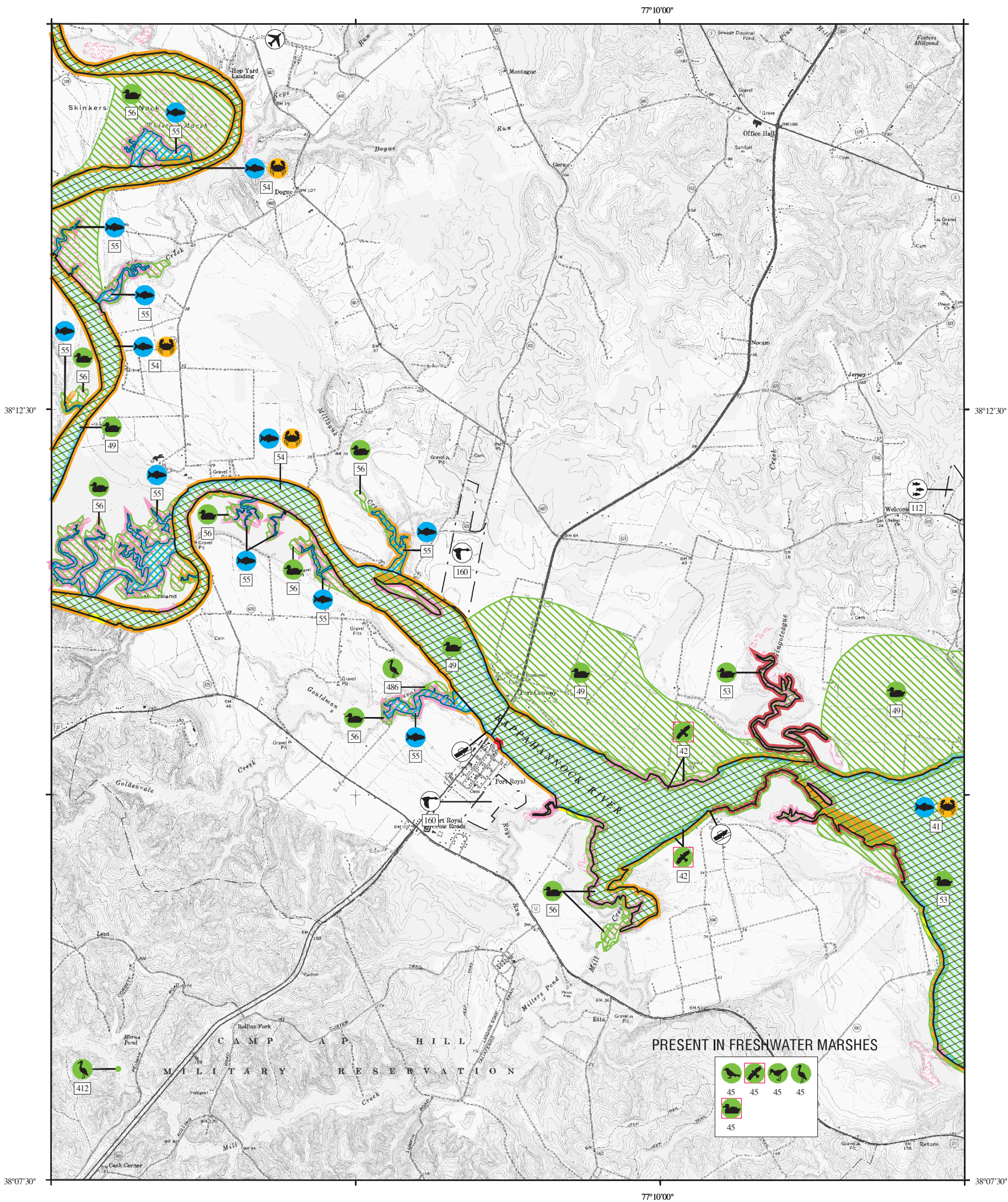


ENVIRONMENTAL SENSITIVITY INDEX MAP



SHORELINE HABITATS (ESI)

- 1B EXPOSED, SOLID MAN-MADE STRUCTURES
- 2A EXPOSED WAVE-CUT PLATFORMS IN CLAY
- 2B EXPOSED SCARPS AND STEEP SLOPES IN CLAY
- 3A FINE-TO MEDIUM-GRAINED SAND BEACHES
- 3B SCARPS AND STEEP SLOPES IN SAND
- 4 COARSE-GRAINED SAND BEACHES
- 5 MIXED SAND AND GRAVEL BEACHES
- 6A GRAVEL BEACHES
- 6B RIPRAP
- 7 EXPOSED TIDAL FLATS
- 8A SHELTERED SCARPS IN CLAY
- 8B SHELTERED, SOLID MAN-MADE STRUCTURES
- 8C SHELTERED RIPRAP
- 9A SHELTERED TIDAL FLATS
- 9B SHELTERED, VEGETATED LOW BANKS
- 10A SALT-AND BRACKISH-WATER MARSHES
- 10B FRESHWATER MARSHES
- 10C SWAMP
- 10D SCRUB-SHRUB WETLANDS

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Delaware

Maryland

Virginia

North Carolina

VOLUME 1

VOLUME 2

VOLUME 1

VOLUME 2

PORT ROYAL, VA. **VA-113**

Virginia: ESIMAP 113

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
42	Bald eagle	T T HIGH	X	X	X	X	X	X	X					X	-	-	-
45	Bald eagle	T T		X	X	X	X								-	-	-
	Common moorhen	C		X	X	X	X								-	-	-
	Great blue heron			X	X	X	X								-	-	-
	Greater yellowlegs			X	X	X	X								-	-	-
	Green heron			X	X	X	X								-	-	-
	King rail			X	X	X	X								-	-	-
	Least bittern			X	X	X	X								-	-	-
	Marsh wren			X	X	X	X								-	-	-
	Osprey			X	X	X	X	X	X						MAR-AUG	-	-
	Sora			X	X	X	X								-	-	-
	Swamp sparrow			X	X	X	X								-	-	-
	Virginia rail			X	X	X	X								-	-	-
	Wood duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
49	Canada goose	VERY HIGH	X	X	X	X					X	X	X		-	-	-
	Tundra swan	HIGH	X	X	X	X					X	X	X		-	-	-
53	American black duck	HIGH	X	X	X	X					X	X	X		-	-	-
	American wigeon		X	X	X	X					X	X	X		-	-	-
	Bufflehead	HIGH	X	X	X	X					X	X	X		-	-	-
	Canada goose	VERY HIGH	X	X	X	X					X	X	X		-	-	-
	Canvasback	HIGH	X	X	X	X					X	X	X		-	-	-
	Common goldeneye		X	X	X	X					X	X	X		-	-	-
	Gadwall		X	X	X	X					X	X	X		-	-	-
	Green-winged teal	HIGH	X	X	X	X					X	X	X		-	-	-
	Mallard	HIGH	X	X	X	X					X	X	X		-	-	-
	Mergansers	HIGH	X	X	X	X					X	X	X		-	-	-
	Mute swan		X	X	X	X					X	X	X		-	-	-
	Northern pintail		X	X	X	X					X	X	X		-	-	-
	Ring-necked duck	VERY HIGH	X	X	X	X					X	X	X		-	-	-
	Ruddy duck	LOW	X	X	X	X					X	X	X		-	-	-
	Tundra swan	HIGH	X	X	X	X					X	X	X		-	-	-
56	American black duck	HIGH	X	X	X	X					X	X	X		-	-	-
	American wigeon		X	X	X	X					X	X	X		-	-	-
	Canada goose	VERY HIGH	X	X	X	X					X	X	X		-	-	-
	Gadwall		X	X	X	X					X	X	X		-	-	-
	Green-winged teal	HIGH	X	X	X	X					X	X	X		-	-	-
	Mallard	HIGH	X	X	X	X					X	X	X		-	-	-
	Northern pintail		X	X	X	X					X	X	X		-	-	-
	Tundra swan	HIGH	X	X	X	X					X	X	X		-	-	-
412	Great blue heron	6 NESTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
486	Great blue heron	43 NESTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
41	Alewife		X	X	X	X	X	X	X	X	X	X	X	X	-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American shad		X	X	X	X	X	X	X	X	X				-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden				X	X	X	X	X	X	X				-	-	-	MAY-NOV	-
	Banded killifish		X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black crappie		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Blue catfish		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-	JAN-DEC	JAN-DEC
	Blueback herring		X	X	X	X	X	X	X	X					-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill		X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	-	JAN-DEC
	Channel catfish		X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-	JAN-DEC	JAN-DEC
	Hickory shad		X	X	X	X	X	X	X	X	X				-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Largemouth bass		X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-	-	JAN-DEC
	Longnose gar		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Minnows		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Pumpkinseed		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish		X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-	JAN-DEC	JAN-DEC
	Striped bass		X	X	X	X	X	X	X	X	X				FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Tessellated darter		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-	-	JAN-DEC
	White catfish		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	White perch		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
	Yellow perch		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-	JAN-DEC	JAN-DEC
54	Alewife		X	X	X	X	X	X	X	X					-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	American shad		X	X	X	X	X	X	X	X					FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Atlantic menhaden				X	X	X	X	X	X	X				-	-	-	MAY-NOV	-
	Banded killifish		X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black crappie		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Blueback herring		X	X	X	X	X	X	X	X					-	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Bluegill		X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	-	JAN-DEC
	Channel catfish		X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-	JAN-DEC	JAN-DEC
	Hickory shad		X	X	X	X	X	X	X	X					FEB-JUN	FEB-JUN	FEB-JUN	FEB-OCT	FEB-JUN
	Hogchoker		X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Largemouth bass		X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-	-	JAN-DEC
	Longnose gar		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Minnows		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Pumpkinseed		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-	JAN-DEC	JAN-DEC
	Redbreast sunfish		X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-	JAN-DEC	JAN-DEC
	Striped bass			X	X	X	X	X	X						-	-	-	MAY-OCT	-
	Tessellated darter		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-	-	JAN-DEC
	White catfish		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-	JAN-DEC	JAN-DEC
	White perch		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	APR-JUN	APR-JUN	JAN-DEC	JAN-DEC
	Yellow perch		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-	JAN-DEC	JAN-DEC
55	Alewife		X	X	X	X									FEB-JUN	FEB-JUN	-	-	FEB-JUN
	Blueback herring		X	X	X	X									FEB-JUN	FEB-JUN	-	-	FEB-JUN

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
41	Blue crab		X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
54	Blue crab		X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAY-NOV	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
112	LAND'S END WILDLIFE MANAGEMENT AREA		

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
160	RAPPAHANNOCK RIVER VALLEY NWR	U.S. FISH AND WILDLIFE SERVICE	804/333-1470

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.