with respect to such application. Such report shall be prepared by the Director of the Division of Energy Planning and Conservation and shall be signed by said director and by the commissioner. In the event that such report is not prepared and transmitted to the State instrumentality with power of approval over such application within 90 days after the department's receipt of such application, such State instrumentality shall act upon such application pursuant to the law providing its power of approval thereof. In the event that the views of the department, as contained in its report, with respect to any such application differ from the views of the State instrumentality with the power of approval over such application, there shall be established an Energy Facility Review Board which shall consist of the Director of the Division of Energy Planning and Conservation, the director or chief executive officer of the State instrumentality with the power of approval over such application, and a designee of the Governor. The decision of the Energy Facility Review Board created with respect to a specific energy facility application shall be binding with respect to such facility and shall be implemented forthwith by the State instrumentality with the power of approval over such application.

In implementing its responsibilities pursuant to this subsection, the department shall have the power to adopt, by regulation, a fee schedule for reviewing applications for the construction or location of energy facilities; provided, however, that fees shall be charged to applicants for permits to construct or locate energy facilities only in those instances where the nature and extent of the proposed energy facility are such as to necessitate the employment of consultants or other expert personnel from without the department before the department can make its determination with respect to any such application, and that such fees shall in any event be the minimum amount necessary to permit the department to fulfill its responsibilities under this section.

*The provisions of this section shall not be regarded as to be in derogation of any powers now existing and shall be regarded as supplemental and in addition to powers conferred by other laws, including municipal zoning authority.**

14. The commissioner shall prepare and adopt an emergency allocation plan specifying actions to be taken in the event of an impending serious shortage of energy which poses grave threats

to the public health, safety, or welfare. The commissioner shall direct all State Government departments and agencies*, *including the Board of Public Utilities,** to develop, subject to his approval, contingency plans for dealing with said emergencies.

15. a. Upon a finding by the commissioner that there exists or impends an energy supply shortage of a dimension which endangers the public health, safety, or welfare in all or any part of the State, the Governor is authorized to proclaim by executive order a state of energy emergency for a period of up to 6 months. The Governor may limit the applicability of any such state of emergency to specific kinds of energy forms or to specific areas of the State in which such a shortage exists or impends.

b. During the duration of a state of energy emergency the commissioner to the extent not in conflict with applicable Federal law or regulation but notwithstanding any State or local law or contractual agreement, shall be empowered to:

(1) Order any person to reduce by a specified amount the use of any energy form; to make use of an alternate energy form, where possible; or to cease the use of any energy form;

(2) Order any person engaged in the distribution of any energy form to reduce or increase by a specfied amount or to cease the distribution of such energy form; to distribute a specified amount and type of energy form to certain users as specified by the *[administrator]* **commissioner**; or to share supplies of any energy form with other distributors thereof;

(3) Establish priorities for the distribution of any energy form;

(4) Regulate and control the distribution and sale of any energy form by:

(a) Establishing such limitations, priorities, or rationing procedures as shall be necessary to insure a fair and equitable distribution of available supplies;

(b) Establishing minimum and maximum quantities to be sold to any purchaser;

(c) Fixing the days and hours of access to retail dealers;

(d) Compelling sales to members of the general public during times when a retail dealer is open for the sale of an energy form;

(e) Establishing methods for notifying the public by flags, symbols, or other appropriate means whether such retail dealers are open and selling the subject energy form;

(5) Direct the heads of those departments and agencies within State Government that were ordered to develop contingency plans pursuant to section 14 of this act to implement said plans;

(6) Adopt and promulgate such rules and regulations as are necessary and proper to carry out the purposes of this section.

c. During the existence of a state of energy emergency, the Governor may order the suspension of any laws, rules, regulations, or orders of any department or agency in State Government or within any political subdivision which deal with or affect energy and which impede his ability to alleviate or terminate a state of energy emergency.

d. Any aggrieved person, upon application to the commissioner shall be granted a review of whether the continuance of any order issued by the commissioner pursuant to this section is unreasonable in light of then prevailing conditions of emergency.

e. During a state of energy emergency the commissioner may require any other department or other agency within State Government to provide such information, assistance, resources, and personnel as shall be necessary to discharge his functions and responsibilities under this act, rules and regulations adopted hereunder, or applicable Federal law and regulations.

f. The powers granted to the Governor and the commissioner under this section shall be in addition to and not in limitation of any emergency powers now or hereafter vested in the Governor, the commissioner, or any other State Government department or agency pursuant to any other laws, including but not limited to any power *[now]* vested in the Board of Public *[Utility Commissioners]* **Utilities** to require utility companies to allocate available supplies of energy; provided, however, that upon declaring a state of energy emergency, the Governor may supersede any other such emergency powers.

g. The state of energy emergency declared by the Governor pursuant to this section shall remain in effect until the Governor declares by a subsequent executive order that the state of energy emergency has terminated.

16. a. The commissioner shall adopt rules and regulations requiring the periodic reporting by energy industries of energy information which shall include but not be limited to the following:

(1) Electrical generating capacity in the State; long-range plans for additions to said capacity; efficiency of electrical generation; price and cost factors in electrical generation; types and quantities of fuels used; projections of future demand, consumption of electricity by sectors; times, duration, and levels of peak demand;

(2) Petroleum refining capacity; amount and type of fuel produced; amount and type of fuel sold; interstate transfers of fuel;

price and cost factors in refining, production, and sale; long-term plans for alterations or additions to refining capacity; location, amount, and type of fuel storage;

(3) Storage capacity for gases; amount and end uses of gases sold; price and cost factors in the sale and use of gases; and

(4) Such other information as the commissioner may determine necessary for carrying out the purposes of this act.

b. The commissioner shall at least annually publish a report analyzing all energy information collected.

c. The commissioner shall have the discretion to obtain energy information from an affiliate of any energy industry or from an association or organization of industries of which any such energy industry is a member. Whenever energy information supplied by an energy industry is so obtained by the commissioner, the energy industry to which such information pertains shall be promptly notified of the energy information so obtained and shall be given an opportunity to correct or amplify such information.

d. Trade secrets collected under this section shall be exempt from the requirements of P. L. 1963, c. 73 (C. 47:1A-1 et seq.). The commissioner shall promulgate rules and regulations for the conduct of administrative hearings on the issue of whether certain energy information should not be disclosed to the public.

17. No person who is an official or employee of the department shall participate in any manner in any decision or action of the department wherein he has a direct or indirect financial interest.

18. The commissioner may issue subpenas requiring the attendance and testimony of witnesses and the production of books, documents, papers, statistics, data, information, and records for the purpose of carrying out any of his responsibilities under this act. Whenever there arises a refusal to honor his subpena, the commissioner may petition a court of competent jurisdiction for an order requiring the attendance and testimony of a witness or the production of the requested books, documents, papers, statistics, data, information, and records. Any failure to obey such an order issued by a court shall be punished by the court as a contempt thereof.

19. Upon a violation of this act or of any rules, regulations, or orders promulgated hereunder, the commissioner, the county prosecutor of the county in which the violation occurs if he has the approval of the commissioner, or any aggrieved person shall be entitled to institute a civil action in a court of competent jurisdiction for injunctive relief to restrain such violation and for such

other relief as the court shall deem proper. The court may proceed in a summary manner. Neither the institution of such action, nor any of the proceedings therein shall relieve any party to such proceedings from other fines or penalties prescribed for such a violation by this act or by any rule, regulation or order adopted hereunder.

20. Any person who fails to provide energy information in his official custody when so required by the commissioner shall be liable for a penalty of not more than $3,000.00 for each offense. If the violation is of a continuing nature, each day during which it continues shall constitute an additional and separate offense. Penalties shall be collected in a civil action by a summary proceeding under the Penalty Enforcement Law (N. J. S. 2A:58-1 et seq.).

21. Any officer or employee of the State who, having obtained by reason of his employment and for official use, any confidential energy information, publishes or communicates such information for reasons not authorized by this or any other act shall be fined not more than $2,000.00 or imprisoned not more than 2 years or both.

22. a. Any person purchasing or attempting to purchase energy in violation of section 15 of this act or any rules, regulations, or orders promulgated thereunder, shall be subject to a penalty of not more than $25.00 for the first offense, not more than $100.00 for the second offense, and not more than $200.00 for the third offense or subsequent offenses.

b. Any retail dealer who violates section 15 of this act or any rules, regulations, or orders promulgated thereunder, shall be subject to a penalty of not more than $25.00 for the first offense, not more than $200.00 for the second offense, and not more than $400.00 for the third offense or subsequent offenses.

c. Any distributor or any other supplier of energy who violates any of the provisions of section 15 of this act or of any rules, regulations, or orders promulgated thereunder, shall be subject to a penalty of not more than $1,000.00 for the first offense, not more than $5,000.00 for the second offense, and not more than $10,000.00 for the third offense or subsequent offenses.

d. In addition to any other penalties provided under this or any other act, the commissioner may recommend to the appropriate agency the suspension or revocation of the license of any retail dealer, gasoline jobber, wholesale dealer, distributor, or supplier of fuel, who has violated this act or any rules, regulations, or orders promulgated hereunder.

e. All penalties imposed pursuant to this section shall be collected in a civil action by a summary proceeding under the Penalty Enforcement Law (N. J. S. 2A:58-1 et seq.). If the violation is of a continuing nature, each day during which it continues shall constitute an additional and separate offense.

*22.1 *The department shall transmit copies of all rules and regulations proposed pursuant to this act* ***by or on behalf of the Division of Energy Planning and Conservation*** to the Senate and General Assembly on a day on which both Houses shall be meeting in the course of a regular or special session. The provisions of the "Administrative Procedure Act" or any other law to the contrary notwithstanding, no such rule or regulation, except a rule or regulation adopted pursuant to an energy emergency declared by the Governor, shall take effect if, within 60 days of the date of its transmittal to the Senate and General Assembly, the Legislature shall pass a concurrent resolution stating in substance that the Legislature does not favor such proposed rule or regulation.*

23. a. All appropriations, grants, and other moneys available to the State Energy Office are hereby transferred to the department created hereunder and shall remain available for the objects and purposes for which appropriated, subject to any terms, restrictions, limitations or other requirements imposed by Federal or State law.

b. The employees of the State Energy Office are hereby transferred to the department created hereunder. Nothing in this act shall be construed to deprive said employees of any rights or protections provided them by the civil service, pension, or retirement laws of this State.

c. All files, books, paper, records, equipment, and other property of the State Energy Office are hereby transferred to the department created hereunder.

d. The rules, regulations, and orders of the State Energy Office shall continue with full force and effect as the rules, regulations, and orders of the department created hereunder until further amended or repealed.

e. Except as otherwise provided by this act, all the functions, powers, and duties of the existing State Energy Office and its administrator are hereby continued in the department and the *[commissioner thereof]* *Director of the Division of Energy Planning and Conservation* created hereunder.

f. This act shall not affect actions or proceedings, civil or criminal, brought by or against the State Energy Office and pending on the effective date of this act, but such actions or proceedings

may be further prosecuted or defended in the same manner and to the same effect by the department created hereunder.

g. Whenever in any law, rule, regulation, order, contract, document, judicial or administrative proceedings, or otherwise, reference is made to the State Energy Office or the administrator thereof, the same shall be considered to mean and refer to the State Department of Energy and the *[commissioner thereof]* *Director of the Division of Energy Planning and Conservation*, created hereunder.

24. All the functions, powers and duties heretofore exercised by the Department of Community Affairs and the Commissioner thereof relating to the adoption, amendment and repeal of the energy subcode of the State Uniform Construction Code pursuant to P. L. 1975, c. 217 (C. 52:27D-119 et seq.) are hereby transferred to, and vested in the Department of Energy and the Commissioner of the Department of Energy; provided, however, that nothing in this section shall be construed so as to interfere with the enforcement of such energy subcode by the Commissioner of the Department of Community Affairs pursuant to the aforecited P. L. 1975, c. 217*; *provided further, however, that this section shall not take effect until 90 days after the effective date of this act, and any energy subcode adopted by the Department of Community Affairs within said 90 days shall continue in force and effect until amended or repealed by the department as herein provided**.

25. The Bureau of Energy Resources in the Department of Public Utilities, together with all of its functions, powers and duties, is hereby transferred to the **Division of Energy Planning and Conservation in the** Department of Energy established pursuant to this act.

26. The transfer of responsibilities directed by this act, except as otherwise provided herein, shall be made in accordance with the "State Agency Transfer Act," P. L. 1971, c. 375 (C. 52:14D-1 et seq.).

27. All acts and parts of acts inconsistent with any of the provisions of this act are, to the extent of such inconsistency, superseded and repealed.

28. If any section, part, phrase, or provision of this act or the application thereof to any person be adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the section, part, phrase, provision, or application directly involved in the controversy in which such judgment shall have been rendered and it shall not affect or impair the validity

of the remainder of this act or the application thereof to other persons.

29. The object and design of this act being the protection of the public health, safety and welfare by means of the coordination of State planning*, *regulation** and authority in energy related matters, this act shall be liberally construed.

30. This act shall take effect immediately.

APPENDIX F - LEGAL COMMENTARY

Introduction

This Appendix provides a legal commentary to the principal recent judicial decisions involving the laws concerning coastal management in New Jersey.

Judicial decisions in New Jersey courts have upheld the constitutionality of the Coastal Area Facility Review Act (N.J.S.A. 13:19-1 et seq.) and the Wetlands Act (N.J.S.A. 13:9A-1 et seq.). New Jersey courts have also expanded a common law doctrine protecting public rights in riparian lands (the "Public Trust Doctrine") to include the rights of beach access and recreational use in addition to the traditionally recognized rights of navigation, commerce and fishing on the water and at the water's edge. Also, the State of New Jersey is actively establishing its claim of ownership of the riparian lands now or formerly flowed by the mean high tide.

Coastal Area Facility Review Act

The Appellate Division of the New Jersey Superior Court upheld the constitutionality of CAFRA in the case of Toms River Affiliates and Lehigh Construction Company v. Department of Environmental Protection and Coastal Area Review Board, 140 N.J. Super 135 (App. Div.), cert. den. 71 N.J. 345 (1976). The case involved the denial by DEP of a CAFRA permit for a ten story, high-rise luxury apartment complex on a 9.5 acre tract of land in Toms River, Ocean County. The plaintiff, a developer, contended that the Act: (1) did not provide adequate standards for the administration of the Act in violation of Article III, Paragraph I of the New Jersey Constitution; (2) granted zoning powers to the DEP in contravention of the constitutional delegation of such powers to a municipality; (3) created an invalid classification by designating a delineated coastal area and omitting other coastal areas; (4) denied equal protection of the laws; and (5) constituted the taking of property in violation of Article I, Paragraph 20 of the Constitution of New Jersey.

The Court rejected all five arguments, finding that: (1) Sections 10 and 11 of the Act set forth specific criteria by which the Environmental Impact Statement required for a CAFRA permit could be evaluated; (2) the police power of the State was not exhausted by the delegation of zoning power to the municipality (the State retained a quantum of reserved police power to delegate such authority to one or more agencies of the State government as the Legislature may deem appropriate); (3) the limitation of the Act to the portion delineated by the statutory boundaries constituted a valid exercise of discretionary power vested in the Legislature (The Court noted that the Act should be read in light of the intention of the Legislature which recognized that the coastal area was a unique and irreplaceable region of the state); (4) the mere fact that the property of the appellants is subject to the Act's provision, while property in other parts of the state is not, does not establish a Fourteenth Amendment deprivation of equal protection; and (5) The taking issue in this case was specious (A particular use of property may be frustrated, but so long as alternative uses for development exist, no taking of private property can be claimed by the appellants).

In the case of Public Interest Research Group of New Jersey, et. al. v. Department of Environmental Protection and Public Service Electric and Gas Co., 152 N.J. Super 191 (App. Div.), certif. den. 73 N.J. 538 (1977), the Court upheld the decision of the Department and the Coastal Area Review Board to approve a CAFRA permit for the Hope Creek Nuclear Generating Station (Units 1 and 2) at Artificial Island in Lower Alloways Creek Township, Salem County. The Court rejected the appellants' procedural contention that DEP should have conducted an adversarial hearing with cross-examination of witnesses and findings of fact and conclusions of law, instead of the two quasi-legislative, fact-finding hearings held before the DEP decision. The Court also ruled that the decision to grant a conditional permit was reasonable. The Court concurred with the Department's finding that Public Service Electric and Gas Co. complied with the findings of Section 10 and 11 of the Act.

The Court also rejected the contention of appellants and the Public Advocate, who submitted an amicus brief, that the environmental impact statement submitted by Public Service Electric and Gas Company was legally deficient.

The Court further rejected appellants claim that the Commissioner's finding in the method for disposal of radioactive waste, as required by N.J.S.A. 13:19-11, was unsupported by the available data in the record. The Court noted the comprehensive federal legislation and regulations in the area of radiation hazards and stated that the Commissioner must satisfy himself that the applicant has conformed to the standards of the Nuclear Regulatory Commission. If such standards are met, the Court noted, the Commissioner has no authority to impose either lower or higher safety standards to regulate radiation (152 N.J. Super. at 216).

Wetlands Act

In American Dredging Co. v. State of New Jersey, 161 N.J. Super. 405 (1978), the Chancery Division, Superior Court held that the Wetlands Act and 1973 Wetlands Order was a valid exercise of the State's police power as applied to a wetlands site on the Delaware River. The plaintiff owns a 2,500 acre site in Dover Township, Gloucester County, of which approximately 159 acres are regulated wetlands. The site is used primarily for dredge spoil disposal, and DEP had issued prior permits allowing fill on all but 80 acres. The plaintiff argued that the denial of a permit for the last 80 acres so diminished their value as to constitute a constructive taking. The Court responded by saying that a diminution in value was only one factor to be considered and weighed against the need for regulation by the State. The Court looked at the site as a whole (i.e. the entire 2,500 acres) and found that the restricted use of 3% of the land (80 acres) was not unreasonable when weighed against the destruction of an entire wetland area. The decision was affirmed by the Superior Court's Appellate Division in June 1979 (167 N.J. Super. 18).

The Wetlands Act was also upheld in the case of Sands Point Harbor, Inc. v. Sullivan, 136 N.J. Super. 436 (1979). In that case a private developer alleged that both the statute and regulations both deprived him of equal protection under the law as guaranteed by the Constitutions of the United States and New Jersey, and further that the statutes and regulations constituted a taking of property without just compensation in violation the New Jersey Constitution.

The applicant's equal protection argument was predicated upon the fact that only coastal wetlands were regulated by the Wetlands Act, and that wetlands subject to the Hackensack Meadowlands Development Commission (N.J.S.A. 13:17-1 et seq.) were specifically excluded. The Court noted that classification in legislation is not constitutionally prohibited, and that the Legislature is granted a wide range of discretion to treat subject matter of legislation differently, so long as the classification is reasonable and related to the basic object of the legislation. The Court stated further that classifying coastal wetlands as a separate object of protection was reasonable, considering that wetlands north of Raritan Bay are characterized by heavy industrial, commercial, or residential development. The only other broad contiguous area of wetlands in the state was within the special legislatively defined Hackensack Meadowlands Development District, and a classification by statute of this area afforded reasonable grounds for the disparate treatment of land in these different areas of the State.

On the so-called "taking issue", the applicant relied upon a New Jersey Supreme Court case which struck down a municipal zoning ordinance severely restricting the use of swamp land (Morris County Land, Parsippany-Troy Hills Township, 40 N.J. 539, 1963). The restrictions in this case, however, were of such a nature that the only practical use which could be made of the property was as a hunting or fishing preserve. The taking test, as defined by the New Jersey Supreme Court, was whether no practical use could be made of the land so as to constitute a taking without just compensation.

The Court found that the only activities absolutely prohibited under the Wetlands Act were the dumping of solid waste, discharging of sewage, and storage and application of pesticides. Since the Commissioner of Environmental Protection must consider the effect of a proposed activity upon the public health and welfare, marine and shellfisheries, wildlife, and the protection of property from flood, hurricane or other disasters, such criteria were reasonable and did not so restrain virtually all activities so as to be in violation of the New Jersey Constitution.

In an unreported decision, Carton et al vs. State of New Jersey (Docket No. A-638-763, 1978), the Superior Court, Appellate Division rejected the contention of a wetlands owner that the Wetlands Act constituted a taking of private property without just compensation. The plantiffs contended that the Act was vague, unreasonable and unconstitutional, but the Court, citing Sands Point Harbor held that the Act was a valid exercise of governmental power and did not constitute a taking. A petition for appeal was denied by the New Jersey Supreme Court on May 16, 1978.

In a recent Administrative Action, the Commissioner upheld a decision denying a wetlands permit for a lagoon development on Long Beach Island (Loveladies Harbor, Inc. - Unit D, Wetlands Permit No. 77-0050-2). The site, which is adjacent to an existing barrier island lagoon development, contains both regulated wetlands and an upland area. DEP rejected the developer's proposal for single family homes on the entire site, but indicated that clustering in the upland area would be acceptable. The local zoning code prohibits clustering, however, and despite the DEP denial, no variance has been granted. The applicant appealed the decision to the Superior Court's Appellate Division in May, 1979 (in the matter of Loveladies Harbor, Inc., Docket No. A-3020-78).

Tidelands Cases

Numerous issues concerning tidelands management in the coastal zone of New Jersey are not expressly addressed or resolved in Titles 12 and 13 of the Revised New Jersey Statutes, which contain the bulk of tidelands statutory authority. The case law decisions described in this section have established key principles in tidelands law.

The case of O'Neill v. State Highway Department 50 N.J. 307 (1967) involved an ownership dispute of lands along the Hackensack River. The State asserted title to these lands. In its opinion, the Court laid down several principles. First, the State owns in fee simple all lands that are flowed by the tide up to the high water line or mark (The high water line or mark is the line formed by the intersection of the tidal plain of mean high tide with the shore). In establishing this line, the average to be used should be, if possible, the average of all the high tides over a period of 18.6 years. Second, the State cannot acquire interior land by the construction of artificial works, such as ditching, which enables the tide to ebb and flow on lands otherwise beyond it. The riparian owner cannot, however, enlarge his holdings by excluding the tide. Third, the party who challenges the existing scene must satisfy the court that the tidelands status of the property was changed by artificial measures.

Rules concerning erosion and its effect on riparian ownership were discussed in the case of Leonard v. State Highway Department of New Jersey, 29 N.J. Super 188 (App. Div. 1954). Where erosion is by natural means, the riparian owner loses title to the State. The owner suffers no such loss, however, in the event of a sudden and perceptible loss of land. The high water mark may shift from time to time through erosion, and persons who own or purchase tide-flowed land are well aware of this natural process. Where there is erosion, they lose title to the State. Where there is accretion, they gain title at the expense of the State.

The State's procedure for tidelands delineation was reviewed in a series of decisions beginning with the City of Newark v. Natural Resources Council (133 N.J. Super 245, Law Div. 1974, affirmed 152 N.J. Super. 458 (Appellate Division, 1977)). Two tidelands statutes relevant to the State's tideland delineation procedure provided that "the (Natural Resource) Council is hereby directed to undertake title studies and surveys of meadowlands throughout the State and to determine and certify those lands which it finds are State owned lands." (N.J.S.A. 13:1B-13.2.) "Upon completion of each separate study and survey the Council shall publish a map portraying the results of its study and clearly indicating those lands designated by the Council as state owned lands". (N.J.S.A. 13:1B-13.4).

In 1970 the State issued a map which designated those portions of the State in which it claimed an interest. In 1971, the Superior Court held that these maps did not comply with the intent of the legislation, and prohibited their use.

The State then began a new delineation process based on aerial photography. This mapping procedure resulted in maps for thirty-seven panels of land, each of approximately 964 acres, drawn at a scale of 1:2,400. In 30 of the 37 panels the maps produced resulted in substantial State claims to land. However, in seven of the panels it was very difficult for the State to determine ownership, and so these areas were characterized as "hatched" (areas of filled meadowlands adjacent to virgin meadowlands). The "hatched" areas indicated a claim by the State that the filled areas were once tide flowed and were therefore likely to be state owned.

The court held that the "hatching" procedure did not conform with the statutory requirement that the State define its interests in unequivocal terms. (N.J.S.A. 13:1B-1 et seq.), and once again ordered the preparation of new maps clearly indicating State interests in tidelands. The Office of Environmental Analysis in DEP began the mapping based on new overlay techniques, and filed these maps with the Appellate Division of the Superior Court in January 1978. The Appellate Division upheld the method used by the State in May, 1979. That decision was appealed to the New Jersey Supreme Court, and arguments were heard in February 1980.

Waterfront Development

An appeal by an owner of a tideland grant whose application for a waterfront development permit was denied by the Natural Resource Council (now the Tidelands Resource Council) was reviewed in Kupper v. Bureau of Navigation, Council of Resources, etc., Docket No. A-737-71 (unpublished opinion of Appellate Division, decided April 9, 1976). The application involved a request to construct a bulkhead connecting two existing bulkheads in a substantially developed residential area. The Court observed that although they were sympathetic to DEP's efforts to preserve the ecological balance in any area of the State, they were equally sympathetic to the rights of individual property owners who would be deprived of the economic use of their land. The Court felt that the trial evidence indicated that granting of a permit in this case would not result in detrimental impacts on the immediate environment, as claimed by DEP.

Public Access to Shorefront Areas

Increasing and maintaining public access to the shorefront in the coastal zone of New Jersey is a public policy derived from the Public Trust Doctrine. That doctrine, as defined by New Jersey case law, holds that the public retains certain limited rights in tidelands, even where those lands have been conveyed to individuals or to municipalities. (See Martin v. Waddel's Lessee 81 U.S. (PET) 367 (1842), Arnold v. Mundy 6 NJL 1 (Sup. Ct. 1821), and Avon v. Borough of Neptune by the Sea 61 N.J. 296 (1972).)

The cases concerning shorefront access have so far dealt only with public access to publicly owned, rather than privately owned land. However, the New Jersey Superior Court is expected to discuss this issue in Matthews v. Bay Head Improvement Association, (Docket No. L-23410-73).

The decision in Avon v. Borough of Neptune is significant in that it expanded the Public Trust Doctrine beyond the traditional public rights of navigation, commerce, and fishing to include recreational uses of the shoreline. The New Jersey Supreme Court held that municipally owned tidal lands below mean high water are subject to these public rights, and for a municipality to charge a discriminatory fee to users of the beach was analogous to erecting a physical barrier.

Two more recent decisons by the New Jersey Supreme Court have expanded public access rights in beachfront areas considerably.

In Van Ness et al. v. Borough of Deal, 78 N.J. 174 (1978) the Supreme Court held that municipally owned upland or dry sand areas are subject to the Public Trust Doctrine, and that a municipality cannot exclude a non resident from using those areas upon payment of a reasonable fee. The Court struck down the Borough's practice of roping off the beach area above the high tide line for the use of residents, saying that "whether natural or man-made, the beach is an adjunct to ocean swimming and bathing and is subject to the public trust doctrine".

In a companion case, Hyland v. Borough of Allenhurst, 78 N.J. 190 (1978), the Court ruled that the exclusion of the general public from the restrooms of a municipally owned beach club was an arbitrary and unreasonable exercise of municipal authority. This decision was not based on the public trust doctrine.

The practice of offering rates to early purchasers of beach badges was recently upheld by the Superior Court, Appellate Division in Hyland v. Township of Long Beach et al. (160 N.J. Super 201, 1978), cert. denied 78 N.J. 395 (1978). The Court found no evidence to support the State's contention that the practice of offering beach badges early in the season favored the township residents over non-residents, and therefore violated the public trust doctrine.

Finally, a recent Superior decision overturned a zoning ban which prohibited the recreational use of beachfront land unless the adjacent upland was developed for single family dwellings. The decision in Lusardi v. Curtis Point Property Owners Association and Township of Brick (Docket No. C-3515-63(C-1101), letter opinion August 13, 1979, Kaplan, CSJ), concerned the use of a dry beach area for bathing and recreation where the area's primary zoning purpose was reserved for single family dwellings.

The Court relied on the Rules on Coastal Resource and Development Policies (Public Access to the Shoreline), on language in the Beaches and Harbors Bond Act of 1977, and on the Neptune, Deal, and Allenhurst decisions as evidence of an affirmative public policy on shoreline access, and found that:

> "In the light of judicial, legislative and executive pronouncements since 1972 ... I conclude that a zoning ban of the recreational use of undeveloped beachfront property unless a primary use exists contravenes state policy and is therefore an unreasonable exercise of the police power."

Board of Public Utilities

It has been held that the Board of Public Utilities, when exercising its authority under N.J.S.A. 40:55D-19 to supercede local actions taken with respect to utilities when necessary if the service conveniences the welfare of the public, may make a finding that such service is necessary if found to be "reasonably requisite to service public convenience" (emphasis added). Petition of Public Service Coordinated Transport, 103 N.J. Super 505 (1968). Under the Coastal Management Program, the Board's authority insures that key "uses of regional benefit" will not be unreasonably excluded by actions of local governments.

APPENDIX G - SECRETARIAL FINDINGS INDEX

The Federal Coastal Zone Management Act of 1972, as amended (16 U.S.C. 1451 *et seq.*) and the program approval regulations adopted as an interim final rule by NOAA-OCZM (15 CFR Part 923, *Federal Register*, Vol. 43, No. 41, March 1, 1978, pp. 8378-8432) define twenty-six required findings that must be made before the Secretary of Commerce may approve a state's coastal management program. This appendix identifies these requirements and provides an index to the appropriate section or sections in Part II where the *New Jersey Coastal Management Program* presents the information required for the secretarial findings.

SECTION OF THE FEDERAL COASTAL MANAGEMENT ACT		ASSOCIATED SECTION(S) OF PROGRAM APPROVAL REGULATIONS	PROGRAM SECTION
305(b)(1)	boundaries	923.31, 923.32, 923.33, 923.34	Chapter Two, Appendix E
305(b)(2)	uses subject to management	923.11, 923.12	Chapter Three
305(b)(3)	areas of particular concern	923.21, 923.23	Chapter Five
305(b)(4)	means of control	923.41	Chapter Three
305(b)(5)	guidelines on priorities of uses	923.22	Chapter Four
305(b)(6)	organizational structure	923.45	Chapter Three
305(b)(7)	shorefront planning process	923.25	Chapter Five
305(b)(8)	energy facility planning process	923.14	Chapter Five
305(b)(9)	erosion planning process	923.26	Chapter Five
306(c)(1)	notice; full participation; consistent with section 303	923.58, 923.51, 923.55, 923.3	Appendix A
306(c)(2)(A)	plan coordination	923.56	Chapter Three
306(c)(2)(B)	continuing consultation mechanisms	923.57	Chapter Three
306(c)(3)	public hearings	923.58	Appendix A
306(c)(4)	gubernatorial review and approval	923.47	Cover Letter
306(c)(5)	designation of recepient agency	923.46, 923.47	Chapter Three
306(c)(6)	organization	923.45, 923.47	Chapter Three
306(c)(7)	authorities	923.41, 923.47	Chapter Three
306(c)(8)	adequate consideration of national interests	923.52	Chapter Five
306(c)(9)	areas for preservation/restoration	923.24	Chapter Five
306(d)(1)	administer regulations, control development; resolve conflicts	923.41	Chapter Three
306(d)(2)	powers of acquisition, if necessary	923.41	Chapter Three
306(e)(1)	technique of control	923.41, 923.42	Chapter Three
306(e)(2)	uses of regional benefit	923.13, 923.41, 923.43	Chapter Six
307(f)	incorporation of air and water quality requirements	923.44	Chapter Four
306(h)	segments	923.61	Chapters Three, Six Eight and Appendix E
307(f)	incorporation of air and water quality requirements	923.44	Chapter Five

APPENDIX H - RECIPIENTS OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

Comments on this Draft Environmental Impact Statement have been requested from the following Federal, State, and local agencies, interest groups and individuals. In addition, the 5,000 groups and individuals on the DEP-DCR mailing list are being offered copies for review and comment.

Federal

- U.S. Senate and House of Representatives - New Jersey Congressional Delegation
- Advisory Council on Historic Preservation
- Council on Environmental Quality
- Department of Agriculture
  - Soil Conservation Service
- Department of Commerce
  - Economic Development Administration
  - Maritime Administration
  - National Marine Fisheries Service
  - National Oceanic and Atmospheric Administration
- Department of Defense
  - Air Force
  - Army Corps of Engineers
  - Navy
- Department of Education
- Department of Energy
- Department of Health and Human Services
- Department of Housing and Urban Development
- Department of Interior
  - Bureau of Land Management
  - Bureau of Mines
  - Heritage Conservation and Recreation Service
  - Fish and Wildlife Service
  - Geological Survey
  - National Park Service
- Department of Transportation
  - Coast Guard
  - Federal Aviation Administration
  - Federal Railroad Administration
  - Federal Highway Administration
  - Urban Mass Transportation Administration
  - Materials Transportation Bureau
  - National Highway Traffic Safety Administration
- Environmental Protection Agency
- General Service Administration
- Marine Mammal Commission
- Nuclear Regulatory Commission
- U.S. Water Resources Council

State of New Jersey

- Governor
- All State Senators and Members of the Assembly
- Department of Agriculture
- Department of Banking
- Department of Civil Service
- Department of Community Affairs

State of New Jersey - Cont.

Department of Defense
Department of Education
Department of Energy
Department of Health
Department of Human Services
Department of Insurance
Department of Labor and Industry
Department of Law and Public Safety
Department of the Public Advocate
Department of State
Department of Transportation
Department of the Treasury
Delaware and Raritan Canal Commission
Pinelands Commission
Hackensack Meadowlands Development Commission

Local and Regional Government

Coastal Counties (17) -- Executives, Freeholder Directors, Planning Agencies, and Environmental Agencies:
- Atlantic County
- Bergen County
- Burlington County
- Camden County
- Cape May County
- Cumberland County
- Essex County
- Gloucester County
- Hudson County
- Mercer County
- Middlesex County
- Monmouth County
- Ocean County
- Passaic County
- Salem County
- Somerset County
- Union County

Coastal Municipalities (242) -- (Mayors, Planning Boards, and Environmental Commissions, for Municipalities in the Coastal Zone)
Delaware River Basin Commission
Delaware River Port Authority
Delaware Valley Regional Planning Commission
Mid-Atlantic Regional Fishery Management Council
Port Authority of New York and New Jersey
Regional Plan Association
South Jersey Resource Conservation and Development Council
Tri-State Regional Planning Commission
Wilmington Metropolitan Area Planning Council (WILMAPCO)
Berkeley Department of Parks and Recreation
Brick Town Recreation Department
Camden City Division of Planning
Cape May County Department of Health
Monmouth County Park System
North Jersey Distric Water Supply Commission

National Special Interest Groups

American Association of Port Authorities
American Farm Bureau Federation
American Fisheries Society
American Institute of Architects
American Institute of Planners
American Littoral Society
American Mining Congress
American National Cattlemen's Association
American Petroleum Institute
American Right of Way Association
American Shore and Beach Protection
American Society of Civil Engineers
American Society of Planning Officials
American Waterways Operators
Atlantic States Marine Fisheries Institute
Atomic Industrial Forum
Boating Industry Association
Chamber of Commerce of the U.S.
Coastal Society
Coastal States Organization
Conservation Foundation
Council of State Planning Agencies
Cousteau Society
Edison Electric Institute
Environmental Defense Fund, Inc.
Environmental Policy Center
Friends of the Earth
Isaak Walton League
League of Women Voters of the U.S.
Marine Technology Society
Mortgage Bankers Association of America
National Association of America
National Association of Counties
National Association of Electric Companies
National Association of Engine & Boat Manufacturers
National Association of Home Builders
National Association of Realtors
National Association of Regional Councils
National Association of State Boating Law Administration
National Audubon Society
National Boating Federation
National Canners Association
National Coalition for Marine Conservation, Inc.
National Commission on Marine Policy
National Conference of State Legislators
National Environmental Development Association
National Farmers Union
National Federation of Fishermen
National Fisheries Institute
National Forest Products

National Special Interest Groups - Cont.

National Governors Conference
National League of Cities
National Ocean Industries Association
National Parks and Conservation Association
National Recreation and Parks Association
National Science Foundation
National Science Teachers Association
National Waterways Conference
National Wildlife Federation
Natural Resources Defense Council
Nature Conservancy
Sierra Club
Society of Real Estate Appraisers
Soil Conservation Society of America
Sport Fishing Institute
United Brotherhood of Carpenters and Joiners of America
U.S. Conference of Mayors
Western Oil and Gas Association
Wilderness Society
Wildlife Management Institute
Wildlife Society
World Dredging Association

State and Local Interest Groups

Environmental Groups

American Littoral Society
Association of New Jersey Environmental Commission (ANJEC)
Atlantic Audubon Society
Atlantic County Citizens Council on Environment
Bayonne Against Tanks
Citizens Association to Protect the Environment (CAPE)
Concerned Citizens for Clean Water
Conservation Society of Long Beach Island
Delaware Raritan Canal Coalition
Hoboken Environment Commission
League for Conservation Legislation
New Jersey Audubon Society
New Jersey Conservation Foundation
New Jersey Sierra Club
Ocean County Sierra Club
Oceanic Society
Passaic River Coalition
S.A.V.E. - Stockton College
Save Our River Environment (SORE)
South Branch Water Shed Association
Stony Brook - Millstone Watershed Association
Upper Raritan Watershed Association
Waterfront Coalition of Bergen and Hudson
West Jersey Sierra Club

Private Sector

Asarco Incorporated
Atlantic City Electric Company
Cold Spring Realty
Dredge Harbor Yacht Basin
P. Evanson Yacht Company, Inc.
Exxon Corporation
Gordon Terminal Service Corporation
Hardeis Electrical Contracting
Hartz Mountain Industries, Inc.
Jersey Central Power and Light Company
Leisure Technology Corporation
Mobil Oil Corporation
National Association of Office and Industrial Park Developers - New Jersey Chapter
New Jersey Asphalt Pavement Association
New Jersey Builders Association
New Jersey Business and Industry Association
New Jersey Marine Trades Association
New Jersey Petroleum Council
New Jersey Shore Builders Association
New Jersey State Chambers of Commerce
Northville Linden Terminal Company
Public Service Electric and Gas Company
Pureland Industrial Complex
Society for Economic and Environmental Development (SEED)
Somers Point Yacht Harbor, Inc.
Utility Contractos Association of New Jersey
Winter Yacht Basin, Incorporated

Public Interest Groups

League of Women Voters of New Jersey
New Jersey Beach Buggy Association
New Jersey League of Municipalities
Public Interest Research Group
Princeton University, Center for Energy and Environmental Studies
Rutgers University, Center for Coastal and Environmental Studies

Libraries

The document will be available in all New Jersey depository libraries as well as many university and public libraries throughout New Jersey and the country.

APPENDIX I - PREPARERS OF THE PROPOSED NEW JERSEY COASTAL MANAGEMENT PROGRAM AND DRAFT ENVIRONMENTAL STATEMENT

The Bureau of Coastal Planning and Development in the Division of Coastal Resources, Department of Environmental Protection prepared this document with the assistance of present and former staff of the entire Department, other state, federal and local agencies, interest groups and citizens. The preparers are listed below and, as required by regulations of the Council on Environmental Quality (1502.17), academic degrees and the number of years of relevant experience of the primary authors are listed in parentheses.

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This report was typed primarily by Vicky Posluszny of the DEP Word Processing Center under the leadership of May Stevens.

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PROPOSED NEW JERSEY COASTAL MANAGEMENT PROGRAM

PUBLIC HEARINGS

TRENTON	JUNE 11, 1980 10:00 a.m.	State Museum Auditorium 204 West State St.
JERSEY CITY	JUNE 11, 1980 7:30 p.m.	Five Corners Library 678 Newark Ave.
CAMDEN	JUNE 12, 1980 10:00 a.m.	Rutgers University Law School-Room 207 5th and Penn Sts.
TOMS RIVER	JUNE 12, 1980 7:30 p.m.	Ocean County Courthouse Courtroom 1 Washington St.

PUBLIC COMMENTS WILL BE ACCEPTED UNTIL JULY 7, 1980

TO TESTIFY AT THE PUBLIC HEARINGS OR TO OBTAIN FURTHER INFORMATION, WRITE THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF COASTAL PLANNING AND DEVELOPMENT, P.O. BOX 1889 TRENTON, N.J. 08625 OR CALL (609) 292-9762.

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