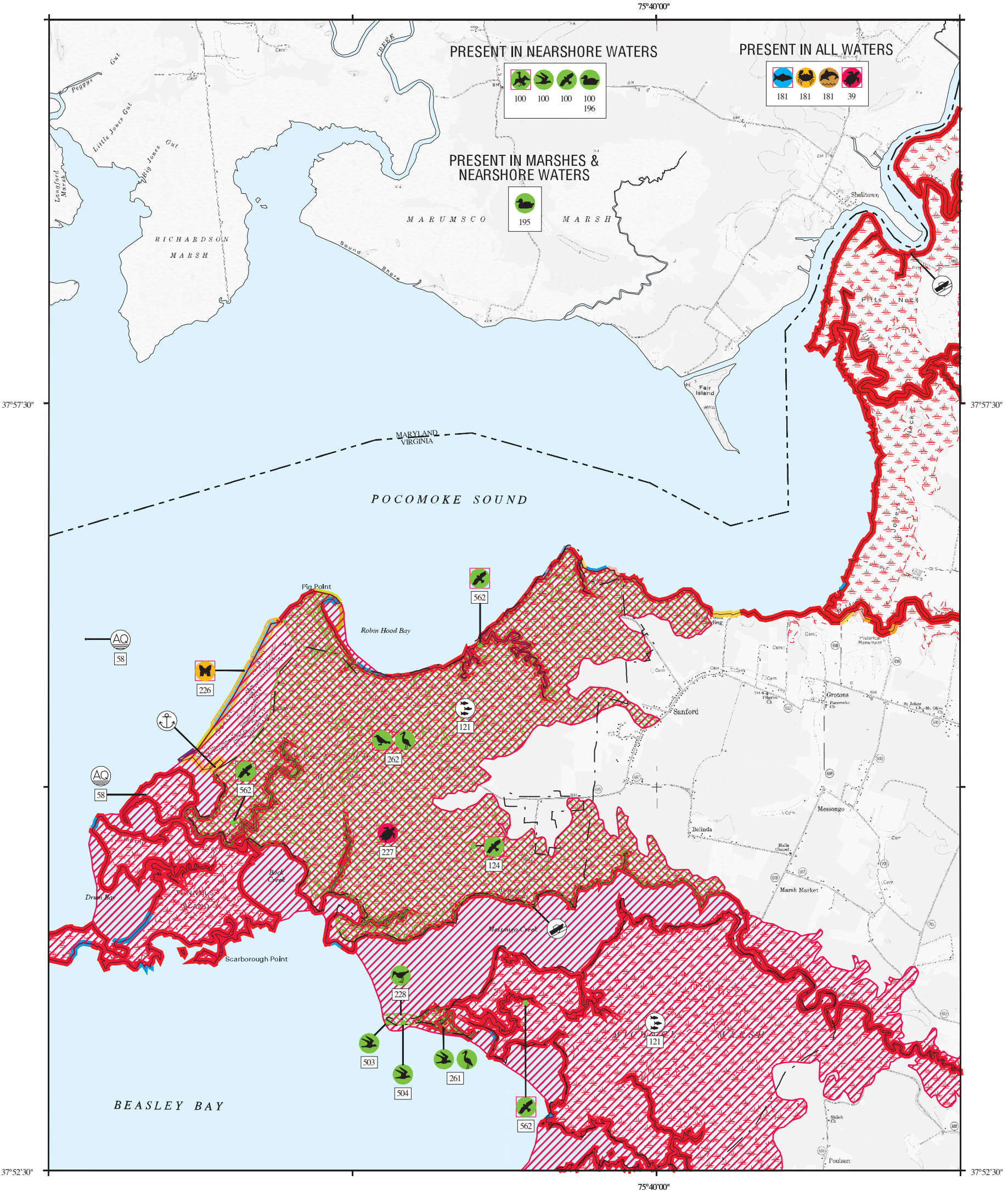
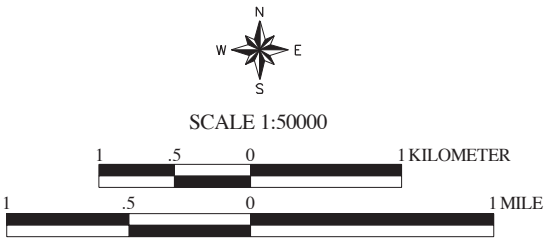


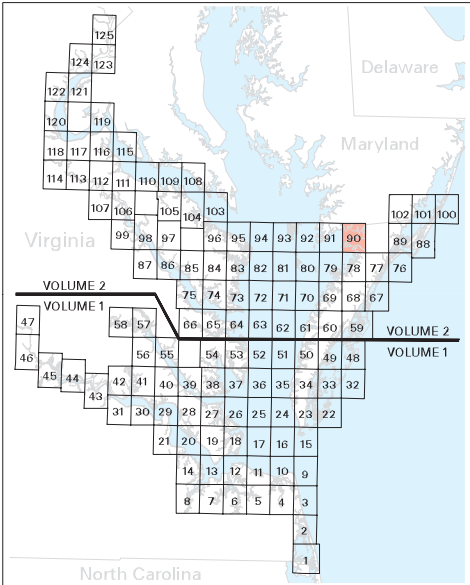
ENVIRONMENTAL SENSITIVITY INDEX MAP



- 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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Virginia: ESIMAP 90

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
100	Brown pelican	C					X	X	X	X	X	X	X		-	-	-
	Gulls		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Loons		X	X	X	X					X	X	X		-	-	-
	Mergansers		X	X	X						X	X	X		-	-	-
	Osprey			X	X	X	X	X	X	X	X	X	X		-	-	-
	Scoters	HIGH	X	X	X	X					X	X	X		-	-	-
	Terns			X	X	X	X	X	X	X	X				-	-	-
124	Bald eagle	T T	X	X	X	X	X			X	X	X	X		FEB-MAY	-	-
195	American black duck	VERY HIGH	X	X	X	X	X	X	X	X	X	X	X		MAR-JUL	-	-
	American wigeon	HIGH	X	X	X	X					X	X	X		-	-	-
	Brant		X	X	X	X					X	X	X		-	-	-
	Canada goose	HIGH	X	X	X	X	X	X	X	X	X	X	X		APR-JUN	-	-
	Gadwall	LOW	X	X	X	X	X	X	X	X	X	X	X		APR-JUN	-	-
	Green-winged teal		X	X	X	X					X	X	X		-	-	-
	Mallard	HIGH	X	X	X	X	X	X	X	X	X	X	X		MAY-JUL	-	-
	Northern pintail		X	X	X	X					X	X	X		-	-	-
	Snow goose		X	X	X	X					X	X	X		-	-	-
196	Bufflehead	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		-	-	-
	Long-tailed duck		X	X	X	X					X	X	X		-	-	-
	Redhead	HIGH	X	X	X	X					X	X	X		-	-	-
	Ring-necked duck	LOW	X	X	X	X					X	X	X		-	-	-
	Ruddy duck	HIGH	X	X	X	X					X	X	X		-	-	-
	Scaup		X	X	X	X					X	X	X		-	-	-
	Scoters	MODERATE	X	X	X	X					X	X	X		-	-	-
	Tundra swan	HIGH	X	X	X	X					X	X	X		-	-	-
228	American oystercatcher	6 ADULTS		X	X	X	X	X	X	X					MAR-JUL	-	-
261	Rails		X	X	X	X	X	X	X	X	X	X	X		APR-JUN	-	-
262	Bitterns			X	X	X	X	X	X	X	X	X	X		MAY-JUL	-	-
	Black rail			X	X	X	X	X	X	X	X	X	X		APR-JUN	-	-
	Egrets		X	X	X	X	X	X	X	X	X	X	X		MAY-JUL	-	-
	Henslow's sparrow			X	X	X	X	X	X	X	X	X	X		MAY-JUL	-	-
	Hérons	T	X	X	X	X	X	X	X	X	X	X	X		MAY-JUL	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X		APR-MAY	-	-
	Saltmarsh sharp-tailed sparrow	C	X	X	X	X	X	X	X	X	X	X	X		MAY-JUL	-	-
	Sora			X	X	X					X	X	X		-	-	-
	Virginia rail		X	X	X	X	X	X	X	X	X	X	X		APR-MAY	-	-
503	Common tern	15 ADULTS		X	X	X	X	X	X	X					MAY-JUL	-	-
	Forster's tern	25 ADULTS		X	X	X	X	X	X	X					MAY-JUL	-	-
	Herring gull	12 ADULTS	X	X	X	X	X	X	X	X	X	X	X		MAY-JUL	-	-
504	Common tern	50 ADULTS		X	X	X	X	X	X	X					MAY-JUL	-	-
	Forster's tern	120 ADULTS		X	X	X	X	X	X	X					MAY-JUL	-	-
562	Peregrine falcon	T		X	X	X	X	X	X						MAR-AUG	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
181	Alewife			X	X	X	X	X							-	-	-	-	FEB-JUN
	American eel		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	SEP-DEC
	American shad		X	X	X	X	X				X	X			-	-	-	NOV-MAR	JAN-JUN
	Atlantic croaker				X	X	X	X	X	X	X	X			-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel			X	X										-	-	-	-	MAR-APR
	Atlantic menhaden		X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		X	X	X	X	X	X	X	X	X	X	X		MAR-JUL	-	-	JAN-DEC	JAN-DEC
	Atlantic spadefish									X	X	X			-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	C	X	X	X	X	X	X	X	X	X				-	-	-	-	JAN-OCT
	Bay anchovy		X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Black drum			X	X	X	X	X	X	X	X				APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass			X	X	X	X	X	X	X					JUN-OCT	-	-	APR-OCT	APR-OCT
	Blueback herring		X	X	X	X	X				X	X			-	-	-	NOV-MAR	JAN-JUN
	Bluefish			X	X	X	X	X	X	X	X				-	-	-	MAY-NOV	APR-NOV
	Butterfish			X	X	X	X	X	X	X	X				-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate				X	X	X	X	X	X					-	-	-	-	MAY-NOV
	Gobies		X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish			X	X	X	X	X	X						-	-	-	JUL-OCT	APR-OCT
	Hickory shad		X	X	X	X	X				X	X			-	-	-	NOV-MAR	JAN-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
	Minnnows		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Mummichog		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern kingfish			X	X	X	X	X	X	X					-	-	-	-	APR-OCT
	Northern pipefish		X	X	X	X	X	X	X	X	X	X			MAY-JUN	-	-	JAN-DEC	JAN-DEC
	Northern puffer			X	X	X	X	X	X	X					MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin			X	X	X	X	X	X	X					MAY-JUL	-	-	-	MAR-OCT
	Red drum				X	X	X	X	X	X					JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake		X	X	X	X				X	X	X			-	-	-	FEB-MAY	FEB-MAY
																			SEP-NOV
	Sandbar shark				X	X	X	X	X	X					-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)			X	X	X	X	X	X	X					-	-	-	JUN-OCT	MAR-OCT
	Silver hake		X	X	X	X					X	X	X		-	-	-	-	OCT-MAY
	Silver perch		X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Spot		X	X	X	X	X	X	X	X	X	X	X	X	-	-	DEC-APR	MAR-NOV	MAR-NOV
	Spotted hake			X	X	X				X	X	X			-	-	-	MAR-JUN	MAR-JUN
																			SEP-NOV
	Spotted seatrout			X	X	X	X	X	X	X	X				MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Striped killifish		X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	JAN-DEC	JAN-DEC
	Summer flounder		X	X	X	X	X	X	X	X	X	X	X	X	-	-	OCT-MAY	JAN-DEC	APR-OCT
	Tautog		X	X	X	X				X	X	X			-	-	-	-	OCT-APR
	Threadfin shad		X	X	X	X				X	X	X			-	-	-	-	FEB-MAY
																			SEP-NOV
	Weakfish			X	X	X	X	X	X	X					APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
181	Blue crab		X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
226	Northeastern beach tiger beetle	T T	X	X	X	X	X	X	X	X	X	X	X	X	JUN-SEP	JUN-SEP	-	JAN-DEC	JUN-OCT

MARINE MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting
181	Bottlenose dolphin				X	X	X	X	X	X	X				-	-	-	-
	Harbor porpoise		X	X	X	X							X		-	-	-	-

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.

Virginia: ESIMAP 90 (cont.)

BIOLOGICAL RESOURCES: (cont.)

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Interesting	Juveniles	Adults
39	Green sea turtle	T T	X X X X X X X	-	-	-	MAY-NOV	-
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	-	MAY-NOV	-
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV
	Loggerhead sea turtle	T T	X X X X X X X	-	-	-	MAY-NOV	-
227	Diamondback terrapin	VERY HIGH	X X X X X X X X X	MAY-JUL	-	-	MAR-NOV	MAR-NOV

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
58	AQUACULTURE: OYSTERS		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
121	SAXIS WILDLIFE MANAGEMENT AREA	VDGIF	804/367-1000

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