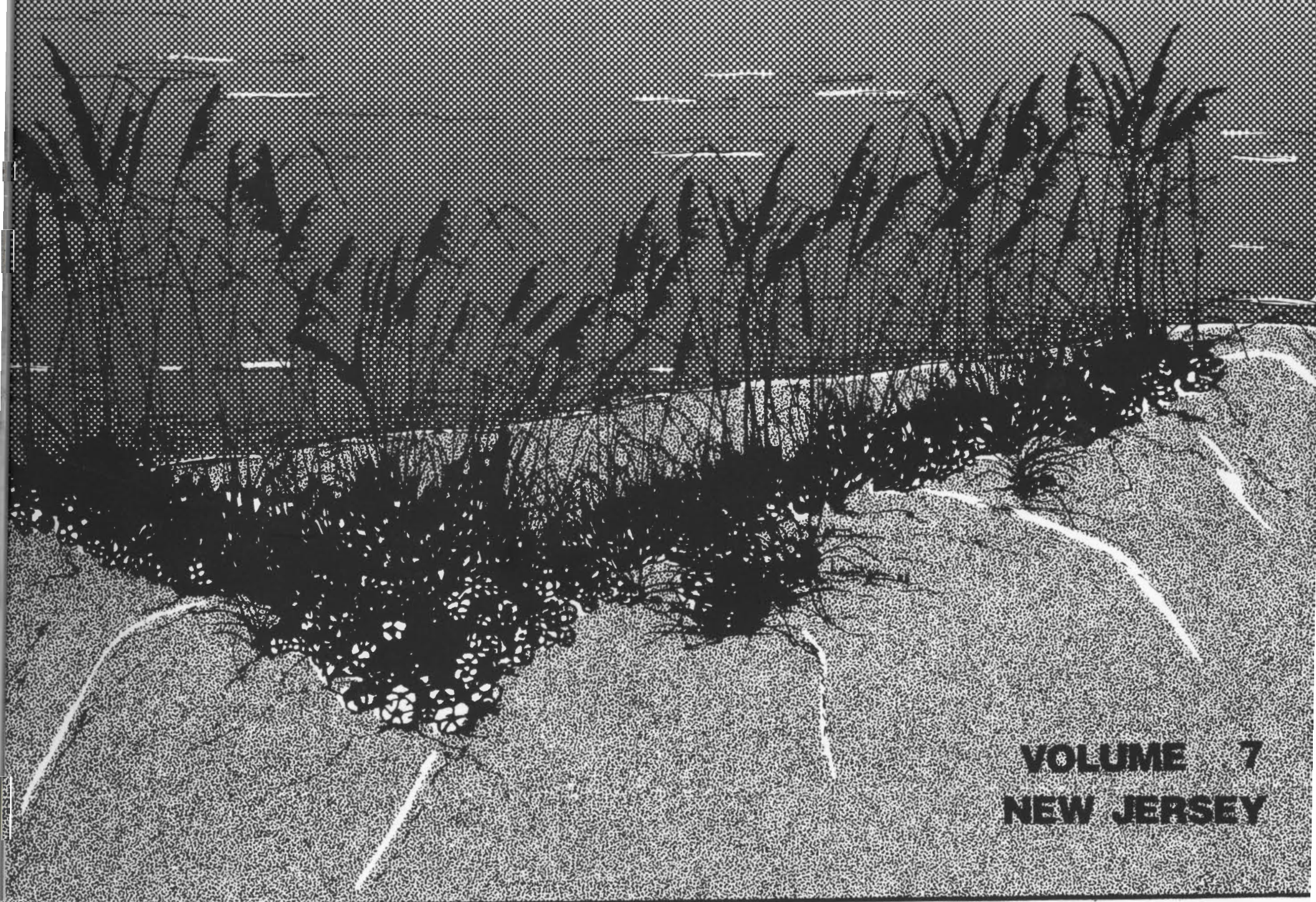


REPORT TO CONGRESS: COASTAL BARRIER RESOURCES SYSTEM

**Proposed Recommendations for Additions to or Deletions
from the Coastal Barrier Resources System**



**VOLUME 7
NEW JERSEY**

U.S. Department of the Interior

February 1987



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VOLUME 7

Proposed Recommendations for Additions to or Deletions from the Coastal Barrier Resources System

NEW JERSEY

Mapped, edited, and published by the Coastal Barriers Study Group

United States Department of the Interior
William P. Horn, Assistant Secretary for Fish and Wildlife and Parks

February 1987

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TABLE OF CONTENTS

	Page
Introduction.....	1
Background.....	1
Coastal Resource Management.....	2
Existing CBRS Units.....	5
Proposed Additions and Modifications.....	5
Table: Summary of Proposed Recommendations.....	5
Index to Proposed CBRS Units.....	7
Table: Proposed CBRS Units and Their Location in This Volume.....	8
Map Key.....	8
Unit Maps.....	9

NEW JERSEY

INTRODUCTION

The Coastal Barrier Resources Act (CBRA) of 1982 (Public Law 97-348) established the Coastal Barrier Resources System (CBRS), a system of undeveloped coastal barriers along the Atlantic and Gulf of Mexico coasts. This atlas of coastal barriers in New Jersey has been prepared in accordance with Section 10 of CBRA (16 U.S.C. 3509), which states:

Sec. 10. Reports to Congress.

(a) In General.--Before the close of the 3-year period beginning on the date of the enactment of this Act, the Secretary shall prepare and submit to the Committees a report regarding the System.

(b) Consultation in Preparing Report.--The Secretary shall prepare the report required under subsection (a) in consultation with the Governors of the States in which System units are located and with the coastal zone management agencies of the States in which System units are located and after providing opportunity for, and considering, public comment.

(c) Report Content.--The report required under subsection (a) shall contain--

(1) recommendations for the conservation of fish, wildlife, and other natural resources of the System based on an evaluation and comparison of all management alternatives, and combinations thereof, such as State and local actions (including management plans approved under the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.)), Federal actions (including acquisition for administration as part of the National Wildlife Refuge System), and initiatives by private organizations and individuals;

(2) recommendations for additions to, or deletions from, the Coastal Barrier Resources System, and for modifications to the boundaries of System units;

(3) a summary of the comments received from the Governors of the States, State coastal zone management agencies, other government officials, and the public regarding the System; and

(4) an analysis of the effects, if any, that general revenue sharing grants made under section 102 of the State and Local Fiscal Assistance Amendments of 1972 (31 U.S.C. 1221) have had on undeveloped coastal barriers.

This atlas of New Jersey includes delineations of the CBRS additions to the Coastal Barrier Resources System (CBRS) proposed by the Department of the Interior. No units were designated in New Jersey when CBRA was enacted in 1982.

Under the direction of the Assistant Secretary for Fish and Wildlife and Parks, this report has been prepared by the Coastal Barriers Study Group, a task force of professionals representing the National Park Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, and other Departmental offices.

BACKGROUND

New Jersey is one of the four smallest States in the country with an area of only 7,836 square miles. It is approximately 166 miles long from north to south, and 70 miles wide at its widest point. Yet, New Jersey is also the Nation's most densely populated State, and it is becoming the most urbanized State in the country, after California. About 90 percent of the population lives in areas classified as cities, and some whole counties are 95 to 100 percent urbanized. In the 1960's, the population of Ocean County, for example, increased 90 percent, and other rural areas witnessed a population increase of over 50 percent. Even most of the coastal barrier beaches are now classified as urban, and the only remaining natural areas are in the parks.

New Jersey has some of the most heavily industrialized coastal regions found anywhere in the Northeast. The New Jersey shoreline, one of the most heavily developed regions of the Atlantic coast, and its associated lands and waters have been severely abused in the past. Yet there are still some parts of the coast that are very wild, especially along the southern mainland where extensive marshes and swamps thrive.

New Jersey can be divided into three geographical sections: the western hills, which stop abruptly just west of Princeton and New Brunswick; the central plain, where

the land drops into low, rolling terrain; and the Coastal Plain, a geographic region that ties New Jersey to other States of the Mid- and South Atlantic coast. New Jersey was not glaciated south of New Brunswick. It was affected by changes of sea level during previous times, but the land was not directly affected by ice. The remaining forests are composed mostly of oak, hickory, and pine, much like elsewhere on the southern Coastal Plain, with gum and white cedar thriving in the wetter places.

The most outstanding natural features of New Jersey are its coastal lowlands, marshes, and beaches, most of which have been developed. The white cedar swamps found in ponds and along the sluggish rivers of the south coast are some of the most extensive along the Atlantic coast. In fact, southern white cedar seems to have reached its maximum distribution in southern New Jersey. The swamps and bogs here also harbor many rare and unusual plant species, including orchids, azaleas, and insectivorous plants.

The tidal wetlands are still extensive on the south coast, although many have been filled. Those that remain are dominated by cordgrasses and provide outstanding habitat for marine and estuarine organisms. One of the largest wetlands in the Northeast once existed in northeastern New Jersey--the Hackensack Meadows. These huge marshes, which covered over 19,000 acres, have largely been filled; even so, those acres that still exist support a surprising array of wildlife. The barrier islands and beaches that front the Atlantic Ocean were once some of the most extensive on the Northeast coastline. Formed from eroded Coastal Plain sediments and headlands, they have a geological link to barriers further south. However, they have nearly all been converted to resorts, permanent towns with seasonal and full-time residents, and major cities. Only about 20 miles of barrier coastline remain in a relatively natural state in Sandy Hook National Park, Island Beach State Park, and Brigantine National Wildlife Refuge. Where the vegetation on the barriers is natural, there are beachgrass, bayberry, seaside goldenrod, and beach pea, as well as woodlands of cherry, pine, black oak, and cedar. An outstanding forest of American holly survives on Sandy Hook.

All of New Jersey's coastal parks are heavily visited by thousands of people annually. Some sections of the coast have been extensively "stabilized" and are so severely eroded that only seawalls and groins remain. Much of the coast was badly damaged in the 1962 Ash Wednesday storm. In some areas dunes have been leveled for dense concentrations of cottages, while in other areas there are no dunes left at all. A few communities, like Mantoloking, have good dune systems and relatively wide beaches. Mantoloking has taken a very aggressive stand on protecting its dunes from damage and has developed a progressive ordinance to maintain and improve the dunes.

Commercial fishing is no longer a significant part of the State's economy. However, recreational fishing and boating and related support industries make a significant contribution to the coastal economy. A study

done in 1982 showed that nonbusiness visitors to the New Jersey coast spent \$4.87 billion, \$850 million of which was spent for motels, hotels, and campgrounds; the report also estimated that the visitors generated a total economic output of \$7 billion.

COASTAL RESOURCE MANAGEMENT

Early Interest in Tidal Waters

New Jersey's interest in its tidal waters precedes the American Revolution. 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.

General Riparian Act. In 1869, this Act set forth the procedure by which an administrative agency, then the Riparian Commissioners, could transfer the rights to 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.

Waterfront Development Law. Enacted in 1914, this law requires prospective developers to obtain State agency approval of plans for the development of any waterfront upon any navigable water or stream of New Jersey or bounding thereon (N.J.S.A. 12:5-3).

New Jersey Coastal Resource Management

New Jersey's coastal program had its beginnings with a series of laws passed in the late 1960's and early 1970's when the State became concerned about wetlands and associated coastal resources. Unfortunately, this concern came too late to protect extensive areas of coastal wetlands that were filled or developed in years past. The State created the Department of Environmental Protection (DEP) in 1970 to "formulate comprehensive policies for the conservation of natural resources of the State" (N.J.S.A. 13: ID-9).

Hackensack Meadowlands Reclamation and Development Act. Passed in 1969 to ensure the orderly development of the Meadowlands District, the Act created the Hackensack Meadowlands Development Commission, provided it with authority to regulate all forms of development within the district, and instructed it to create a master plan for the district.

Wetlands Act of 1970. This Act created the Department of Environmental Protection to delineate and regulate development in all coastal wetlands of the State from the Raritan River Basin southward.

Coastal Area Facility Review Act (CAFRA). This 1973 Act was the next major legislative advance in coastal management and protection. It gave DEP authority to regulate major development in the bay and ocean shore segment of the coastal zone in order to preserve environmentally sensitive sites and ensure a rational pattern of development. CAFRA also required the Department to prepare a strategy for the management area by September 1977.

Coastal Management Program. In 1972, when the Federal Coastal Zone Management Act was enacted, the Governor directed DEP to develop a statewide coastal management program to meet Federal approval. 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 then to complete a boundary, policy, and management system suitable for the remainder of the State's coastal zone. Between 1974 and 1978, the Department collected data and met with interested groups throughout the State. As a result of these meetings, a comprehensive set of Coastal Resource and Development Policies designed to ensure consistent and predictable permit decisionmaking in the coastal zone was adopted effective September 28, 1978; the Coastal Management Program for the Bay and Ocean Shore Segment received Federal approval the next day.

The first step toward extending 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 this 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. The second step in extending the program was the publication of the "Proposed New Jersey Coastal Management Program" and "Draft Environmental Impact Statement."

The third step was public review and comment on all three of these documents in the spring and early summer of 1979. DEP staff met with, and received comments from many residents; Federal, State, county, and municipal elected representatives and agencies; regional planning groups; and interest groups with environmental, civic, residential, industrial development, and other concerns. In addition, DEP and the National Oceanic and Atmospheric Administration, Office of Coastal Zone Management (NOAA-CZM) jointly held four formal public hearings on the State's proposed coastal management program on June 11 and 12, 1979, in Camden, Jersey City, Toms River, and Trenton. The remaining sections of New Jersey's Coastal Management Program were approved in 1980.

The fundamental core of the Coastal Management Program is carried out by DEP. DEP adopted the Coastal Resource and Development Policies as administrative rules for this task. The basic coastal policies follow.

1. Protect and enhance the coastal ecosystem.
2. Concentrate rather than disperse the pattern of coastal residential, commercial, industrial, and resort

development, and encourage the preservation of open space.

3. Employ a method of decisionmaking that allows each coastal location to be evaluated in terms of both its advantages and disadvantages for development.
4. Protect the health, safety, and welfare of people who reside, work, and visit in the coastal zone.
5. Promote public access to the waterfront through linear walkways and at least one waterfront park in each waterfront municipality.
6. Maintain active port and industrial facilities, and provide for necessary expansion in adjacent sites.
7. Maintain and upgrade existing energy facilities, and site additional energy facilities determined to be needed by the New Jersey Department of Energy (DOE) in a manner consistent with the policies of this Coastal Management Program.
8. Encourage residential, commercial, and recreational mixed-use redevelopment of the developed waterfront.

DEP Organization. The DEP contains nine units:

1. Division of Coastal Resources (prior to July 1, 1979, the Division of Marine Services)
2. Division of Water Resources
3. Division of Environmental Quality
4. Division of Fish, Game and Wildlife
5. Division of Parks and Forestry
6. Green Acres Administration
7. Division of Fiscal and Support Services
8. Division of Employee Management and Development
9. Commissioner's Office

The Division of Coastal Resources is further broken down into the following sections which resulted from a reorganization of the former Division of Marine Services following the amendments to DEP's enabling legislation in 1979 (N.J.S.A. 13: ID- et seq.).

Bureau of Coastal Project Review. This bureau administers CAFRA Wetlands and Waterfront Development Permit Programs in accordance with legislation and within the Rules on Coastal Resource and Development Policies. The bureau has taken over the permit functions of the former Offices of Coastal Zone Management, Riparian Lands Management, and Wetlands Management.

Bureau of Coastal Planning. This bureau provides planning assistance in developing and refining programs to guide and regulate development and protect resources in the coastal areas. This office has taken over planning functions formerly in the Office of Coastal Zone Management.

Bureau of Tidelands. This bureau provides staff for the Tidelands Resource Council and helps protect and manage State-owned tidelands by reviewing applications for

conveyances of grants, leases, and licenses. The functions of the former Office of Riparian Lands is now within this bureau.

Bureau of Coastal Enforcement and Field Services. This bureau provides a multidisciplinary team to support the functions of the Bureau of Tidelands and the Bureau of Coastal Project Review. The team is basically a field inspection group. Former inspection functions of the CZM, Wetlands Management, and Riparian Lands Management offices are now in this bureau.

Bureau of Coastal Engineering. This bureau takes care of the State's shore protection and waterway maintenance programs. The functions of the former Office of Shore Protection are included here.

Other divisions of the DEP are also required to follow and enforce coastal regulations that fall within their spheres of interest, e.g., water pollution, air pollution, development of parks and historic sites, and recreation areas.

DEP Regulatory Authority. The DEP's regulatory authority in the coastal zone came from three laws passed by the State legislature that apply to nearly all types of development within the coastal region.

Waterfront Development Law (N.J.S.A. 12:5-3). This law authorizes the DEP to regulate the construction or alteration of coastal structures such as docks, wharves, piers, bulkheads, bridges, pipelines, cables or other "similar or dissimilar developments" along or on navigable waters in the State. Persons planning waterfront developments must apply for permits from the DEP, which reviews permit applications.

Coastal Area Facility Review Act (CAFRA) (N.J.S.A. 13:19-1 et seq.). This Act gives the DEP power to approve and regulate the design, location, and construction of major facilities within the New Jersey coastal zone, an area of 1,376 square miles. Permit applications and Environmental Impact Statements must be submitted to the DEP for public hearings and review.

The Wetlands Act (N.J.S.A. 13:9A-1 et seq.) of 1970. This Act authorizes DEP to regulate activities on coastal wetlands. The Act, administered by the Division of Coastal Resources, gives the State broad powers to control every form of coastal wetland disturbance or development with the exception of mosquito control and continued use for agricultural purposes, such as harvesting salt marsh hay. Most coastal wetlands were mapped in 1972, and only those which are mapped fall within the regulations of the Act. Wetland permit decisions are made by the Division Director, but can be appealed to the Commissioner of DEP.

The DEP is authorized to undertake Shore Protection programs to prevent and/or repair damage caused by shoreline erosion. The Federal Beaches and Harbor Act of 1977 (Public Law 77-208) provided a \$30 million bond issue to fund State matching grants for

beach maintenance, protection, and restoration. The DEP is required to prepare a master plan, underway since 1978, to develop Shore Protection Rules. These rules include policies on coastal engineering, dunes and dune management, beach nourishment, and high-risk beach erosion areas. The Shore Protection Master Plan and Coastal Policies will become the basis for planning joint projects with the U.S. Army Corps of Engineers; coastal permits will be issued only when in conformity with these coastal policies.

Other State and Local Actions

Tidelands Resource Council. In addition to the DEP and its coastal divisions, the State manages tidelands through its proprietary role as owner of the lands. The ownership role of the State is exercised through the Tidelands Resource Council, which is composed of 12 citizens appointed by the Governor, with advice and consent from the State Senate. The State's ownership of tidelands extends to the mean high water mark, determined on the basis of a theoretical 18.6-year tide. The council has broad discretionary powers concerning applications for tideland use. Many of the State's tidelands were sold in the past, but today title remains with the State and the council can only license use on a case-by-case basis following permit review. The council can issue grants and leases or license use of the tidelands provided such activities are within the public interest.

Hackensack Meadowlands Development Commission. The Hackensack Meadowlands District is now a joint venture between the DEP and the Hackensack Meadowlands Development Commission (HMD), which is composed of the Commissioner of the Department of Community Affairs and three residents each from Bergen and Hudson Counties and appointed by the Governor. The commission is required to develop and implement a program for development of the Meadowlands District. The DEP's Division of Coastal Resources makes Federal consistency determinations for any action affecting the district. The requirements of the Wetlands Act do not apply to this area.

New Jersey Department of Energy. This department is a significant part of the Coastal Management Program since most energy sitings are on the coast. The Department has broad planning authority and decisionmaking powers with other State agencies over energy-related matters. It is the lead agency for the Coastal Energy Impact Program (CEIP). Amendments to the Federal Coastal Zone Management Act of 1976 created the CEIP, which provides funds to assist coastal States with energy resource management.

Green Acres Administration. This body determines how and where State funds will be spent for parks and open space purchases along with development and capital improvements. The DEP can obtain land by condemnation, if necessary, through this program. The Division of Coastal Resources reviews proposals for consistency with the Coastal Resource and Development policies of the State. One of the program's top priorities is to create waterfront parks in urban areas and to provide public access and recreational opportunities in the coastal zone.

EXISTING CBRS UNITS

No units were designated in New Jersey when CBRA was enacted in 1982.

PROPOSED ADDITIONS

This section identifies proposed recommendations for additions to the Coastal Barrier Resources System in New Jersey. The Secretary of the Interior, as directed by Section 10 of the Coastal Barrier Resources Act, will make his final recommendations to the Congress after a 90-day public comment period. These proposed recommendations have been developed in response to public, State and Federal agency, and Congressional comments on the Coastal Barrier Draft Inventory developed by the Study Group. The inventory maps were available for public comment between March 4, 1985, and September 30, 1985. The process and criteria used in the inventory were described on March 4, 1985, in the Federal Register (Vol. 50, No. 42).

The State of New Jersey reviewed these documents and supports the addition of all the units identified in the Department's

draft inventory. The State specifically made it clear that Stone Harbor, NJ-09, is only leased to the City of Stone Harbor for 50 years and should not be considered "otherwise protected."

The Department received three other comments concerning New Jersey. All were in favor of the proposed CBRS expansion.

The Department of the Interior proposes to recommend that all undeveloped, unprotected coastal barriers and associated aquatic habitat identified in Raritan Bay, Delaware Bay, and along the Atlantic Ocean be added to the Coastal Barrier Resources System. A table presenting the Department's current position on each unit identified in the inventory follows this discussion.

Public comment on the proposed recommendations is solicited.

Comments should be directed to:

The Coastal Barriers Study Group
Department of the Interior
National Park Service
P.O. Box 37127
Washington, DC 20013-7127.

SUMMARY OF PROPOSED RECOMMENDATIONS FOR COASTAL BARRIERS IN NEW JERSEY

Unit ID Code ^a	Unit Name ^b	County	Congress. Dist. ^c	Shoreline Length (miles)	Area (acres)	Proposed Recommendation ^d
NJ-01	Gateway	Monmouth	3	—	—	Federally protected (NPS); no further consideration
NJ-02	Seidler Beach	Middlesex	3	0.44	80	Add to CBRS; no change from inventory
NJ-03	Cliffwood Beach	Monmouth	3	—	—	Locally protected; no further consideration
NJ-04	Conaskonk Point	Monmouth	3	1.63	262	Add to CBRS; no change from inventory
NJ-05	Island Beach	Ocean	13	—	—	State protected; no further consideration
NJ-06	Brigantine	Ocean Atlantic	13 2	2.67	2,032	Delete Federally protected (FWS) area; add balance to CBRS
NJ-07	Ocean City Beach	Cape May Atlantic	2	—	—	Locally protected; no further consideration

(continued)

SUMMARY OF PROPOSED RECOMMENDATIONS FOR COASTAL BARRIERS IN NEW JERSEY (CONCLUDED)

Unit ID Code ^a	Unit Name ^b	County	Congress. Dist. ^c	Shoreline Length (miles)	Area (acres)	Proposed Recommendation ^d
NJ-08	Corson Inlet	Cape May	2	—	—	State protected; no further consideration
NJ-09	Stone Harbor	Cape May	2	1.72	3,953	Add to CBRS; no change from inventory
NJ-10	Cape May	Cape May	2	—	—	Federally/privately protected; no further consideration
NJ-11	Higbee Beach	Cape May	2	—	—	State protected; no further consideration
NJ-12	Del Haven	Cape May	2	1.16	391	Delete State-protected northern section; add balance to CBRS
NJ-13	Kimbles Creek	Cape May	2	1.91	675	Add to CBRS; no change from inventory
NJ-14	Moore's Beach	Cape May Cumberland	2	3.90	3,273	Delete State-protected area; add balance to CBRS
Total - CBRS as Recommended				13.43	10,666	
Existing CBRS				0	0	
Net Change in CBRS				+13.43	+10,666	

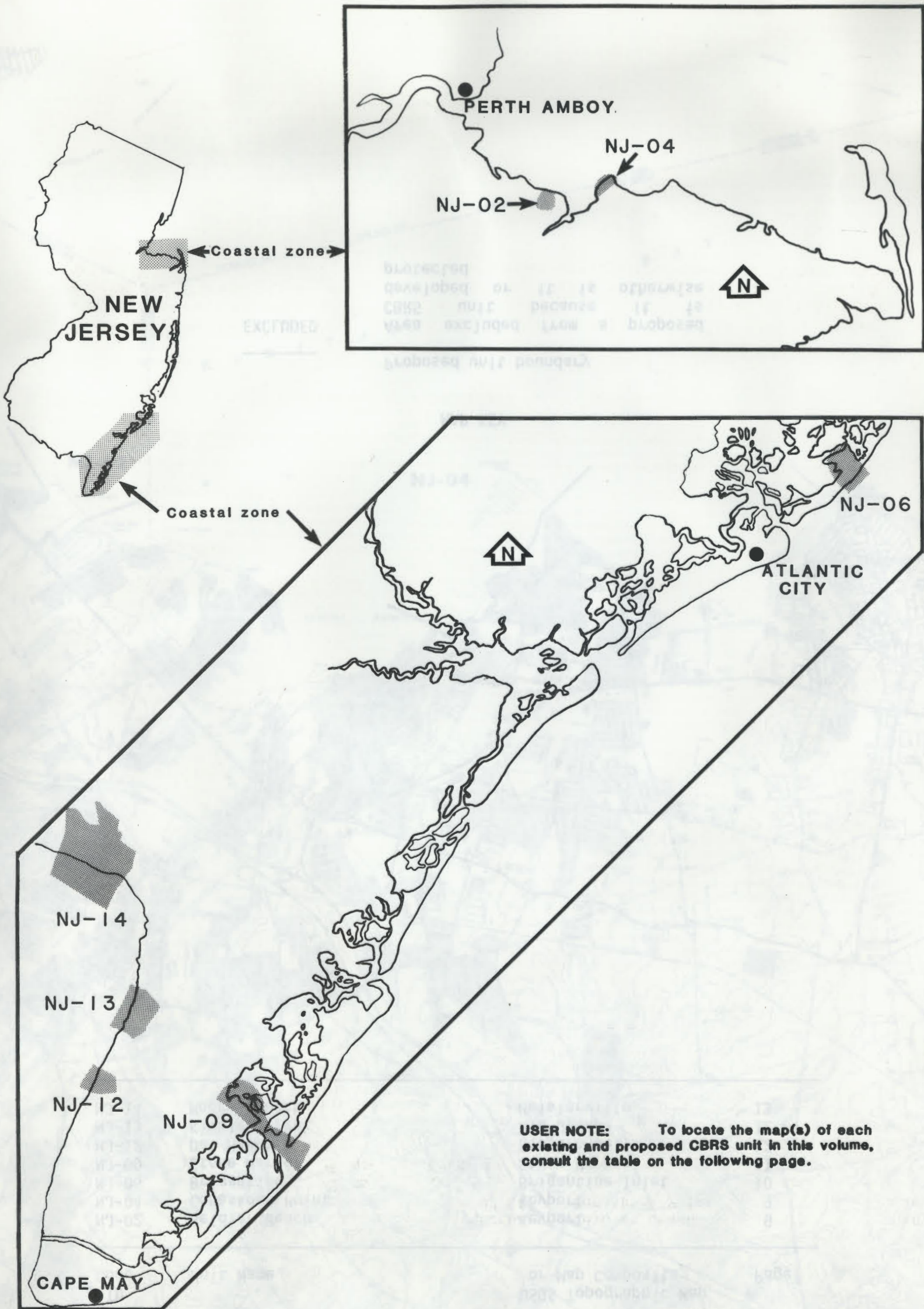
^aUNIT ID CODE - State initials (NJ) plus a number identify each separate proposed unit.

^bUNIT NAME - A provisional name based on a prominent local feature.

^cCONGRESSIONAL DISTRICT - U.S. Congressional District in which unit is located.

^dPROPOSED RECOMMENDATION - A brief explanation of the changes between the 1985 inventory and the recommendations proposed in this revised inventory. For more detailed explanations, please contact the Study Group. Abbreviations: FWS = Fish and Wildlife Service, NPS = National Park Service, CBRS = Coastal Barrier Resources System. Barriers no longer under consideration are not mapped in this atlas.

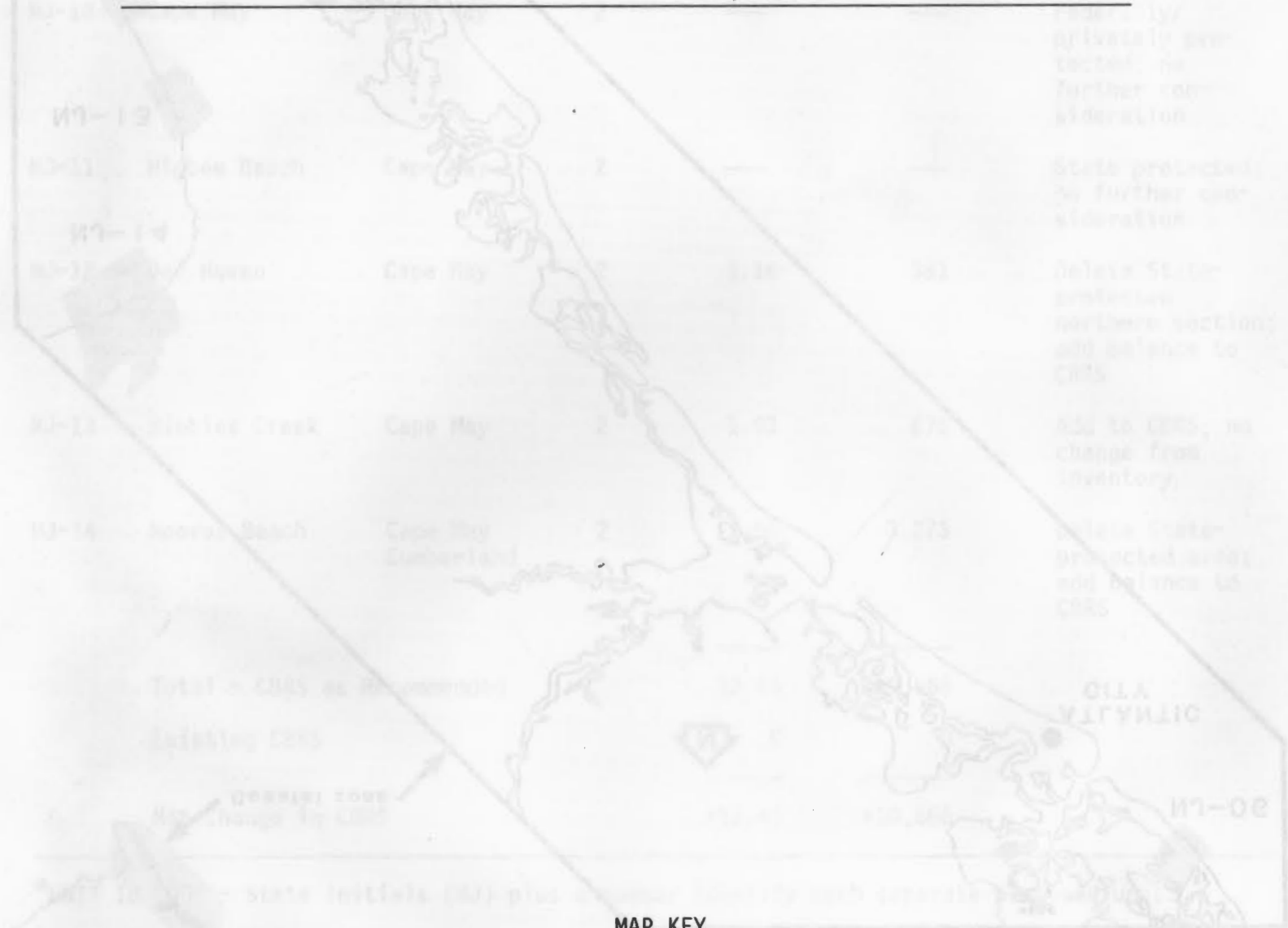
INDEX TO PROPOSED CBRS UNITS IN NEW JERSEY



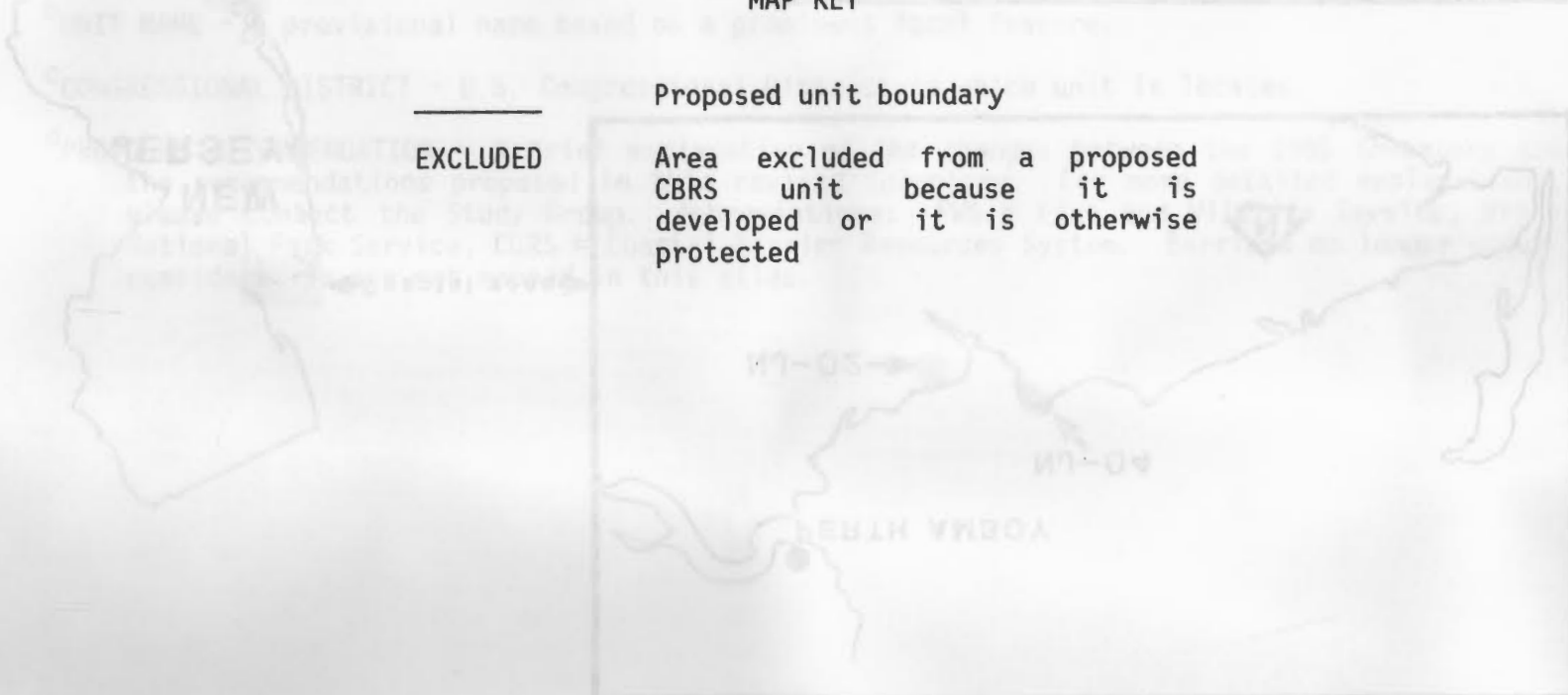
USER NOTE: To locate the map(s) of each existing and proposed CBRS unit in this volume, consult the table on the following page.

PROPOSED CBRS UNITS AND THEIR LOCATION IN THIS VOLUME

Unit ID Code	Unit Name	USGS Topographic Map or Map Composite	Page
NJ-02	Seidler Beach	Keyport	9
NJ-04	Conaskonk Point	Keyport	9
NJ-06	Brigantine	Brigantine Inlet	10
NJ-09	Stone Harbor	Stone Harbor	11
NJ-12	Del Haven	Rio Grande	12
NJ-13	Kimbles Creek	Rio Grande	12
NJ-14	Moore's Beach	Heislerville	13



MAP KEY



INDEX TO PROPOSED CBRS UNITS IN NEW JERSEY



Report to Congress on the Coastal Barrier Resources System

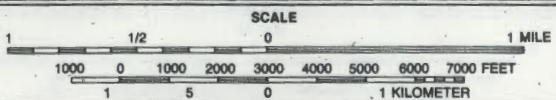
UNITED STATES
DEPARTMENT OF THE INTERIOR
DONALD P. HODEL, SECRETARY



9



QUADRANGLE
KEYPORT
NEW JERSEY



Solid lines depict proposed recommendations for additions or deletions to the Coastal Barrier Resources System. (Section 10 of P.L. 97 - 348.)
Dash lines depict approximate boundaries of existing units in the Coastal Barrier Resources System, for reference purposes only.

Mapped, edited and published
by the Coastal Barriers Study Group
U.S. Department of the Interior
Washington, D.C. 20240

Base Map is the U.S. Geological Survey 1:24,000 scale quadrangle.



UNITED STATES
DEPARTMENT OF THE INTERIOR
DONALD P. HODEL, SECRETARY

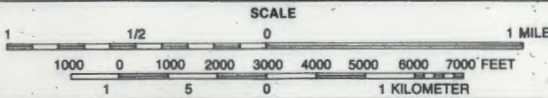


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Report to Congress on the Coastal Barrier Resources System

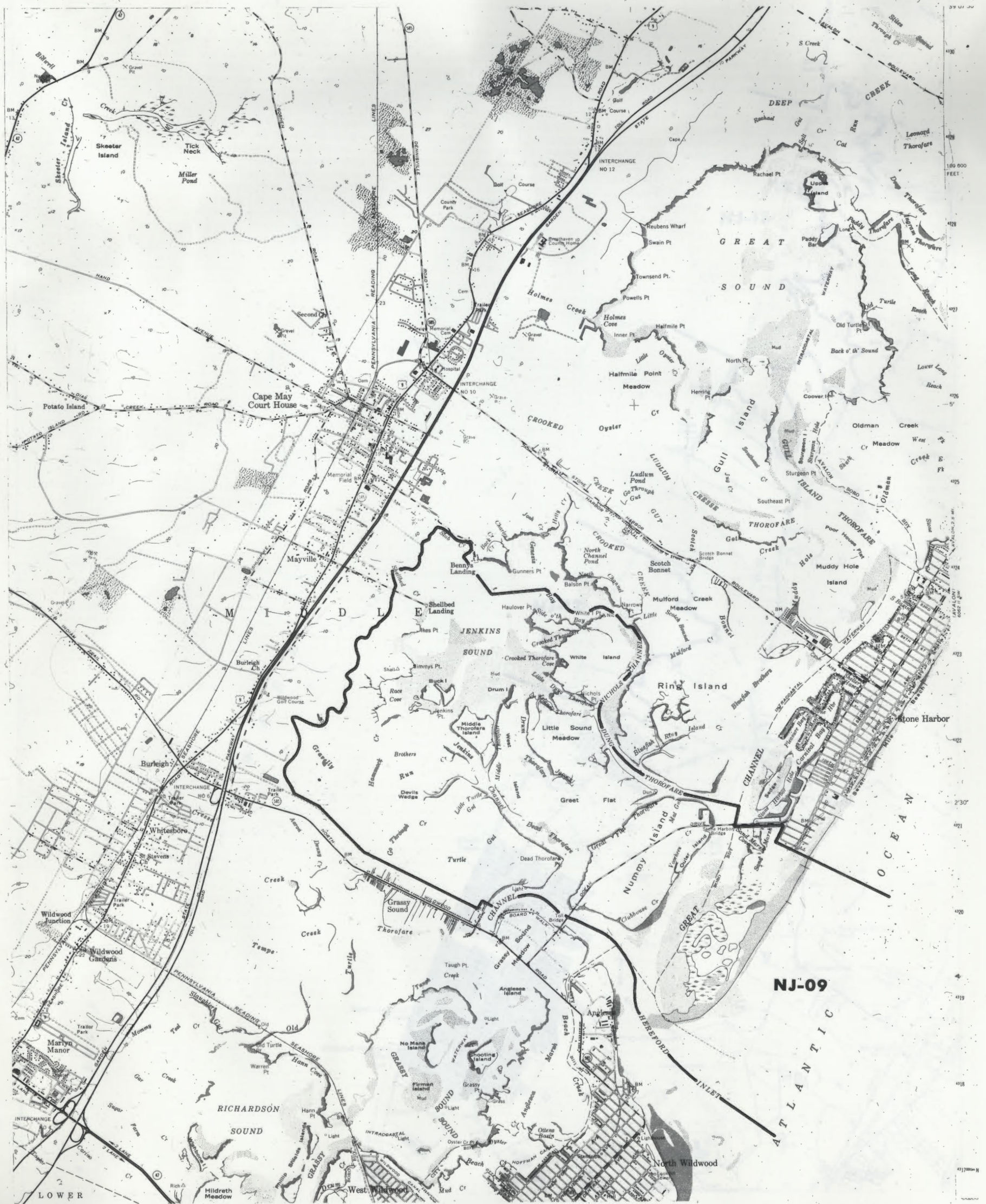
QUADRANGLE
BRIGANTINE INLET
NEW JERSEY



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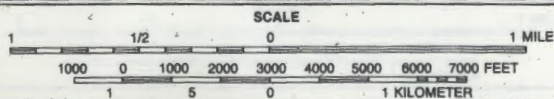
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11



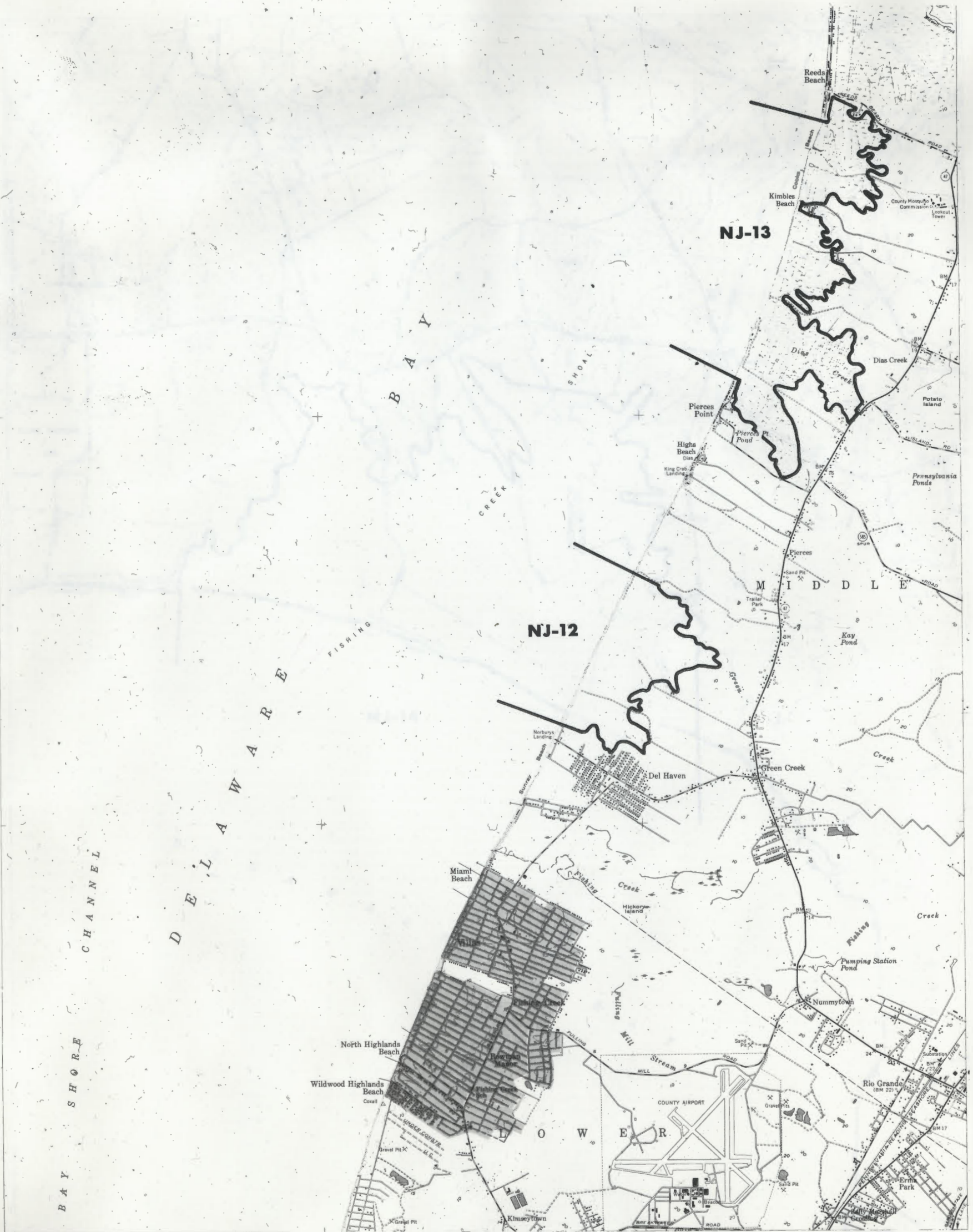
QUADRANGLE
STONE HARBOR
NEW JERSEY



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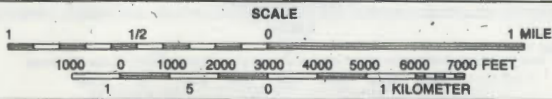


12



Report to Congress on the Coastal Barrier Resources System

QUADRANGLE
RIO GRANDE
NEW JERSEY



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