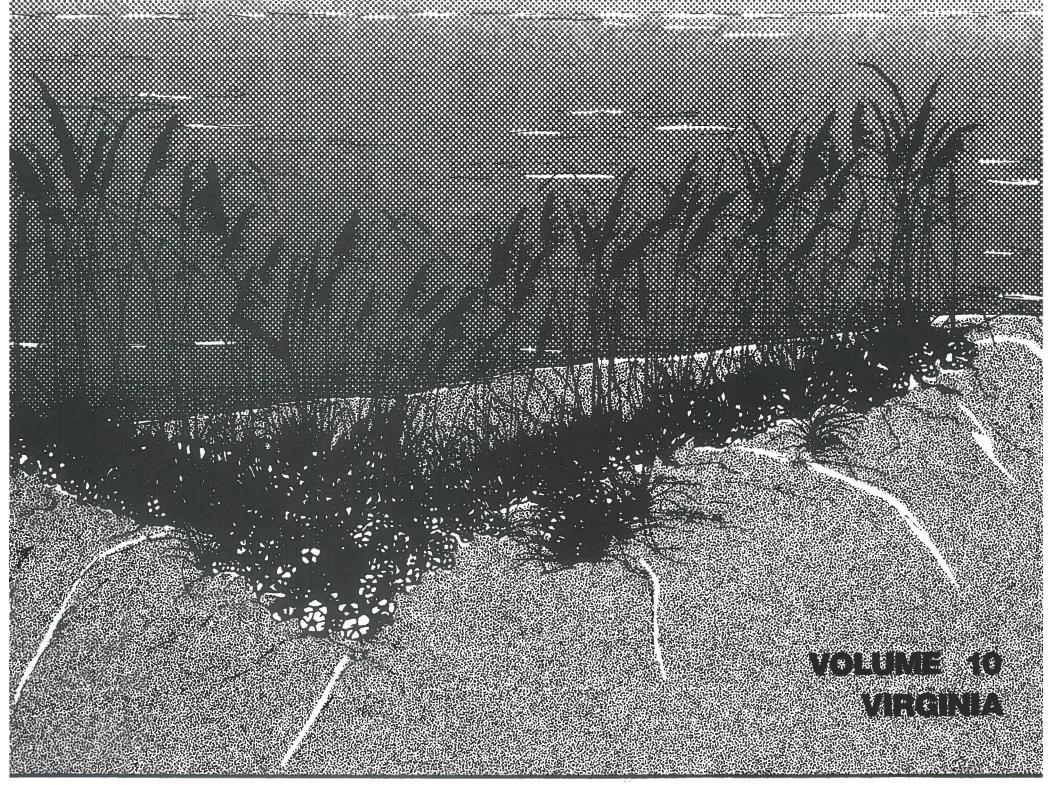
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REPORT TO CONGRESS: COASTAL BARRIER RESOURCES SYSTEM

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



U.S. Department of the Interior



REPORT TO CONGRESS: COASTAL BARRIER RESOURCES SYSTEM

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VOLUME 10

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

VIRGINIA

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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VIRGINIA

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 Virginia 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 con-

tain--

- (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 Virginia includes delineations of the CBRS units designated by Congress in 1982 and delineations of proposed recommendations for additions and modifications to the CBRS that will be provided to Congress by the Department of the Interior following public review and comment.

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

The State of Virginia contains about 1,800 miles of estuarine tidal shoreline surrounding Chesapeake Bay and approximately 112 miles of oceanfront shoreline along the Atlantic. Of this oceanfront shoreline, 77.4 miles are protected from development, 19.7 miles are developed, and 13.8 miles remain unprotected and undeveloped. State of Virginia statistics show that well over 60 percent of the State's population reside within the coastal areas.

The ocean shore from Chincoteague Island to Cape Charles is composed of 10 major barrier islands that front an extensive system of salt marshes and open bays. Wind, wave, and tidal processes created these relatively long, narrow islands and endowed them with sandy beaches and extensive dune systems. The barrier islands are separated by narrow, relatively deep tidal inlets. South of the entrance to Chesapeake Bay, Virginia's ocean shoreline consists of sandy beaches and dunes which form the Cape Henry spit complex, the Virginia Beach headland, and the barrier island that protects Back Bay.

Natural resources are abundant along Virginia's shorelines. Chesapeake Bay, the Nation's largest estuary, contains abundant fish and wildlife resources. Millions of wintering waterfowl stop over in this area annually, and over 75 percent of Atlantic flyway waterfowl overwinter in the bay.

The Atlantic coastline is also rich in aquatic and terrestrial wildlife resources.

The principal coastal industries in Virginia include shipbuilding, fishing, food processing, tourism, and agriculture. Two liquefied natural gas plants and a major oil refinery are located on the Lower Chesapeake Bay. The Port of Hampton Roads leads the Nation in volume of exports and in total foreign trade tonnage; a major deep-water port, it is capable of handling large volumes of every category of cargo. The Hampton Roads area also has the Nation's largest concentration of military installations, making the Federal Government another important contributor to the State's economy.

COASTAL RESOURCE MANAGEMENT

Virginia Coastal Resource Management

The State of Virginia began developing a coastal management program in 1975, largely as a study of the effects of exploration and development of oil and gas reserves on the Outer Continental Shelf. In 1976, the Coastal Study Commission was broadened to include development of the State's coastal resources management programs. By 1977, the commission published a draft document, "Proposals for Coastal Resources Management in Virginia." In 1979, the State and Federal Governments terminated their cooperative efforts to develop a Federally approved coastal zone management plan in Virginia because the Coastal Resources Management Act (S.B. 403) failed to pass both the State House and Senate. However, the State continued management efforts and developed "A Process for the Review and Evaluation of the Management of Virginia's Coastal Resources" in 1980. In 1982, the Governor endorsed coastal management in Virginia in his first address to the General Assembly. That endorsement, coupled with enactment of the Coastal Primary Sand Dune Protection Act and the incorporation of nonvegetated wetlands into the Wetlands Act, marked the beginning of a new effort by the State to define a Federally approved coastal zone management A draft environmental impact program. statement (EIS) for this program was issued in August 1985. On September 23, 1986, Virginia's Coastal Resources Management Program (VCRMP) was approved by the U.S. Department of Commerce. The VCRMP consists of 8 core coastal regulatory programs. The lead State agency is the Council on the Environment.

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Local Actions

Taxes. The State has given cities and counties the authority to levy taxes for the purchase of open areas. The Open-Space Land Act (Va. Code Ann. 10-151 to 10-157 1974 and Supp. 1982) was passed in 1966 to help preserve recreational, historic, scenic and park areas. Any county or municipality can acquire open space land and levy taxes to fund those acquisitions.

Zoning. Accomack County passed a Flood Plain Ordinance in June, 1984. This ordinance, which was adapted to the Federal Emergency Management Agency's standards, apparently discourages development on uninhabited barrier islands. Unfortunately, a copy of the ordinance was not available at the time of this writing.

EXISTING CBRS UNITS

The CBRS units comprise about 14 miles of shoreline facing the ocean. They are all barrier islands and have extensive saltwater marshes behind them. Cedar Island, Fishermans Island, and Assawoman Island are used seasonally by hunters and fishermen.

A brief description of each existing CBRS unit in Virginia is provided below. Each unit is identified by its number, name, and the county in which it is located.

KOl-Assawoman Island (Accomack). This barrier island has a beach length of 4.2 miles. The island protects both an extensive salt marsh system and Kegotank Bay. Because of its limited access, the island's beach/dune systems are well preserved. The island is used seasonally for fishing and hunting. In the past, this area was considered as a potential site for a pipeline crossing.

KO3-Cedar Island (Accomack). This unit is composed of 6.6 miles of beachfront and protects an extensive marsh and bay system. The Nature Conservancy owns a large tract of land on the northern part of the island outside the CBRS Unit. The few cottages on the island are used seasonally by local residents for hunting and fishing.

KO4-Little Cobb Island (Northampton). This small barrier island has a beach length of 0.7 mile. One structure and a wharf are the only developments on the island.

CBRS UNITS IN VIRGINIA ESTABLISHED BY CONGRESS, 1982

Unit Name	Unit ID Code	County	Shoreline Length (miles)	Area (acres)
Assawoman Island Cedar Island Little Cobb Island Fishermans Island	K01 K03 K04 K05	Accomack Accomack Northampton Northampton	4.2 6.6 0.7 2.3	1,015.9 9,280.6 383.9 617.3
Totals:			13.8	11,297.7

KO5-Fishermans Island (Northampton). This unit is located adjacent to Fishermans Island National Wildlife Refuge. Access to the island is limited to boat or foot traffic from the Chesapeake Bay Bridge-Tunnel Highway. The island supports abundant wildlife resources such as osprey, peregrine falcons, herons, and bald eagles. Hunting and fishing are seasonal activities on the island.

PROPOSED ADDITIONS AND MODIFICATIONS

This section identifies proposed recommendations for additions to the Coastal Barrier Resources System in Virginia. 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. The following 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 Virginia reviewed these documents and opposes any changes to the CBRS in that State. The Department received 206 other comments concerning Virginia. Almost all were from the two Delmarva Peninsula counties where opposition to expansion of CBRS in quite strong.

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The Department of the Interior proposes to recommend that all undeveloped, unprotected coastal barriers and associated aquatic habitat in the Chesapeake Bay, the estuarine Potomac River, and along the Atlantic coast identified in the inventory be added to the Coastal Barrier Resources System. Another barrier identified by the Fish and Wildlife Service (Severn River) is also recommended for addition. 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 VIRGINIA

Unit ID Code ^a	Unit Name ^b	County or Independent City	Congress. Dist.	Shoreline Length (miles) ^d	Area (acres) ^e	Proposed Recommendation
VA-01	Assateague	Accomack	1	_	_	Federally protected (FWS, NPS); no further consideration
VA-02	Wallops Island	Accomack	1			Under National Aeronautics and Space Administra- tion control; no further consid- eration
K01	Assawoman Island	Accomack	1	4.20	5,657	Add additional wetlands to existing CBRS unit
VA-03	Metomkin	Accomack	1		(management)	Privately protected; no further consideration
K03	Cedar Island	Accomack	1	6.60	17,379	Add additional wetlands to existing CBRS unit no change from inventory
VA-04	Parramore Island	Accomack	1	_		Privately protected; no further consideration

Unit ID Code ^a	Unit Name ^b	County or Independent City	Congress. Dist.	Shoreline Length (miles)	Area (acres) ^e	Proposed Recommendation ^f
VA-05	Hog Island	Northampton	1	_		Privately protected; no further consideration
VA-06	Cobb Island	Northampton	1			Privately protected; no further consideration
K04	Little Cobb Island	Northampton	1	0.7	384	No change to existing CBRS unit
VA-07	Wreck Island	Northampton	1	0.0	39,608	Delete State- protected area from inventory; add balance to CBRS
VA-08	Smith Island Complex	Northampton	1		_	Privately protected; no further consideration
K05	Fishermans Island	Northampton	1	2.30	617	Delete Federally protected area (FWS) delineated in inventory; no change to existing CBRS unit
VA-09	Elliotts Creek	Northampton	1	0.34	98	Add to CBRS; no change from inventory
VA-10	Old Plantation Creek	Northampton	1	0.37	258	Add to CBRS; no change from inventory
VA-11	Remus Creek	Northampton	1	1.42	315	Add to CBRS; no change from inventory
VA-12	Church Neck	Northampton	1	1.02	40	Add to CBRS; no change from inventory
VA-13	Westerhouse Creek	Northampton	1	0.18	60	Add to CBRS; no change from inventory
VA-14	Shooting Point	Northampton	1	0.26	30	Add to CBRS; no change from inventory
VA-15	Horse Island	Northampton	1	0.94	384	Delete artificial pond; add balance to CBRS
VA-16	Scarborough Neck	Accomack	1	2.87	328	Add to CBRS; no change from inventory
VA-17	Craddock Neck	Accomack	1	3.02	1,220	Add to CBRS; no change from inventory

SUMMARY OF PROPOSED RECOMMENDATIONS FOR COASTAL BARRIERS IN VIRGINIA (CONTINUED)

Unit ID Code ^a	Unit Name ^b	County or Independent City	Congress. Dist.	Shoreline Length (miles) ^d	Area (acres) ^e	Proposed Recommendation
VA-18	Bluff Point	Accomack	1	1.16	482	Add to CBRS; no change from inventory
VA-19	Parkers Island	Accomack	1	0.80	370	Add to CBRS; no change from inventory
VA-20	Parkers Marsh	Accomack	1			State protected; no further consideration
VA-21	Beach Island	Accomack	1	0.75	174	Add to CBRS; no change from inventory
VA-22	Russell Island	Accomack	1	0.46	110	Add to CBRS; no change from inventory
VA-23	Simpson Bend	Accomack	1	1.20	494	Add to CBRS; no change from inventory
VA-24	Drum Bay	Accomack	1	1.15	715	Add to CBRS; no change from inventory
VA-25	Fox Islands	Accomack	1	1.71	985	Add to CBRS; no change from inventory
VA-26	Cheeseman Island	Accomack	1	3.13	1,129	Add to CBRS; no change from inventory
VA-27	Watts Island	Accomack	1	1.91	987	Add to CBRS; no change from inventory
VA-28	Tangier Island	Accomack	1	2.69	593	Add to CBRS; no change from inventory
VA-29	Elbow Point	Westmoreland	1,	3.75	1,600	Add to CBRS; no change from inventory
VA-30	White Point	Westmoreland	1	3.53	366	Add to CBRS; no change from inventory
VA-31	Cabin Point	Westmoreland	1	0.70	125	Add to CBRS; no change from inventory
VA-32	Glebe Point	Westmoreland	1	6.91	300	Add to CBRS; no change from inventory
VA-33	Sandy Point	Westmoreland	1	0.29	28	Add to CBRS; no change from inventory
VA-34	Judith Sound	Northumberland	d 1	0.88	230	Add to CBRS; no change from inventory
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Unit ID Code ^a	Unit Name ^b	County or Independent City	Congress. Dist.	Shoreline Length (miles)d	Area (acres) ^e	Proposed Recommendation ^f
VA-35	Cod Creek	Northumberland	1	0.73	251	Add to CBRS; no change from inventory
VA-36	Presley Creek	Northumberland	1	0.36	94	Add to CBRS; no change from inventory
VA-37	Cordreys Beach	Northumberland	1	0.38	138	Add to CBRS; no change from inventory
VA-38	Marshalls Beach	Northumberland	1	0.25	80	Add to CBRS; no change from inventory
VA-39	Ginny Beach	Northumberland	1	_	· ·	State protected; no further consideration
VA-40	Gaskin Pond	Northumberland	1	0.26	87	Add to CBRS; no change from inventory
VA-41	Owens Pond	Northumberland	1	0.80	104	Add to CBRS; no change from inventory
VA-42	Chesapeake Beach	Northumberland	1	0.44	33	Add to CBRS; no change from inventory
VA-43	Fleet Point	Northumberland	1	0.53	26	Add to CBRS; no change from inventory
VA-44	Bussel Point	Northumberland	1	0.44	33	Add to CBRS; no change from inventory
VA-45	Harveys Creek	Northumberland	1	0.35	31	Add to CBRS; no change from inventory
VA-46	Ingram Cove	Northumberland	i 1	0.30	22	Add to CBRS; no change from inventory
VA-47	Bluff Point Neck	Northumberland	1	1.22	157	Add to CBRS; no change from inventory
VA-48	Barnes Creek	Northumberland	1	0.58	75	Add to CBRS; no change from inventory
VA-49	North Point	Lancaster	1	1.38	322	Add to CBRS; no change from inventory
VA-50	Windmill Point	Lancaster	1	0.47	20	Add to CBRS; no change from inventory
VA-51	Deep Hole Point	Lancaster	1	1.69	207	Add to CBRS; no change from inventory

SUMMARY OF PROPOSED RECOMMENDATIONS FOR COASTAL BARRIERS IN VIRGINIA (CONTINUED)

Unit ID Code ^a	Unit Name ^b	County or Independent City	Congress. Dist.	Shoreline Length (miles) ^d	Area (acres) ^e	Proposed Recommendation ^f
VA-52	Sturgeon Creek	Middlesex	1	0.29	142	Add to CBRS; no change from inventory
VA-53	Jackson Creek	Middlesex	1	0.38	45	Add to CBRS; no change from inventory
VA-54	Stove Point	Middlesex	1	0.37	233	Add to CBRS; no change from inventory
VA-55	Rigby Island/ Bethel Beach	Mathews	1	15.06	5,214	Additional barrier and wetlands identified; add to inventory and to CBRS
VA-56	New Point Comfort	Mathews	1	0.87	430	Add to CBRS; no change from inventory
VA-57	Ware Neck	Gloucester	1	0.29	45	Add to CBRS; no change from inventory
VA-57A	Severn River	Gloucester	1	5.42	2,037	New unit identi- fied by FWS; add to CBRS
VA-58	Allens Island	Gloucester	1			Not a barrier; no further consideration
VA-59	Plum Tree Island	Poquoson City	1			Federally protected (FWS); no further consideration
VA-60	Long Creek	Hampton City	1	_	_	Locally protected; no further consideration
VA-61	Mill Creek	Hampton City	1		-	Military; no further consideration
VA-62	East Ocean View Park	Norfolk City	1	_	,	Locally protected; no further consideration
VA-63	Little Creek	Virginia Beach City	2			Military (Navy); no further consideration
VA-64	Lynnhaven Inlet	Virginia Beach City	2	_		Locally protected/ military; no further consideration
VA-65	Cape Henry	Virginia Beach City	2			State protected/ military; no further consideration
VA-66	Lovetts Marsh	Virginia Beach City	2			Military; no further consideration

Unit ID Code ^a	Unit Name ^b	County or Independent City	Congress. Dist.	Shoreline Length (miles) ^d	Area (acres) ^e	Proposed Recommendation ^f
VA-67	Tecumseh	Virginia Beach City	2	_	_	Military; no further consideration
VA-68	Little Island	Virginia Beach City	2		_	Locally protected; no further consideration
VA-69	Back Bay	Virginia Beach City	2		_	Federally protecte (FWS); no further consideration
VA-70	False Cape	Virginia Beach City	2		_	State/Federally (FWS) protected no further consideration
	Total - CBR	S as Recommended	ı	88.10	84,892	
	Existing CB	RS		13.8	11,298	
	Net Change	in CBRS		+74.3	+73,594	

^aUNIT ID CODE - State initials (VA) plus a number identify a proposed new unit. An existing unit is identified by the legal code letter (K) and number established by Congress in 1982.

bUNIT NAME - For proposed new units, this is a provisional name based on a prominent local feature. For existing CBRS units, this is the legal name.

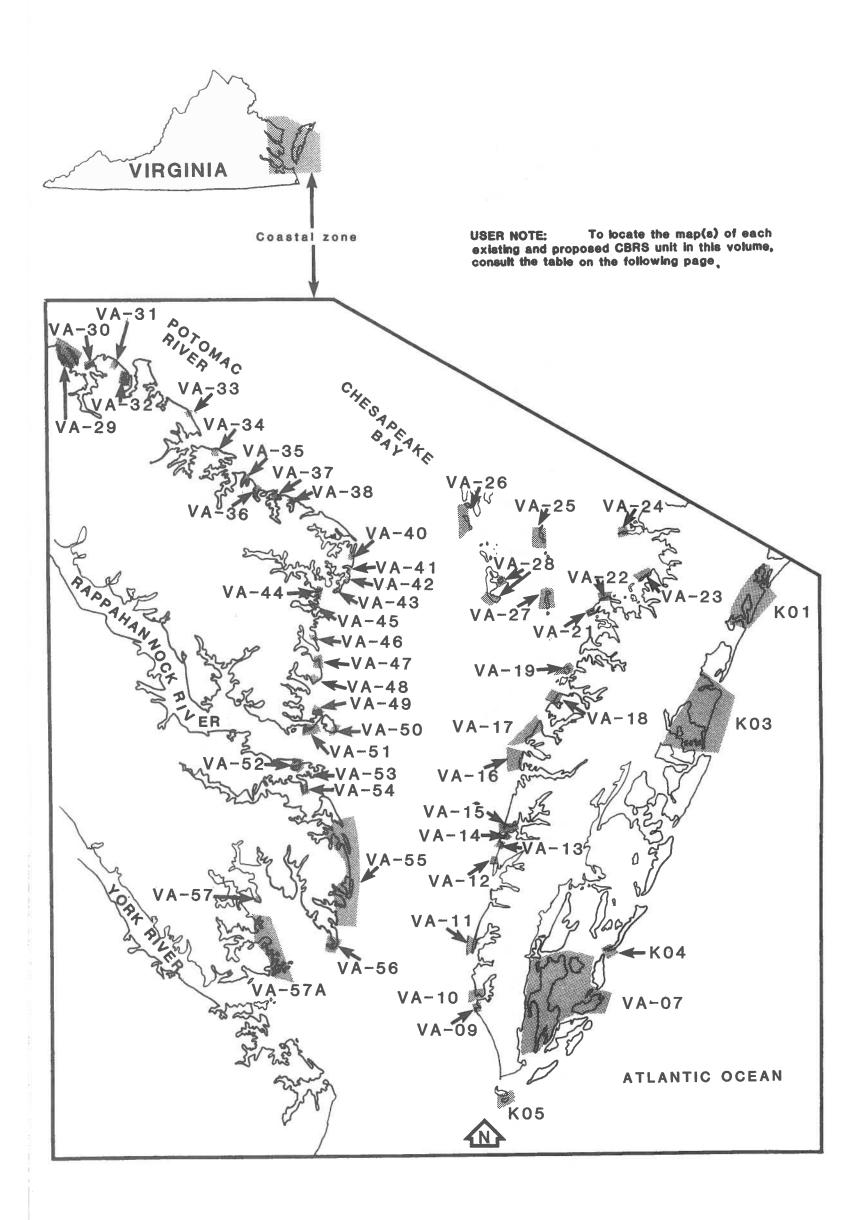
^CCONGRESSIONAL DISTRICT - U.S. Congressional District in which unit is located.

^dSHORELINE LENGTH - For existing units with additions or deletions, this length is for the entire unit, as modified.

^eAREA - For existing units with additions or deletions, this area is for the entire unit, as modified.

fPROPOSED RECOMMENDATION - A brief explanation of the differences 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 EXISTING AND PROPOSED CBRS UNITS IN VIRGINIA



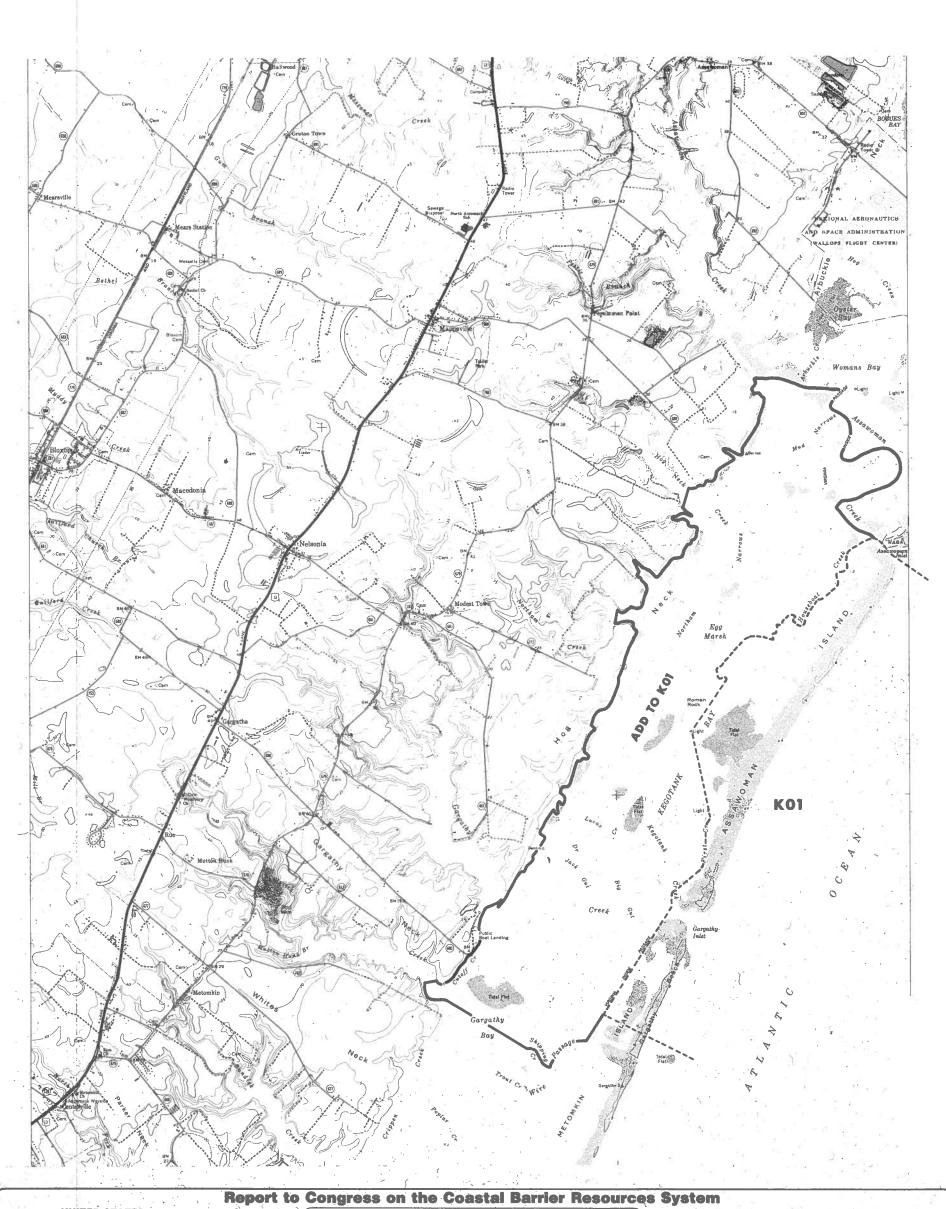
	Unit Name	or Map Composite	Page
.01	A T - 3 !	Diame	12
01	Assawoman Island	Bloxom Metomkin Inlet	13
.03	Cedar Island	Wachapreague	14
04	Little Cobb Island	Cobb Island	15
(05	Fishermans Island	Fishermans Island	19
A-07	Wreck Island	Cobb Island	15
π 07	WIECK ISTAIN	Cheriton	16
		Townsend	17
		Ship Shoal Inlet	18
A-09	Elliotts Creek	Elliotts Creek	20
/A-10	Old Plantation Creek	Elliotts Creek	20
/A-11	Remus Creek	Cape Charles	21
/A-12	Church Neck	Franktown	22
/A-13	Westerhouse Creek	Franktown	22
/A-14	Shooting Point	Franktown	22
/A-15	Horse Island	Franktown	22
/A-16	Scarborough Neck	Jamesville	23 23
/A-17	Craddock Neck	Jamesville Pungotoague	23 24
/A-18	Bluff Point	Pungoteague Pungoteague	24
/A-19 /A-21	Parkers Island Beach Island	Chesconessex	25
/A-21 /A-22	Russell Island	Chesconessex	25
/A-23	Simpson Bend	Parksley	26
/A-24	Drum Bay	Saxis	27
/A-25	Fox Islands	Great Fox Island	28
/A-26	Cheeseman Island	Ewell, MD	29
/A-27	Watts Island	Tangier Island	30
/A-28	Tangier Island	Tangier Island	30
/A-29	Elbow Point	Stratford Hall	31
		St. Clements Island	32
/A-30	White Point	St. Clements Island	32 32
/A-31	Cabin Point	St. Clements Island	32
/A-32	Glebe Point	St. Clements Island Kinsale	33
VA-33	Sandy Point Judith Sound	St. George Island	34
VA-34 VA-35	Cod Creek	Heathsville	35
VA-36	Presley Creek	Heathsville	35
VA-37	Cordreys Beach	Heathsville	35
VA-38	Marshalls Beach	Burgess	36
VA-40	Gaskin Pond	Reedville	37
VA-41	Owens Pond	Reedville	37
VA-42	Chesapeake Beach	Reedville	37
VA-43	Fleet Point	Reedville	37
VA-44	Bussel Point	Reedville	37
VA-45	Harveys Creek	Reedville	37 37
VA-46	Ingram Cove	Reedville	38
V/A = 11"	Dluff Doint Mock	Fleets Bay	38
VA-47	Bluff Point Neck Barnes Creek	Fleets Bay Fleets Bay	38
VA-48 VA-49	North Point	Fleets Bay	38
VA-49 VA-50	Windmill Point	Deltaville	39
VA-51	Deep Hole Point	Fleets Bay	38
		Deltaville	39
VA-52	Sturgeon Creek	Deltaville	39
VA-53	Jackson Creek	Deltaville	39
VA-54	Stove Point	Deltaville	39
VA-55	Rigby Island/		
	Bethel Beach	Mathews	40
		New Point Comfort	41
VA-56	New Point Comfort	New Point Comfort	41
VA-57	Ware Neck	Achilles	42
VA-57A	Severn River	New Point Comfort Achilles	41 42

MAP KEY

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and sign gip gift side tops and seed	Existing CBRS units
	Proposed additions to or deletions from CBRS
ADD	Area recommended for addition to a CBRS unit
DELETE	Area recommended for deletion from the CBRS
EXCLUDED	Area excluded from an existing or proposed CBRS unit because it is developed or it is otherwise protected



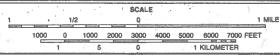


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QUADRANGLE

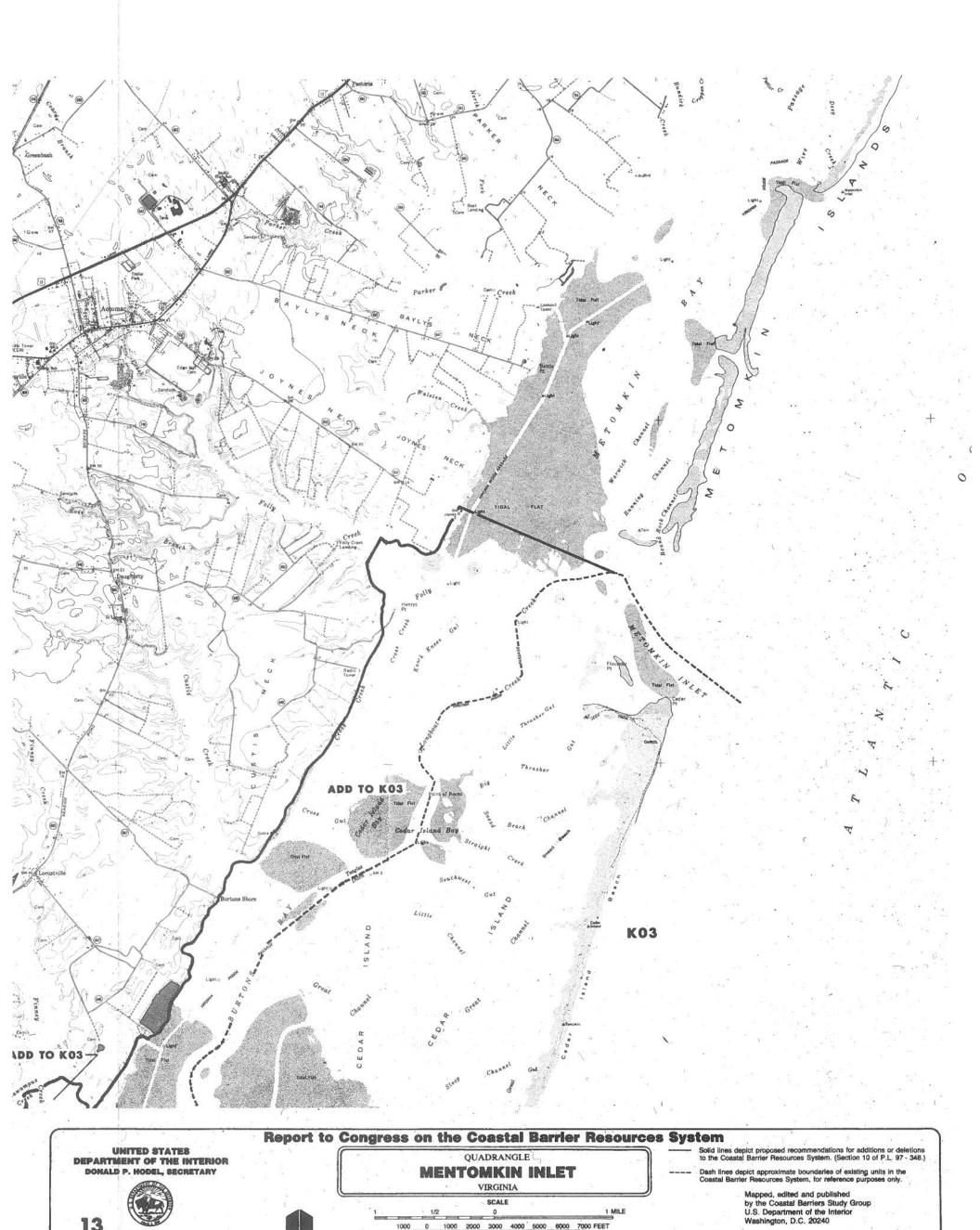


VIRGINIA



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.

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SCALE

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

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Report to Congress on the Coastal Barrier Resources System

QUADRANGLE

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



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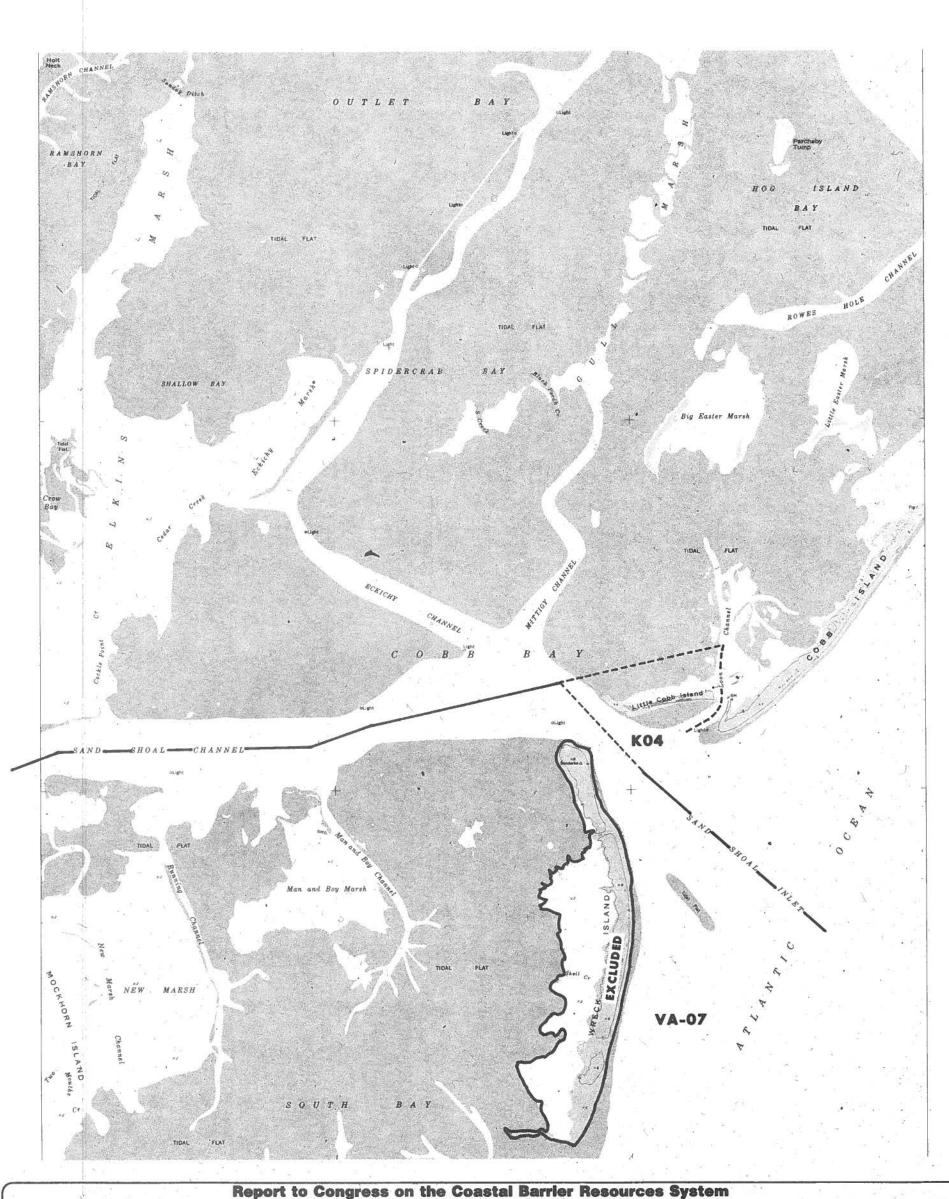
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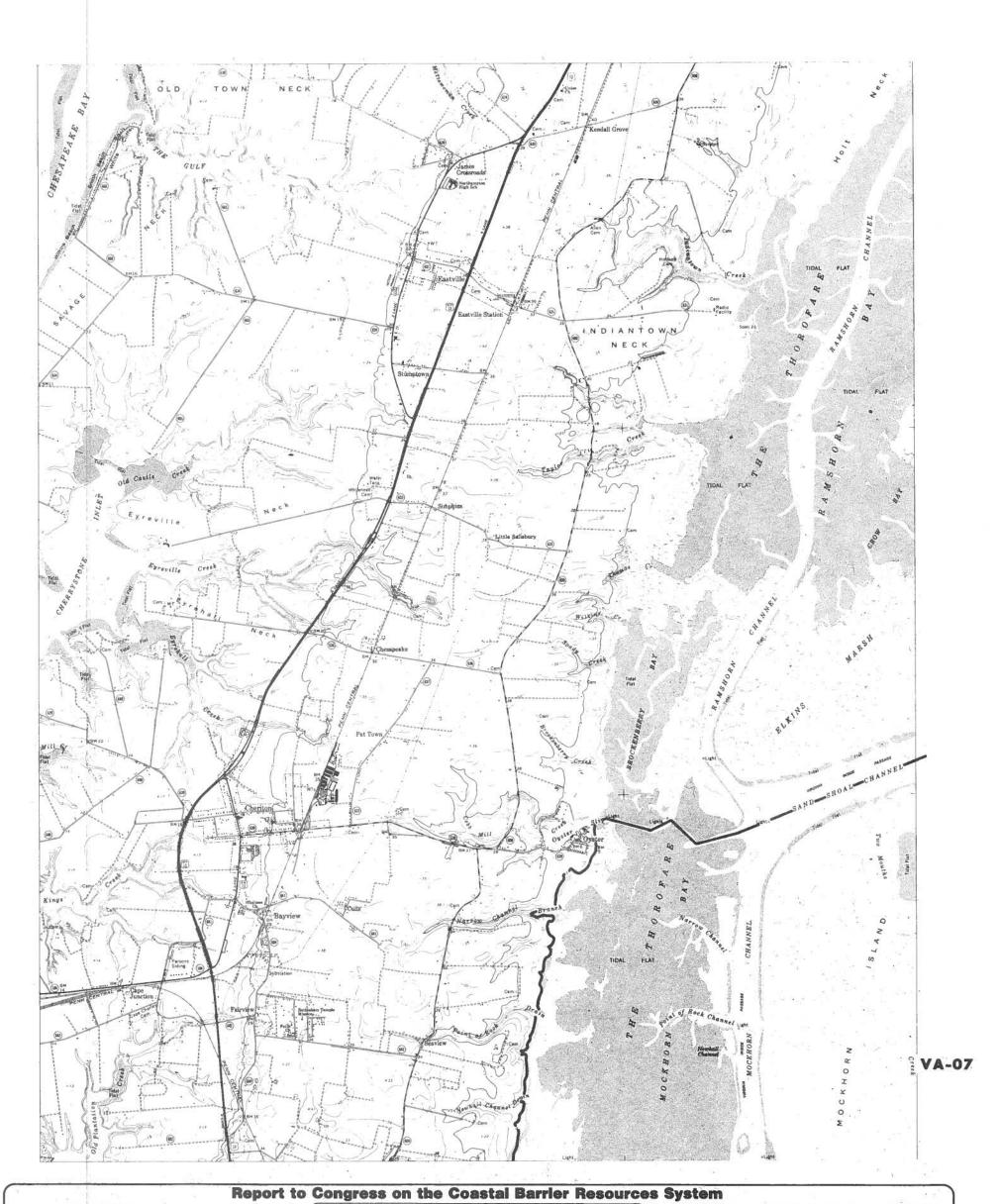
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QUADRANGLE CHERITON

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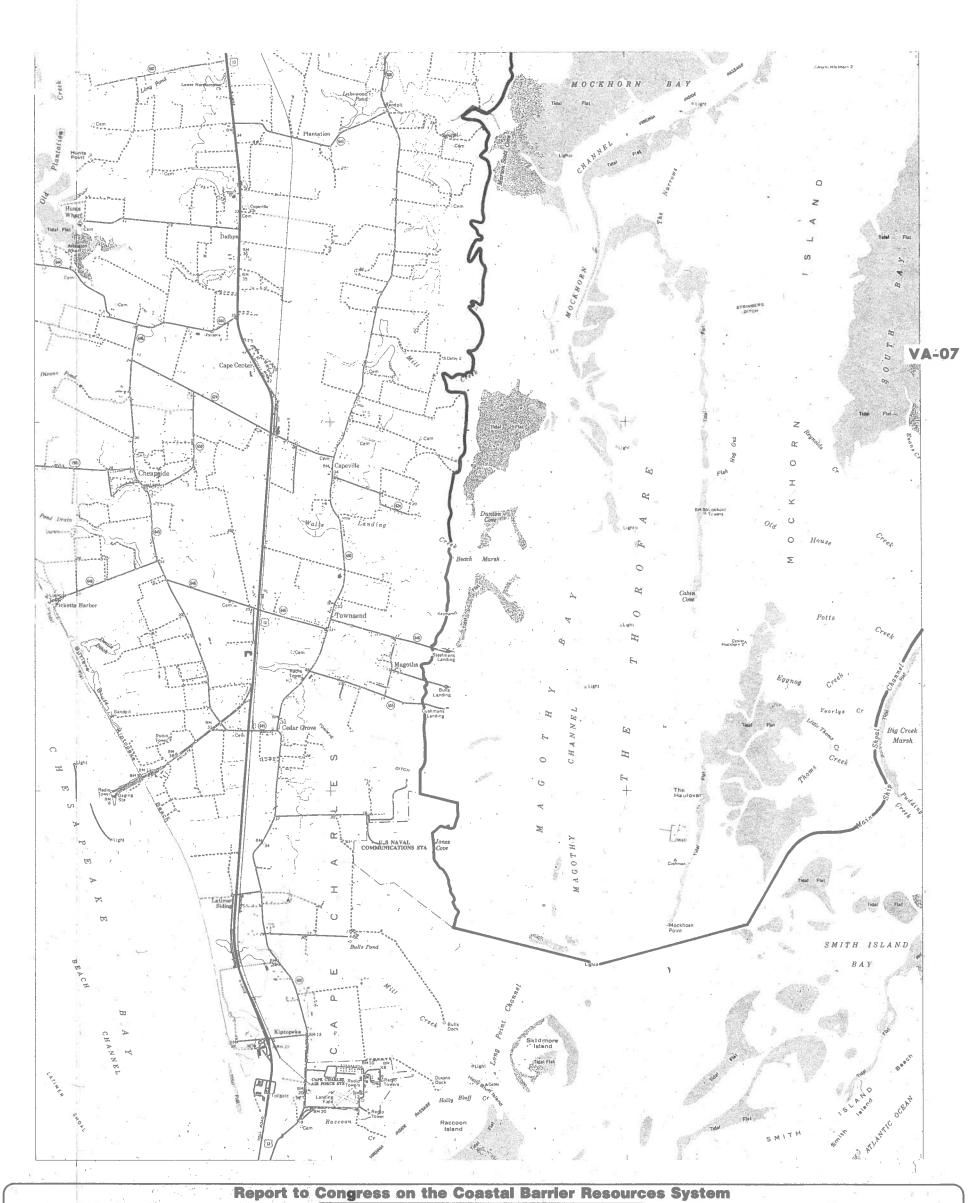
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Washington, D.C. 20240

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



QUADRANGLE

TOWNSEND

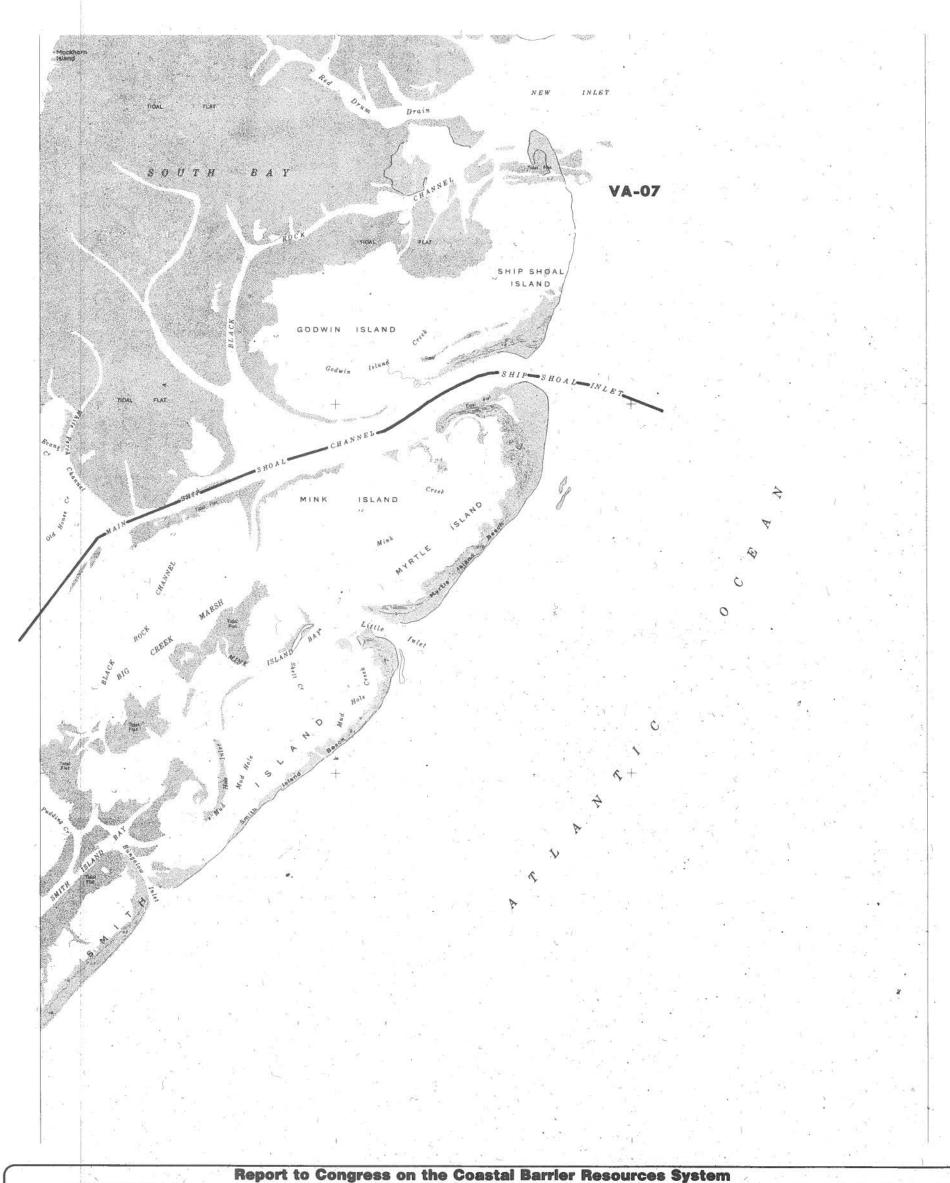
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SCALE 1 MILE 1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
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· QUADRANGLE

SHIP SHOAL INLET

VIRGINIA

| SCALE | 1 MILE | 1000 | 0 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 | FEET | 1 | / 5 | 0 | 1 KILOMÉTER |

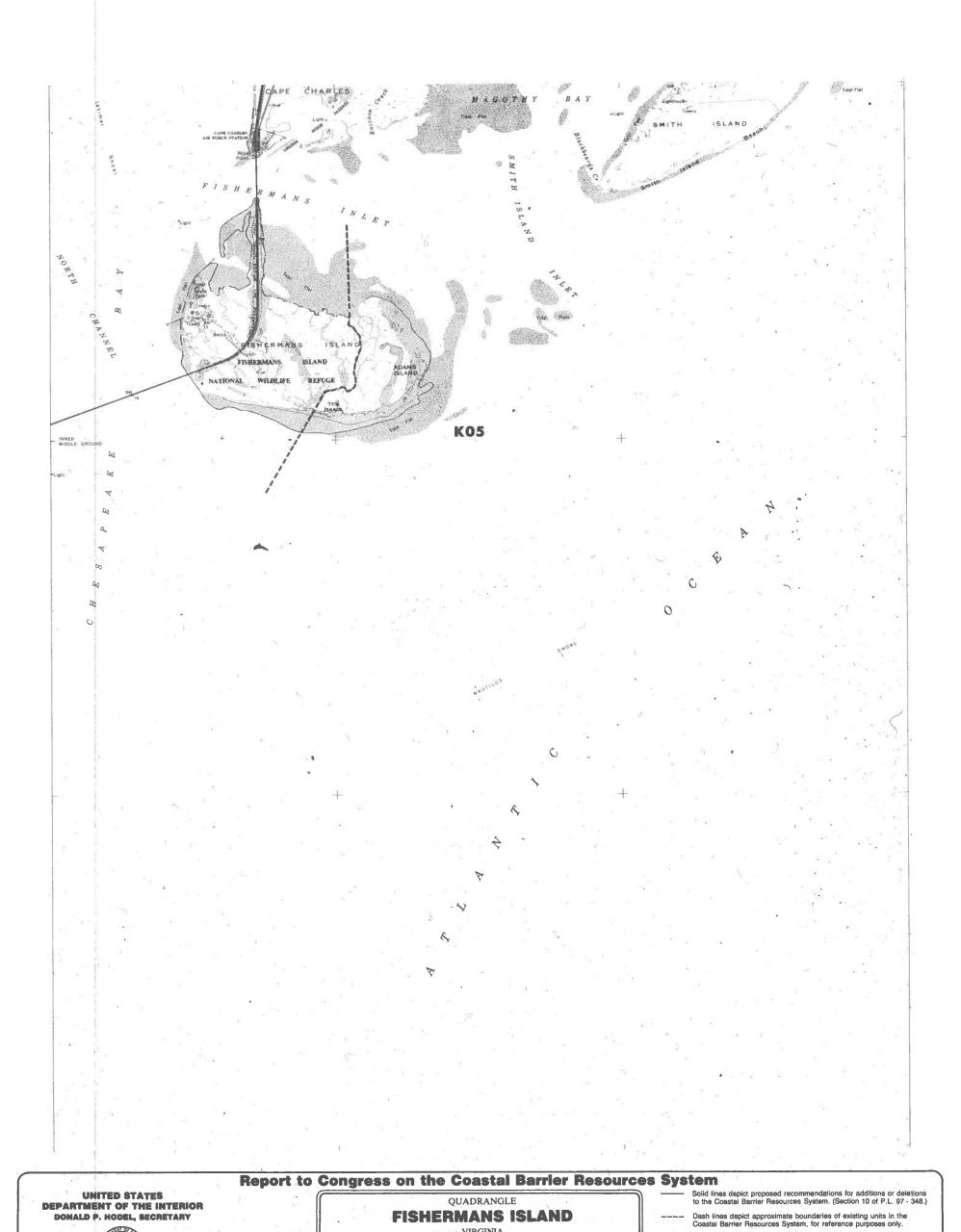
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Base Map is the U.S. Geological Survey 1:24,000 scale quadrangle.



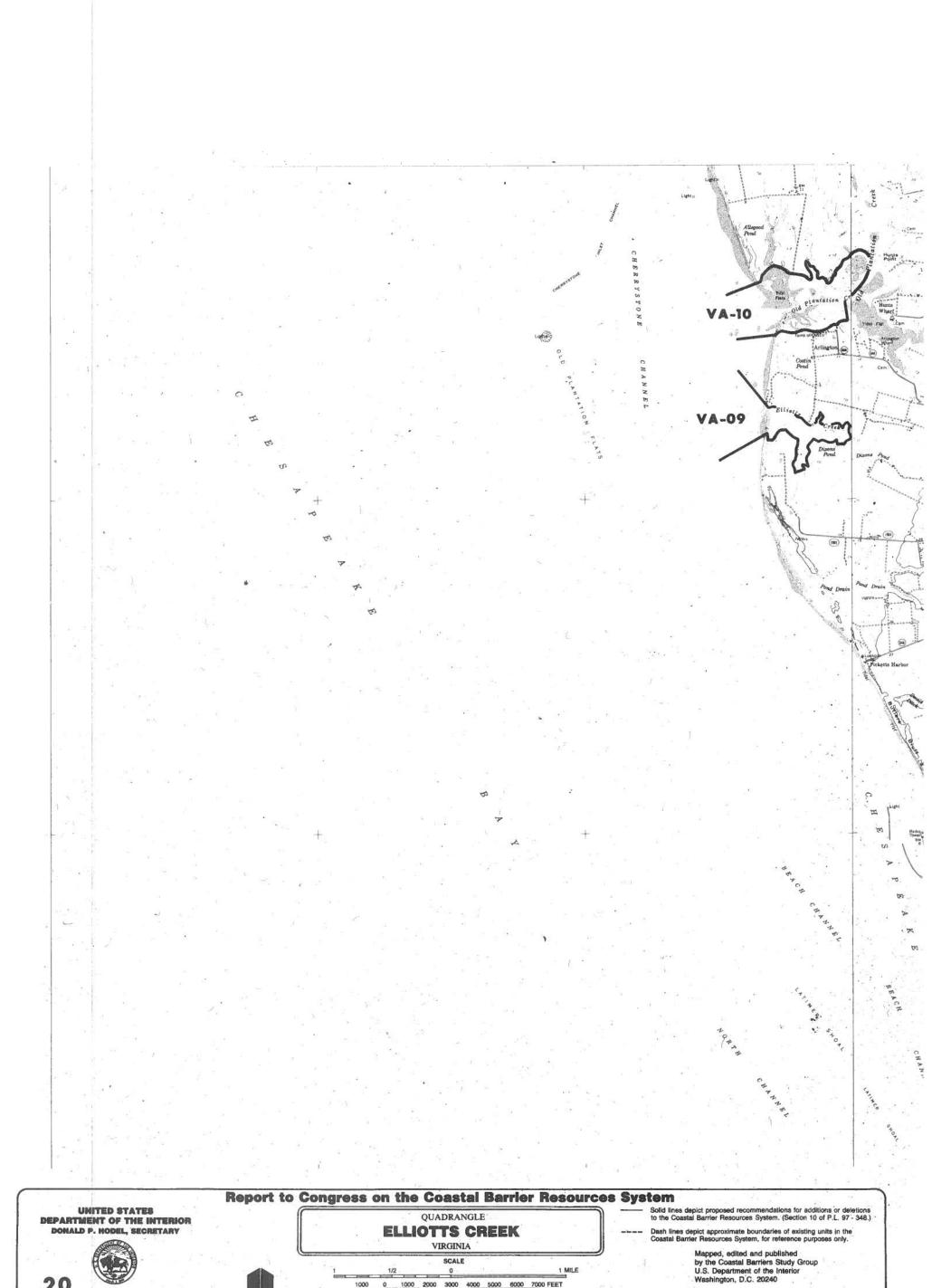
VIRGINIA

SCALE

1 5 0 1 KILOMETER

1 MILE

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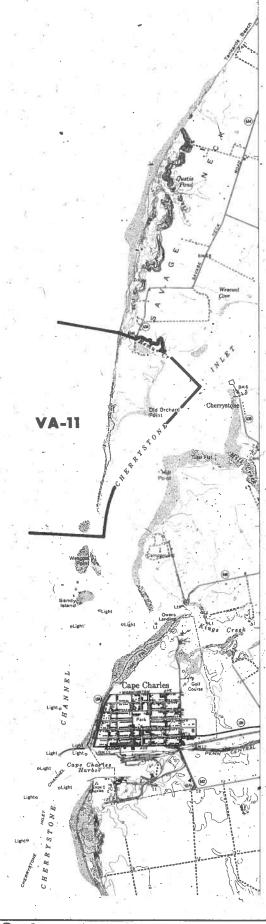
SCALE

1 5 0 1 KILOMETER

1 MILE

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

20



Report to Congress on the Coastal Barrier Resources System

UNITED STATES
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QUADRANGLE **CAPE CHARLES** VIRGINIA

H

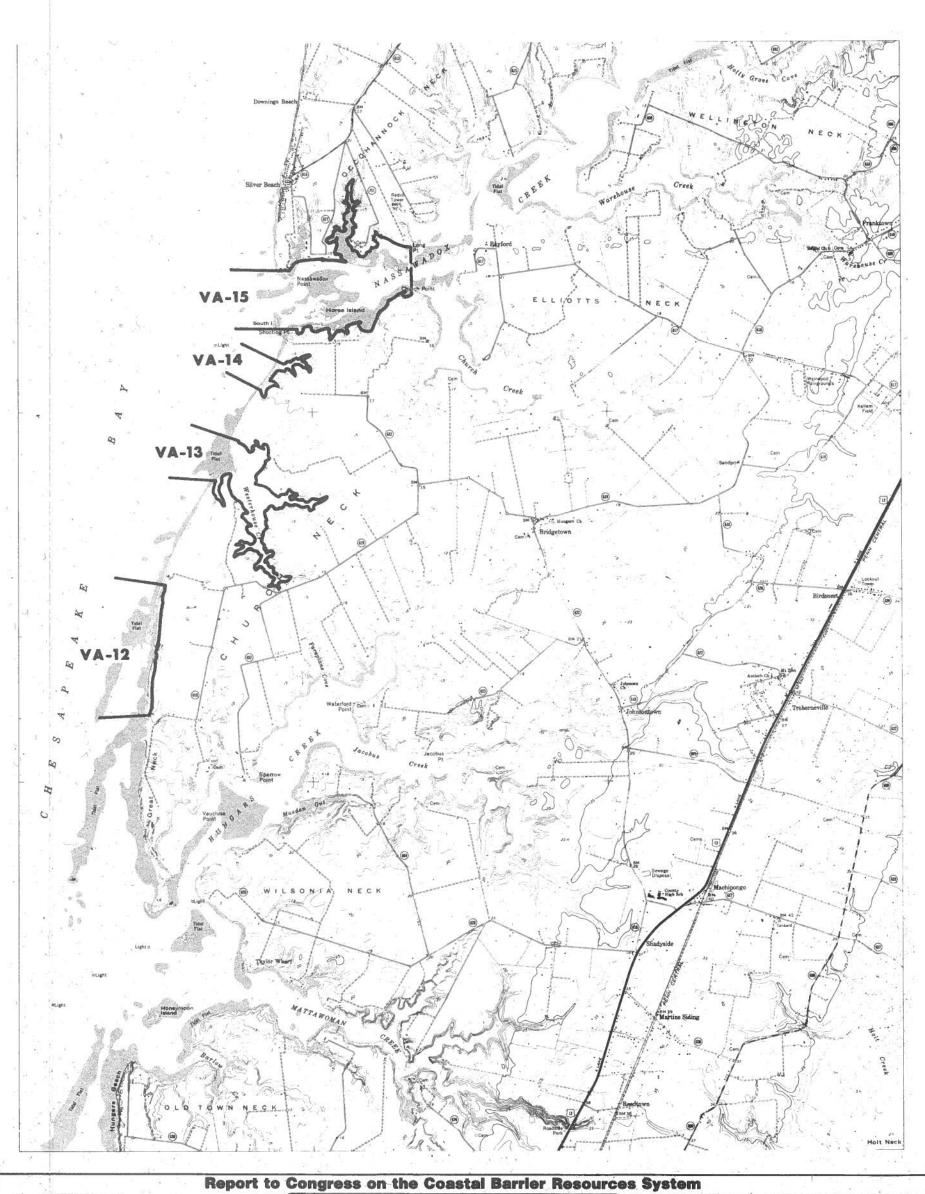
North

SCALE 1 MILE 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 5 0 1 KILOMETER 1000

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QUADRANGLE FRANKTOWN

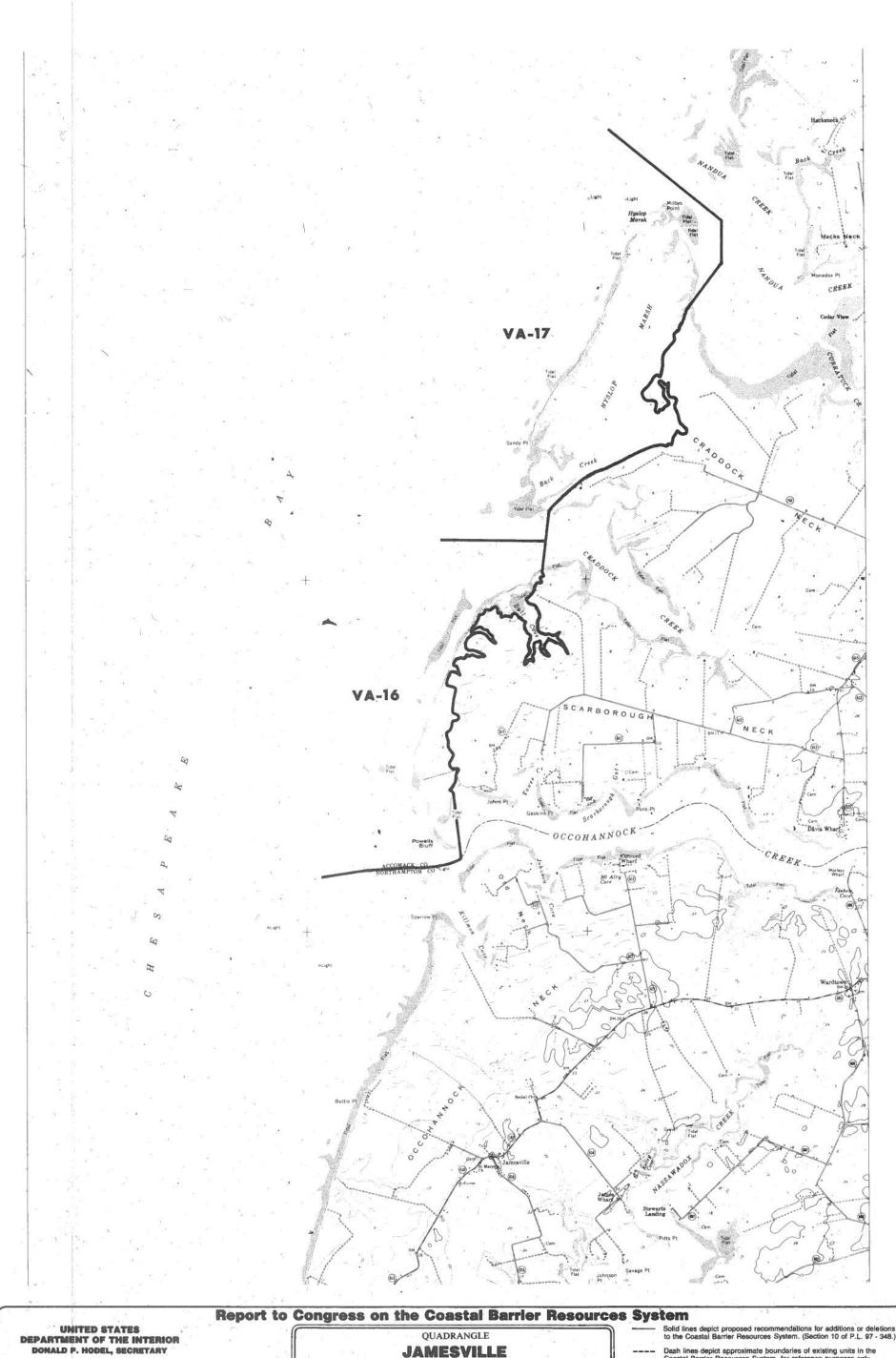
VIRGINIA

| 1/2 | 0 | 1 MILE | 1000 | 0 1000 | 2000 | 3000 | 4000 | 5000 | 8000 | 7000 | FEET | 1 | 5 | 0 | 1 KILOMETER |

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JAMESVILLE VIRGINIA

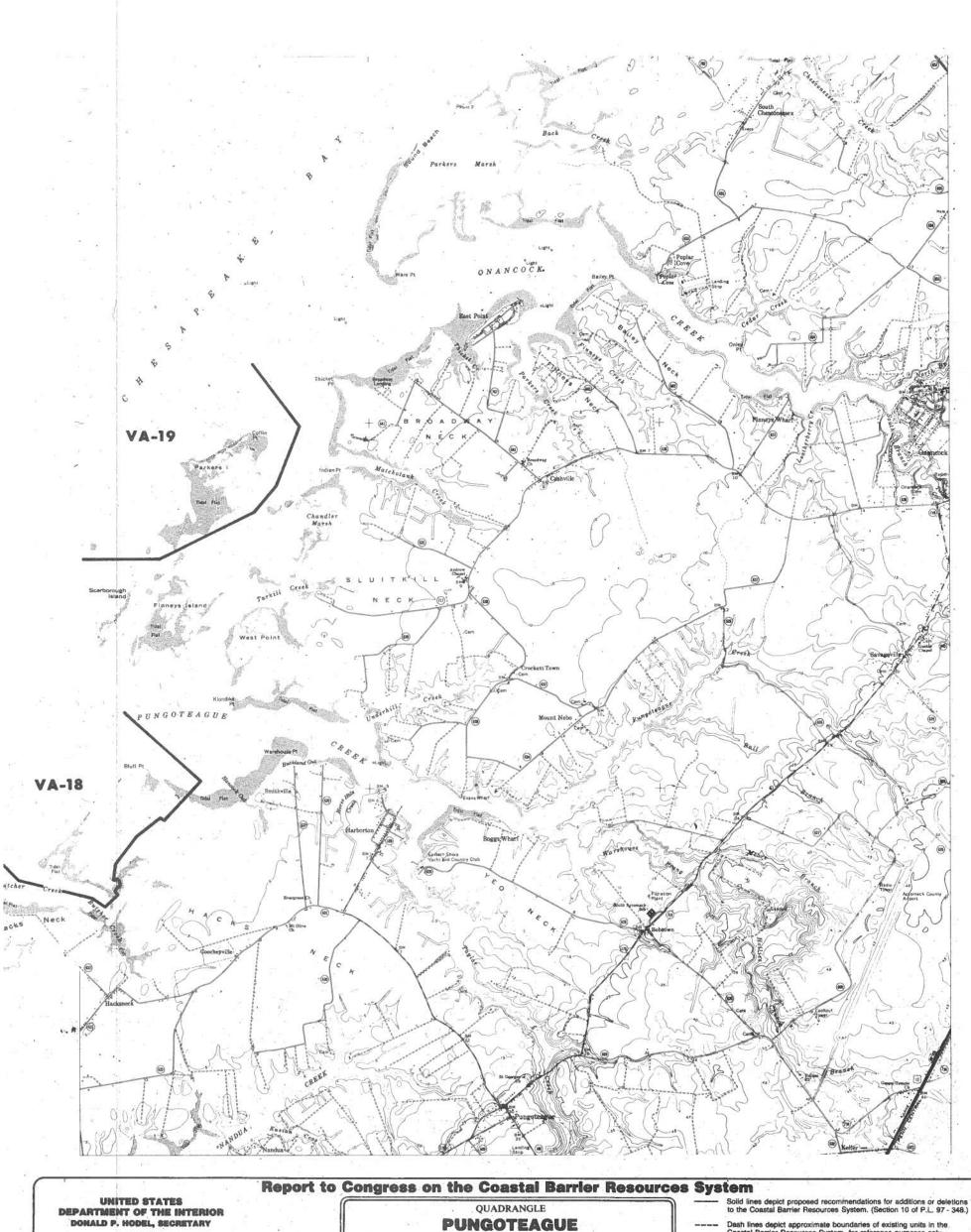
1 MILE 1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

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QUADRANGLE

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QUADRANGLE

PUNGOTEAGUE

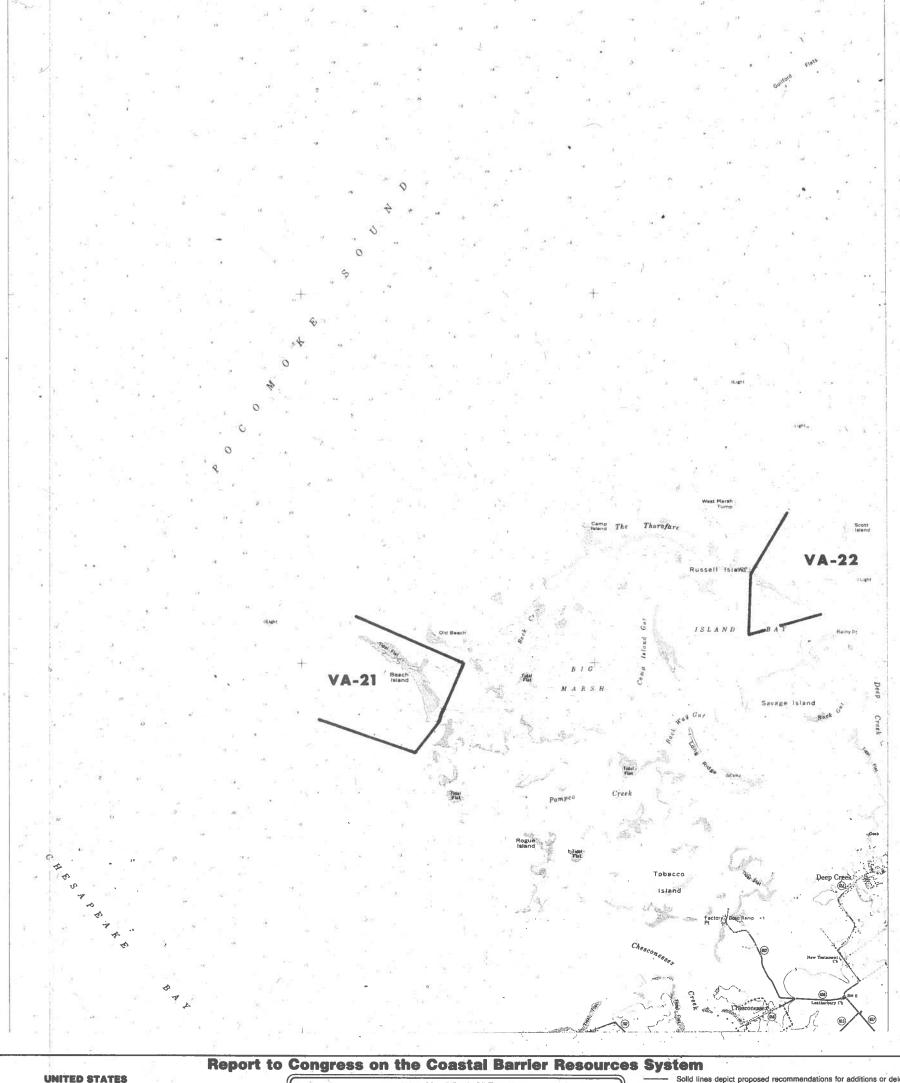
VIRGINIA

SCALE 1 MILE 1 5 0 1 KILOMETER .

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QUADRANGLE

CHESCONESSEX

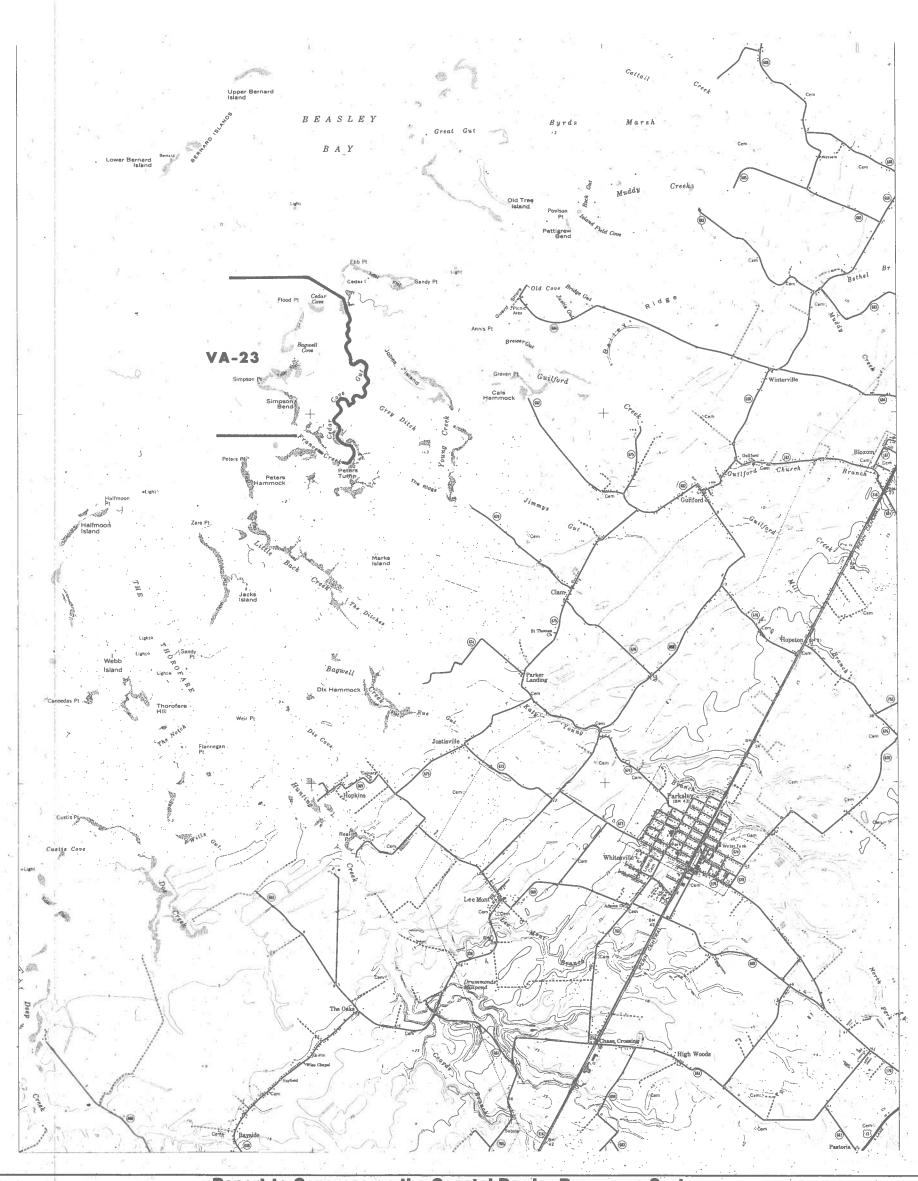
VIRGINIA

SCALE 1 MILE 1000 2000 3000 4000 5000 6000 7000 FEET
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North

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QUADRANGLE PARKSLEY

 VIRGINIA

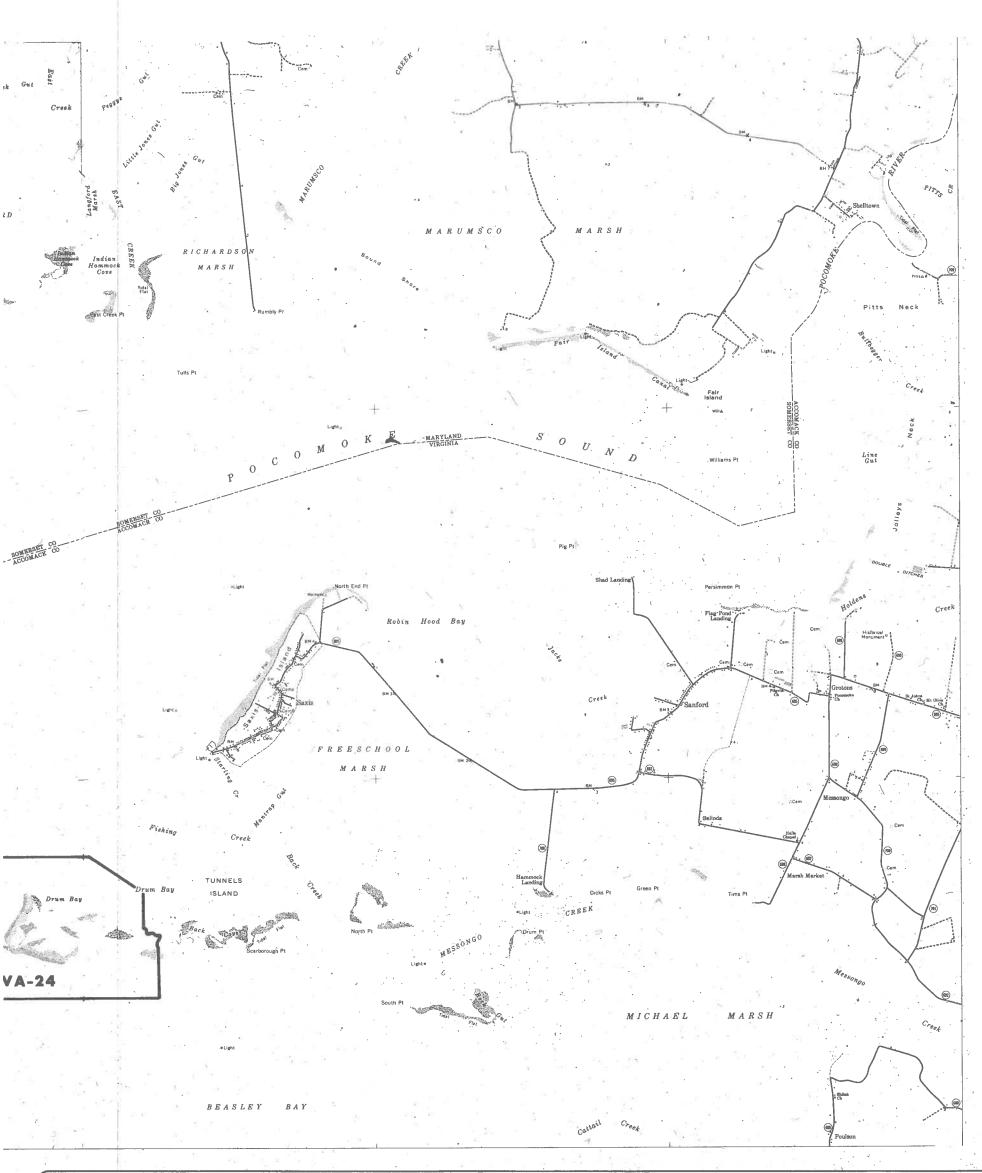
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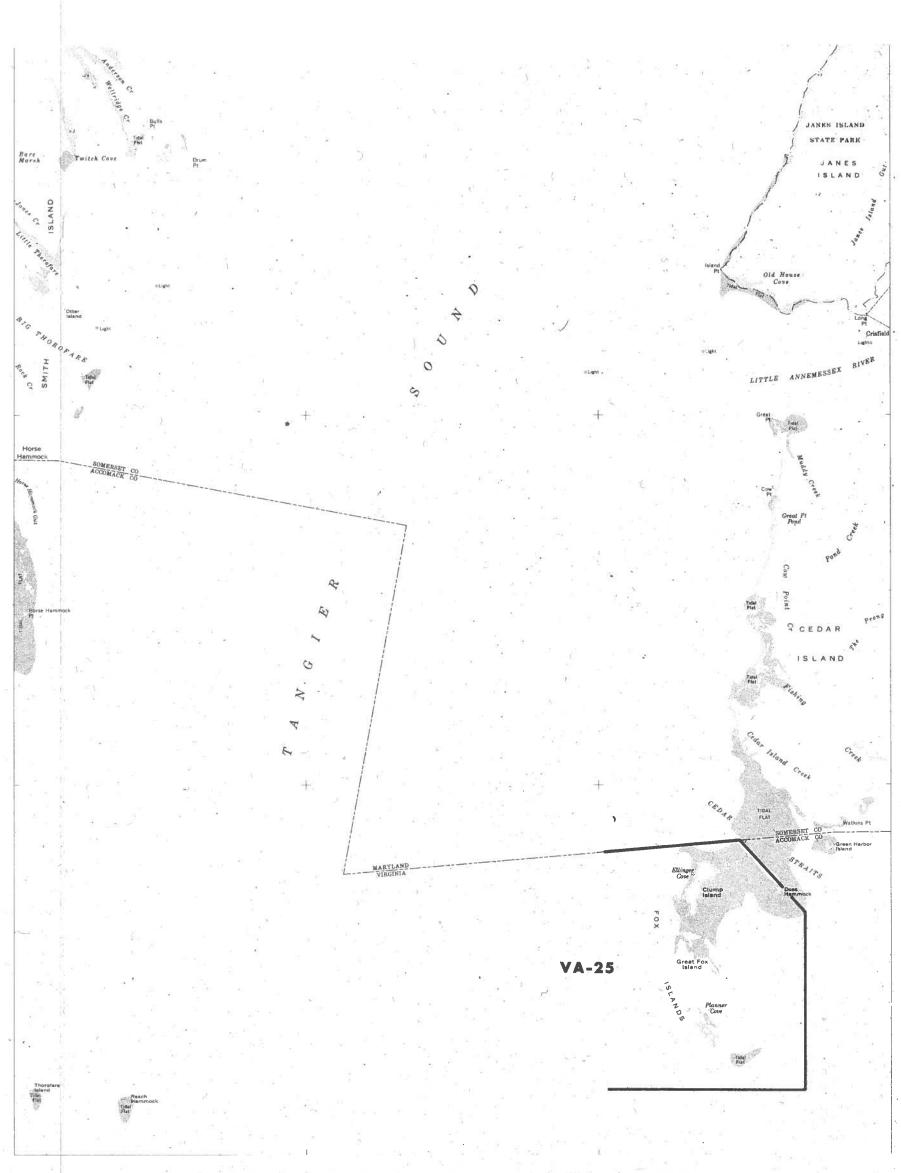
27

North

QUADRANGLE SAXIS VIRGINIA SCALE 1 MILE . 1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

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North

QUADRANGLE

GREAT FOX ISLAND

VIRGINIA

1 MILE

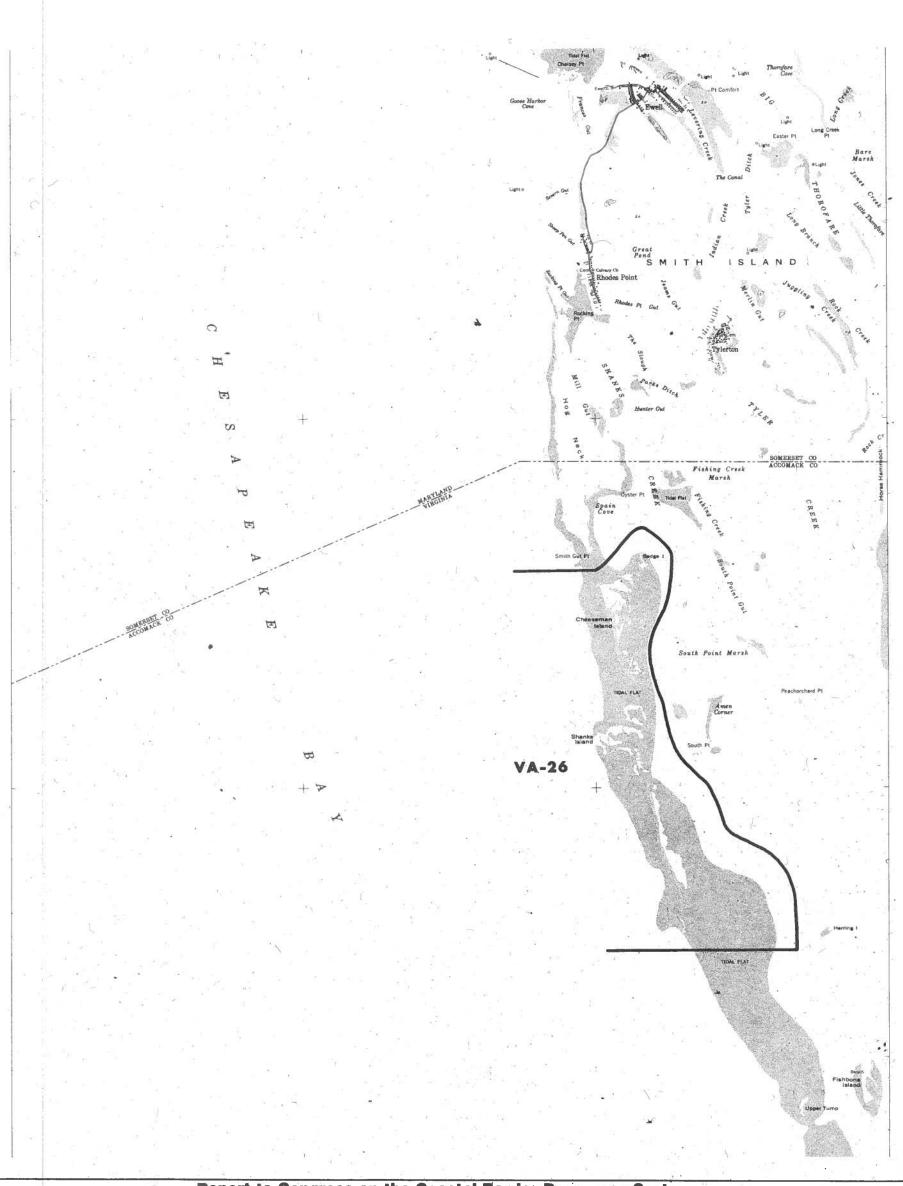
SCALE
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1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 5 0 1 KILOMETER

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QUADRANGLE
EWELL, MD
VIRGINIA

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Report to Congress on the Coastal Barrier Resources System

QUADRANGLE
TANGIER ISLAND

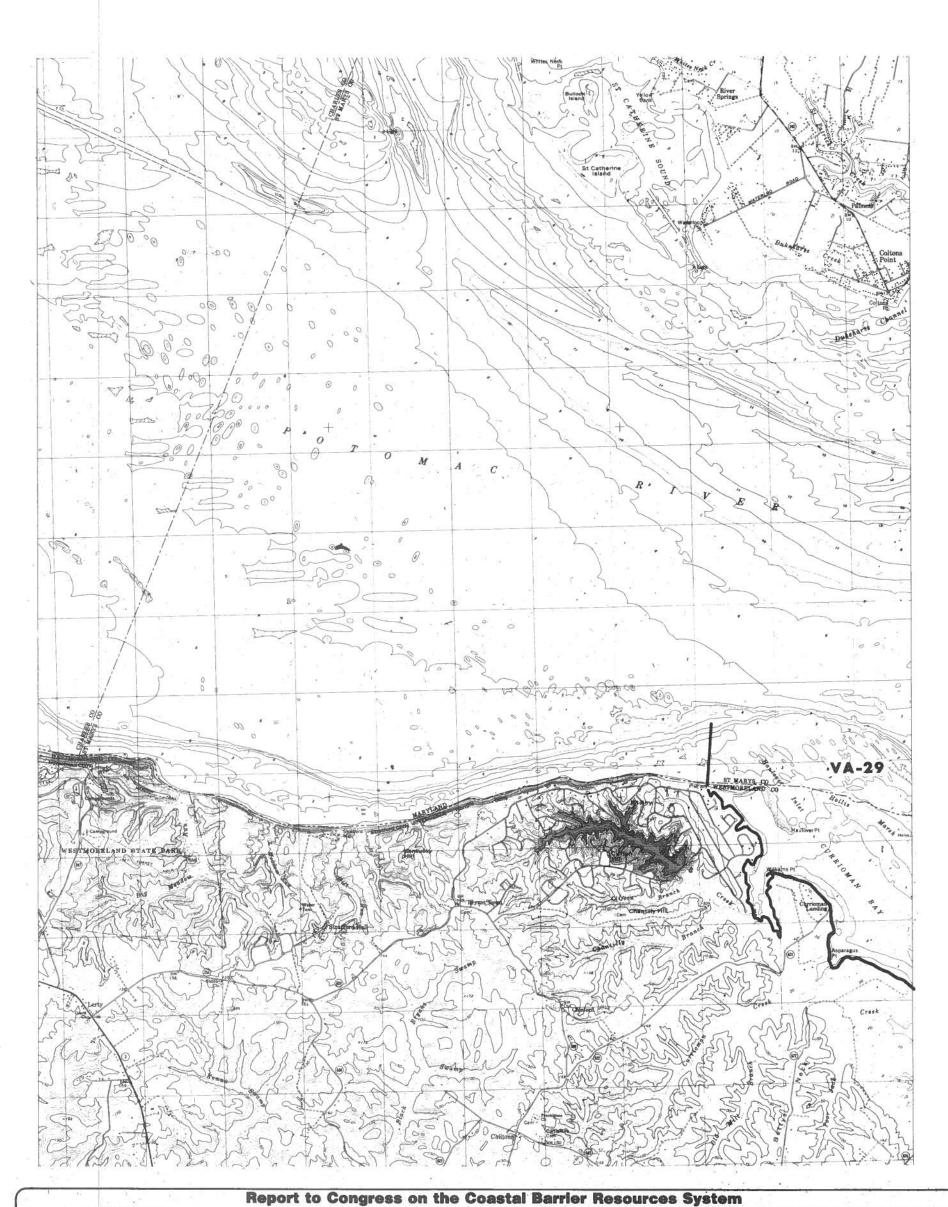
VIRGINIA

| 1/2 | SCALE | 1 MILE | 1000 | 0 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 | FEET | 1 | 5 | 0 | 1 KILOMETER |

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QUADRANGLE STRATFORD HALL

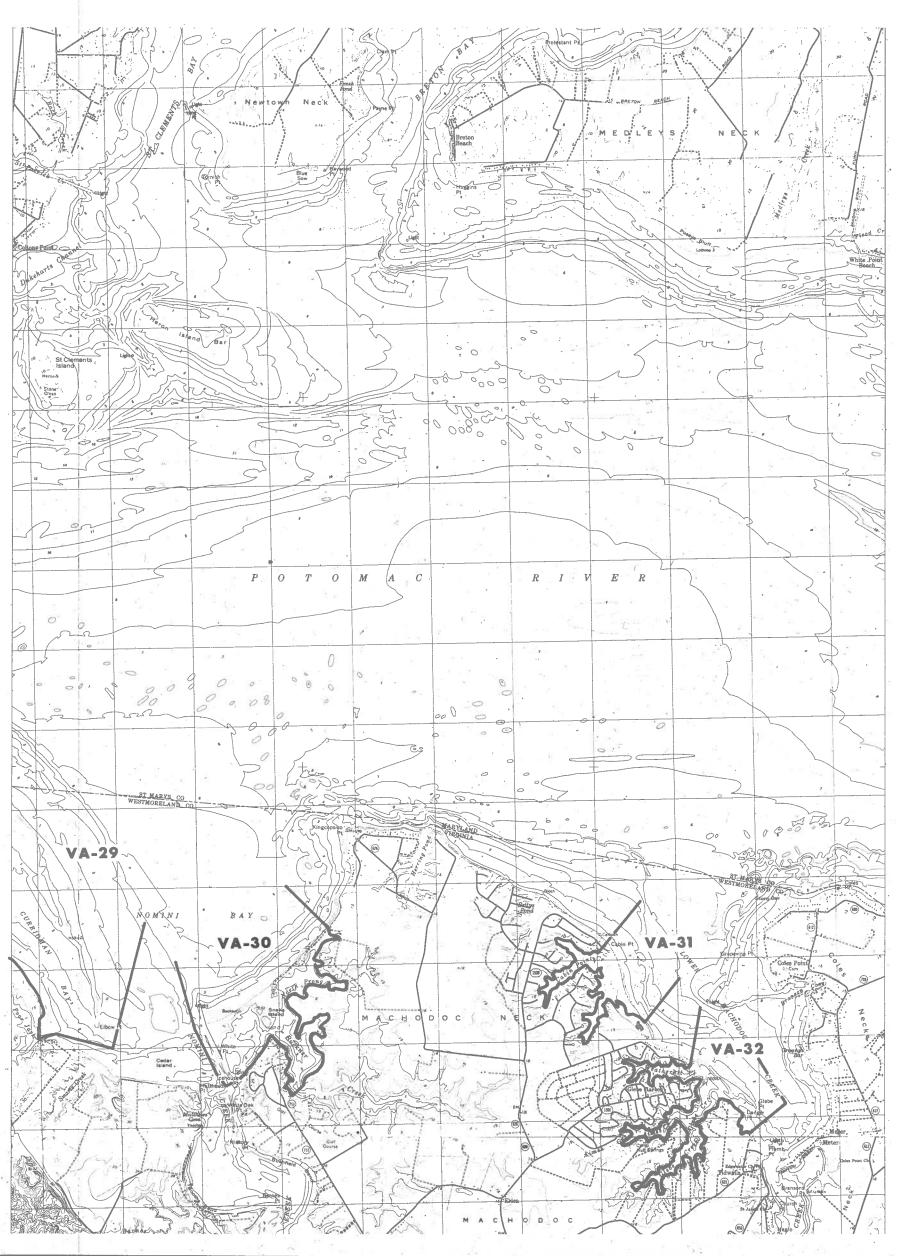
VIRGINIA

| SCALE | 1 MILE | 1000 | 1 MILE | 1000 | 0 1000 2000 3000 4000 5000 6000 7000 FEET | 1 5 0 1 KILOMETER

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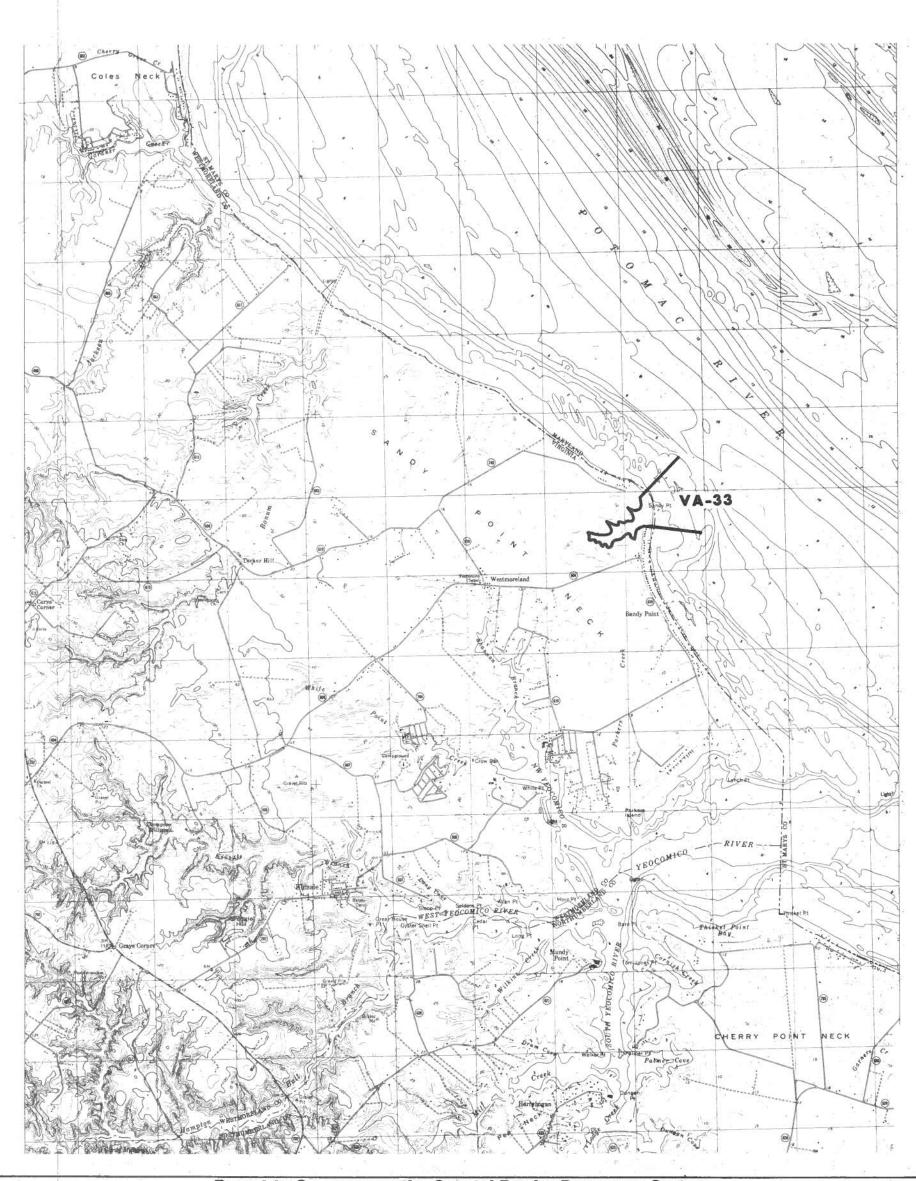
QUADRANGLE
SAINT CLEMENTS ISLAND
VIRGINIA

1 1/2 SCALE 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 5 0 1 KILOMETER

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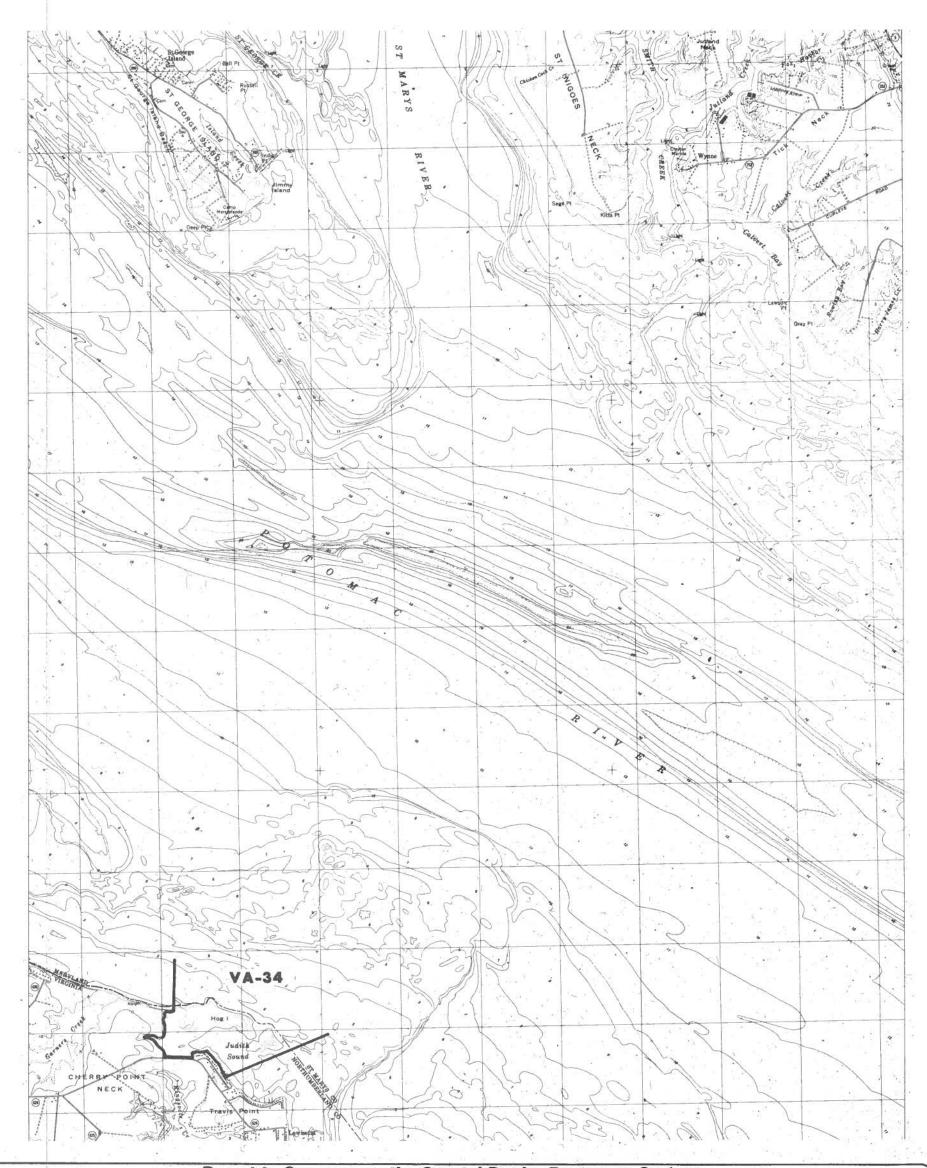
QUADRANGLE KINSALE VIRGINIA

1/2 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 5 0 1 KILOMETER

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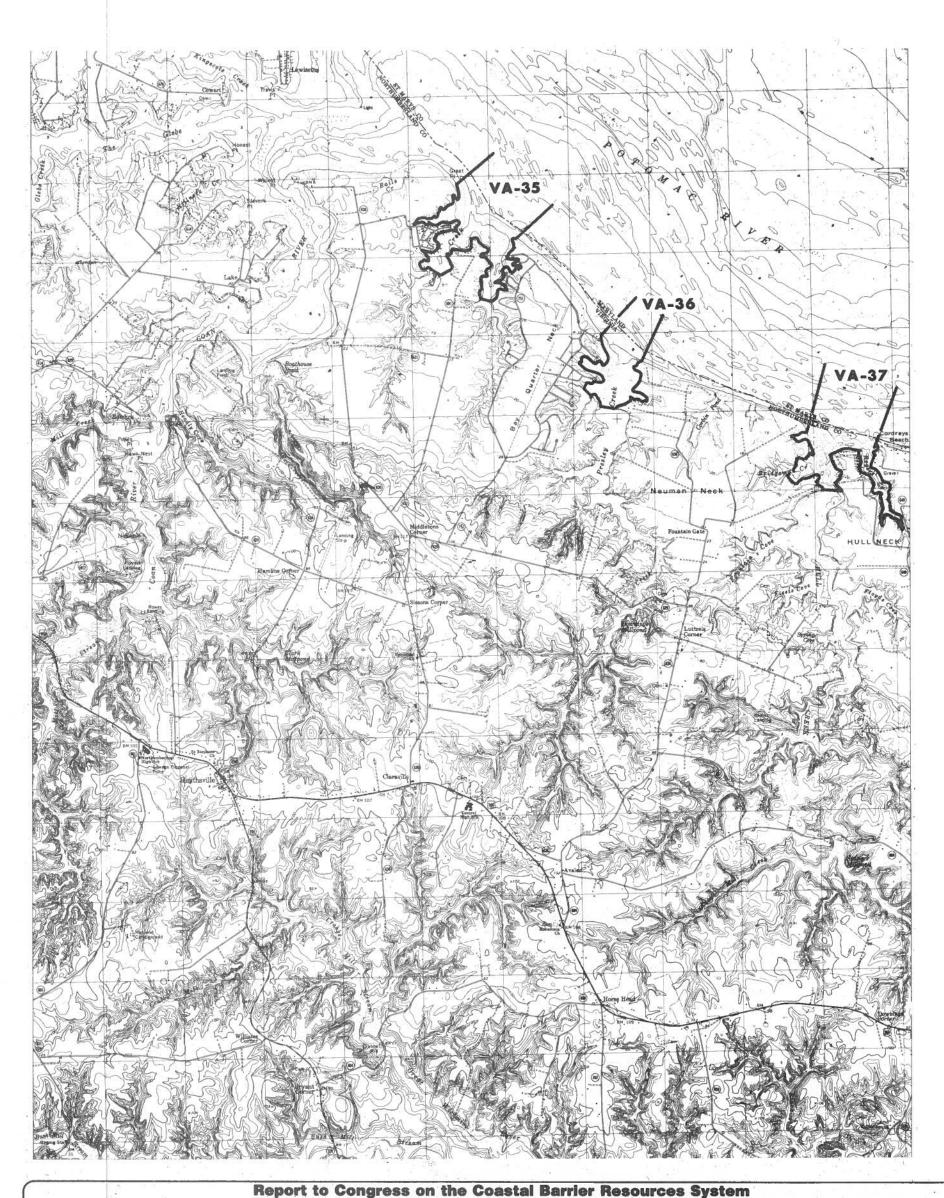
QUADRANGLE ST. GEORGE ISLAND

VIRGINIA

SCALE 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 5 0 1 KILOMETER 1000

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QUADRANGLE

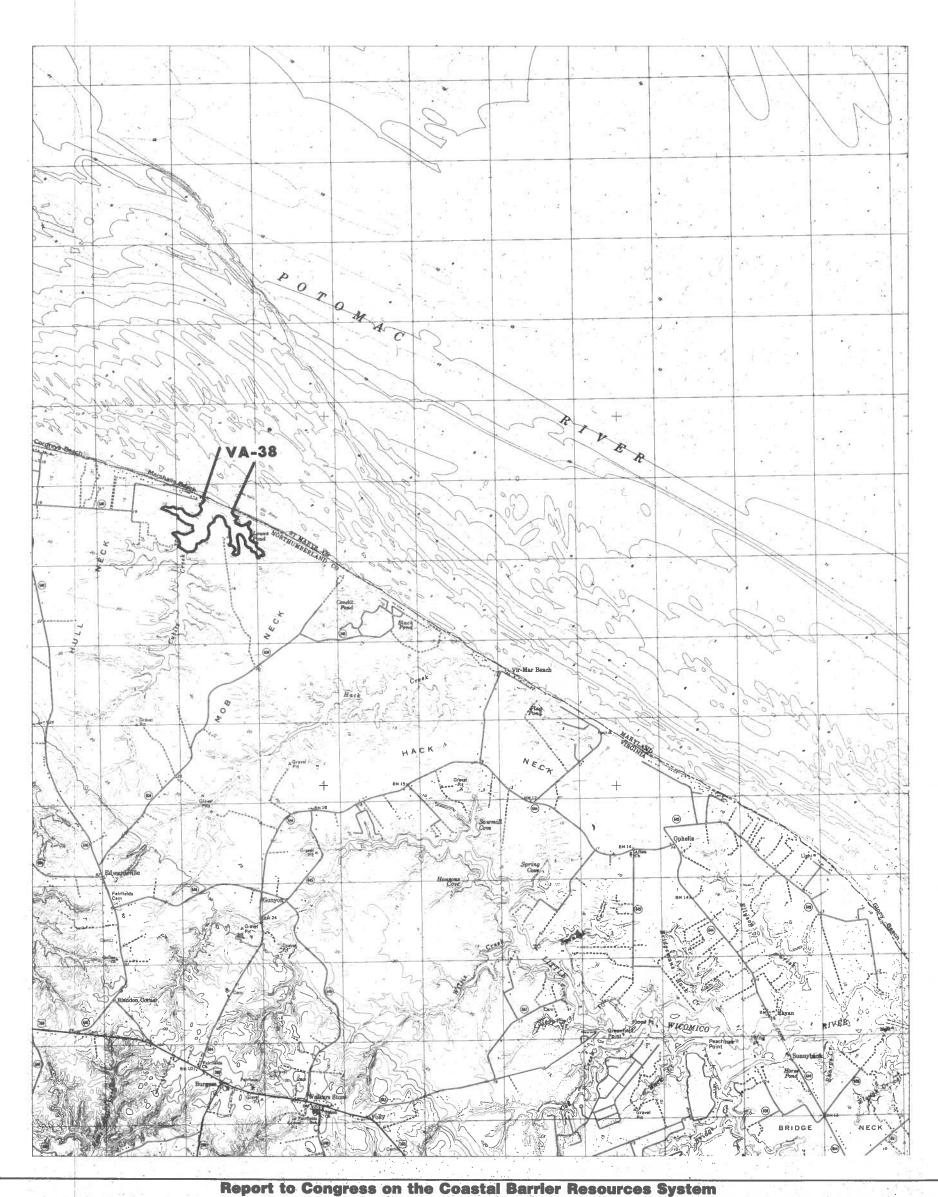
HEATHSVILLE

VIRGINIA

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QUADRANGLE

BURGESS

VIRGINIA

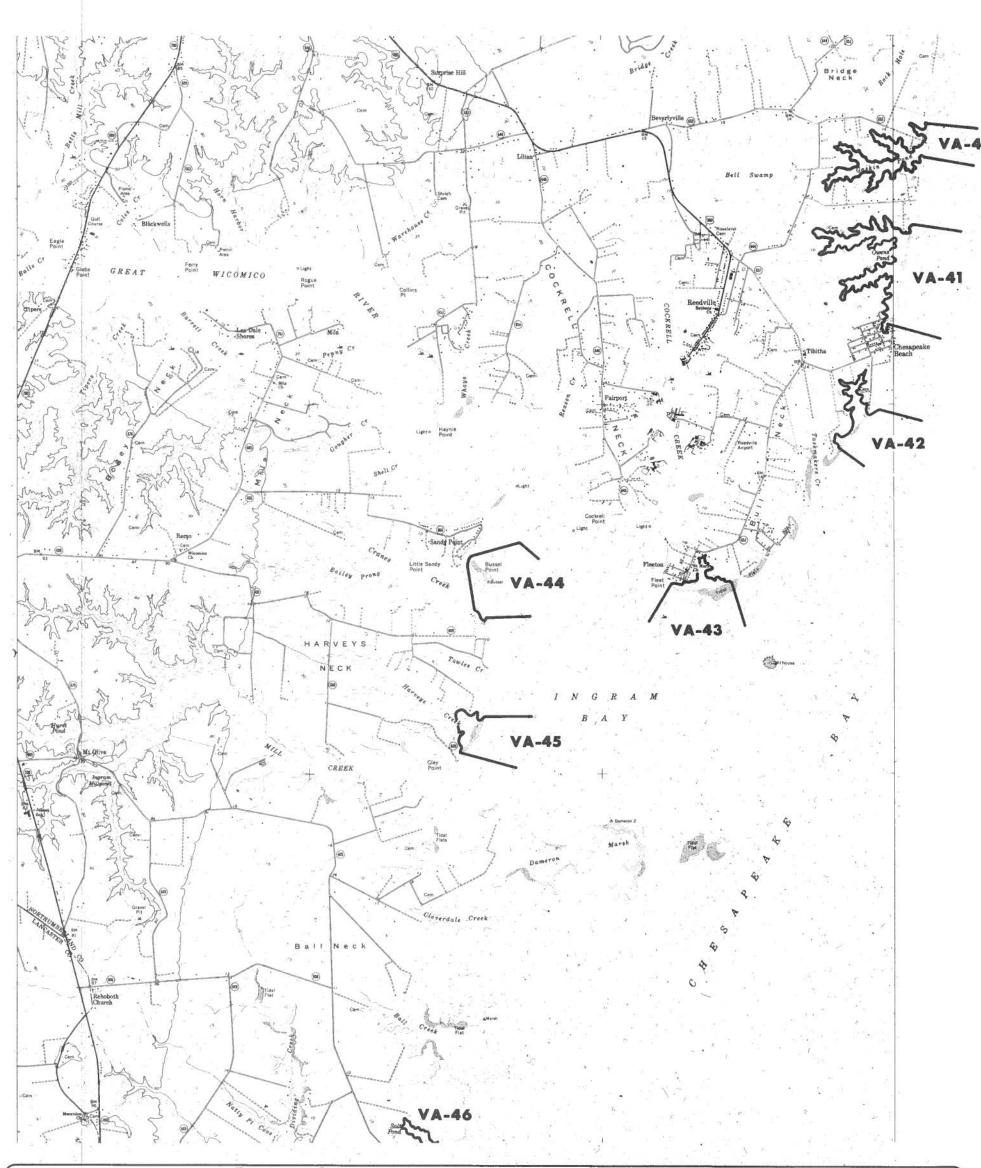
SCALE 1 MILE 1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

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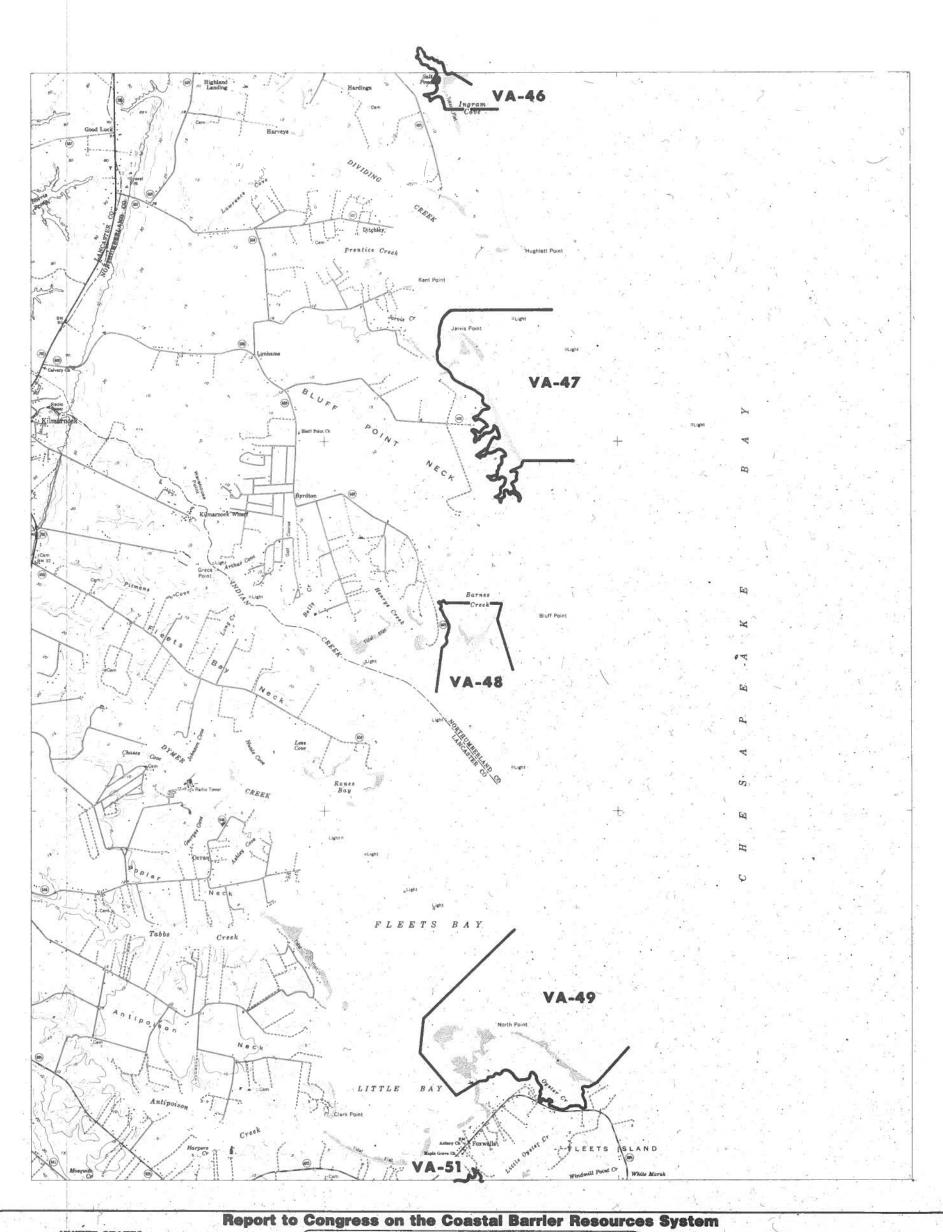
VIRGINIA

1, 1/2 0 1 MILE 1000 0 1000 2000 3000 4000 5000 8000 7000 FEET 1 5 0 1 KILOMETER Solid lines depict proposed recommendations for additions or deletions to the Coastal Barrier Resources System. (Section 10 of P.L. 97 - 348.)

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38

North

QUADRANGLE FLEETS BAY

VIRGINIA

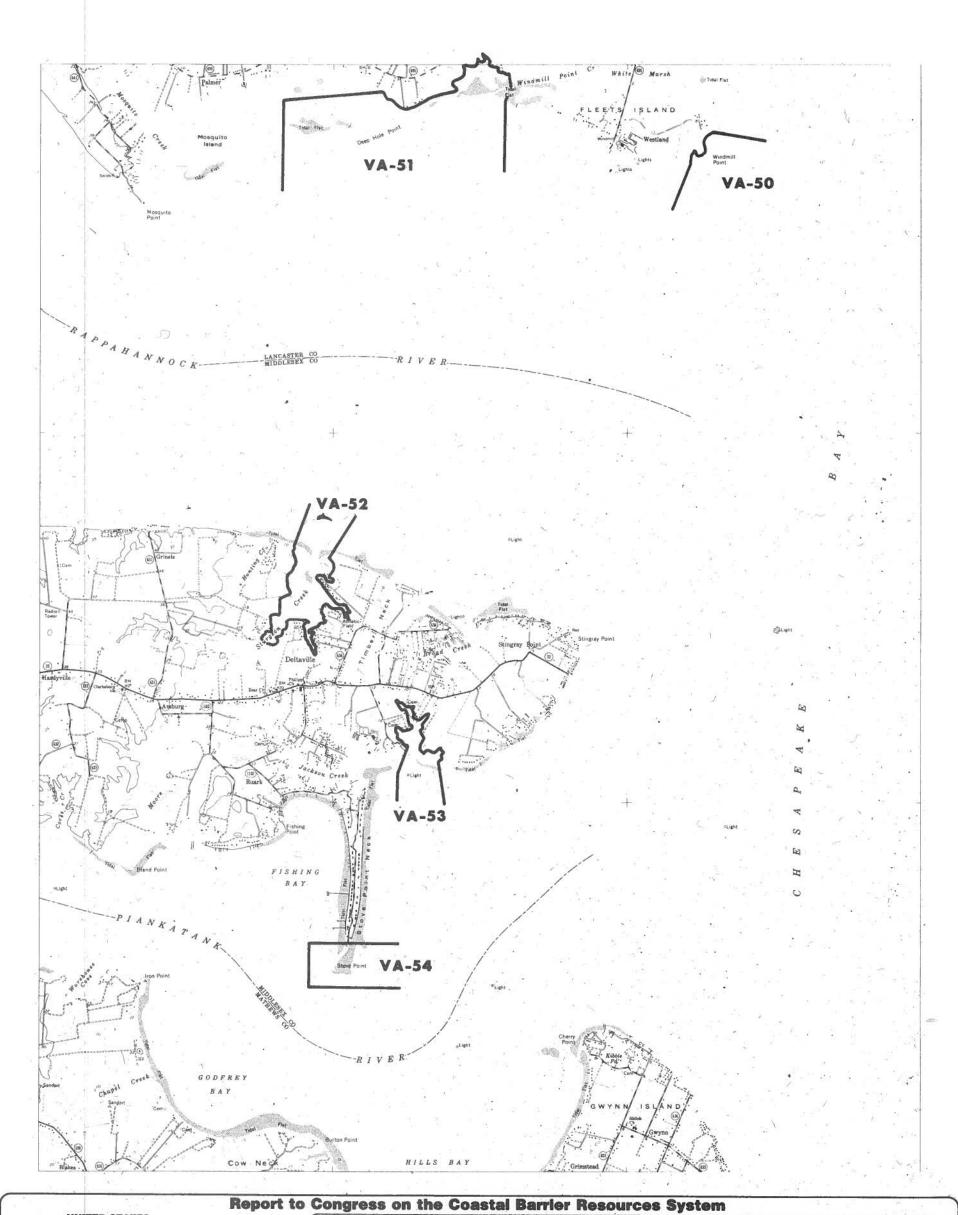
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QUADRANGLE

DELTAVILLE VIRGINIA

SCALE

1 1/2 0 1 MILE

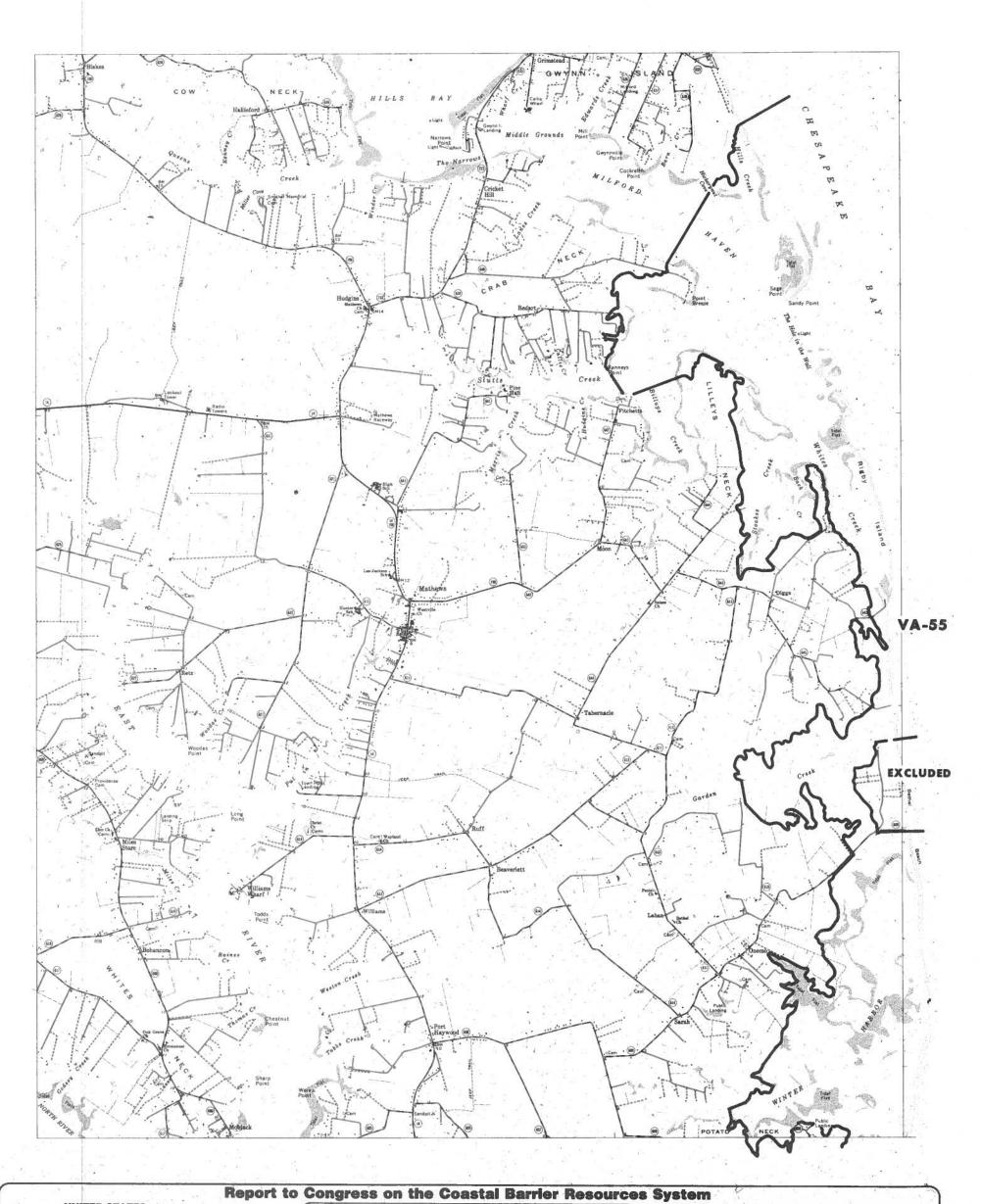
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QUADRANGLE

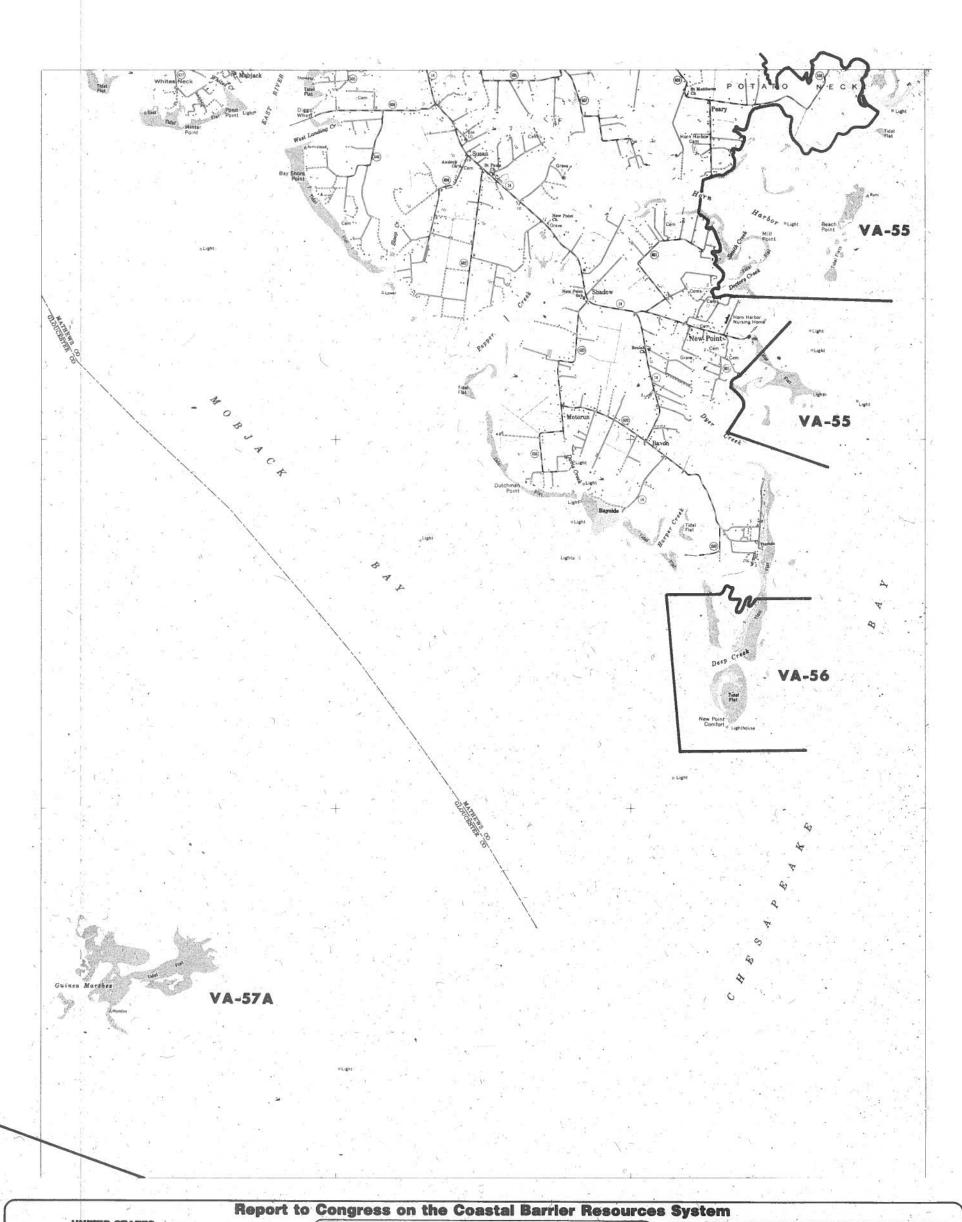
VIRGINIA

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1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 5 0 1 KILOMETER

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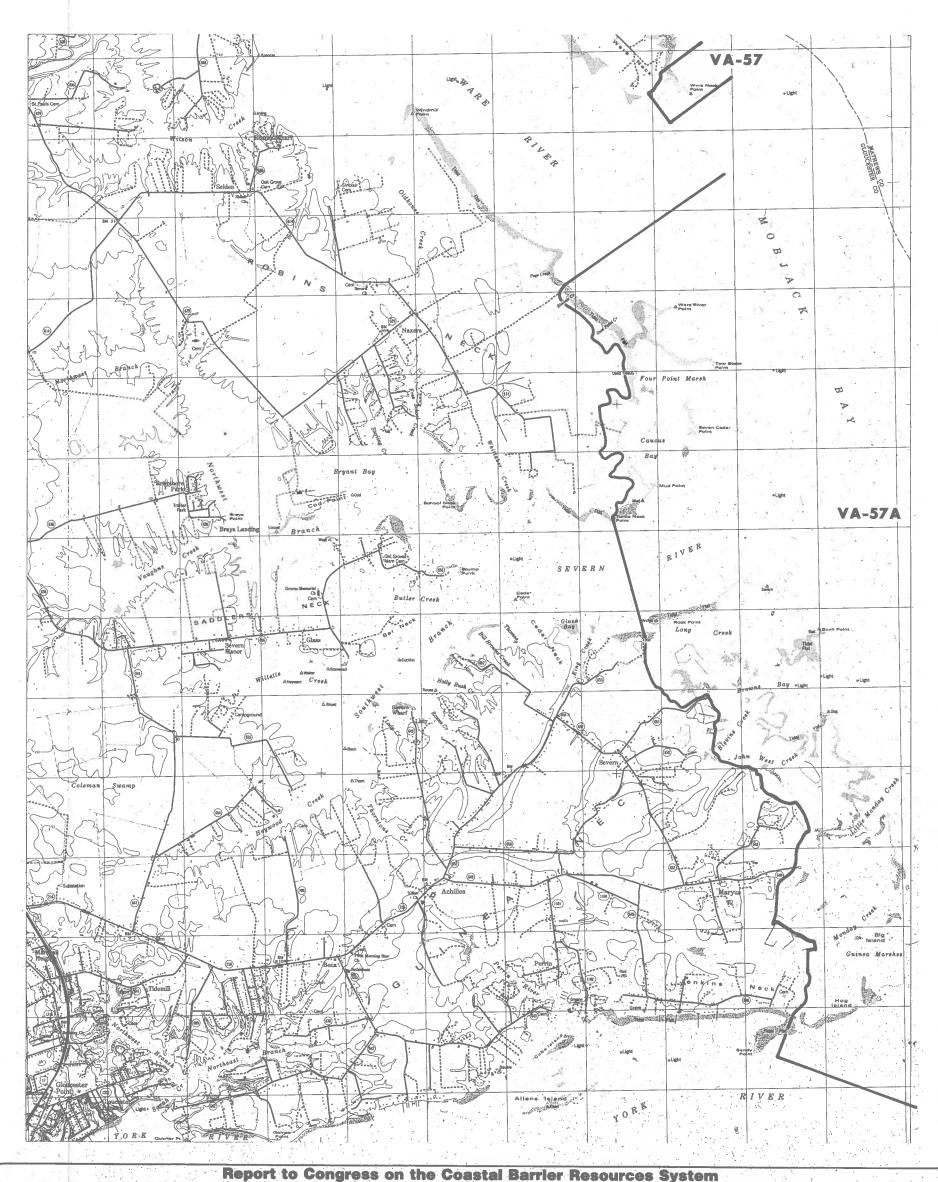
North

QUADRANGLE **NEW POINT COMFORT**

VIRGINIA SCALE 1 5 0 1 KILOMETER Solid lines depict proposed recommendations for additions or deletions to the Coastal Barrier Resources System. (Section 10 of P.L. 97 - 348.)

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OLIADRANGLE

QUADRANGLE ACHILLES

VIRGINIA

1/2 0 1 MILE 1000 0 1000 2000 3000 4000 5000 6000 7000 FEET 1 5 0 1 KILOMETER Solid lines depict proposed recommendations for additions or deletions to the Coastal Barrier Resources System. (Section 10 of P.L. 97 - 348.)

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