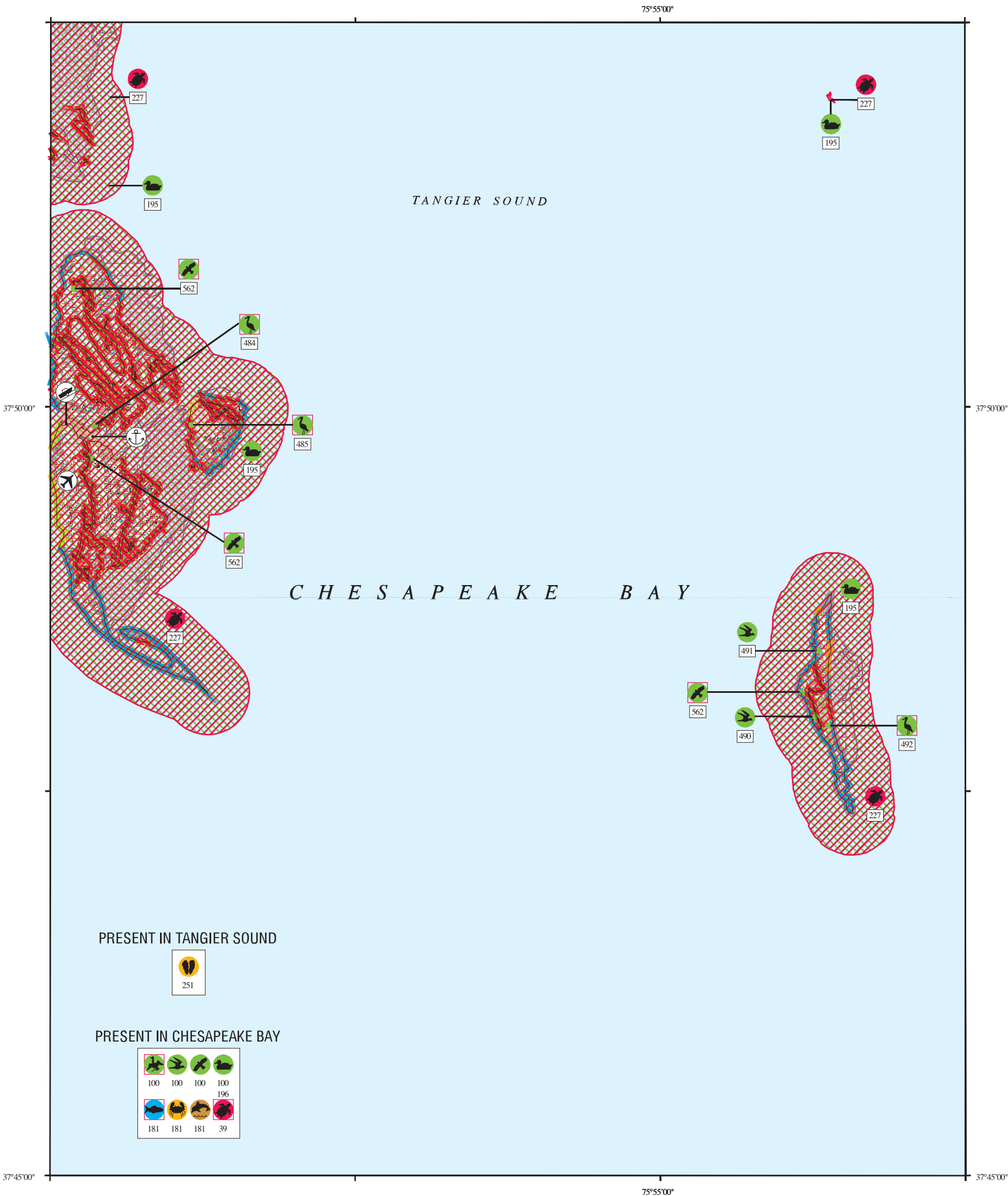


ENVIRONMENTAL SENSITIVITY INDEX MAP



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 80

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	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				-	-	-
195	American black duck	VERY HIGH	X	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	X	APR-JUN	-	-
	Gadwall	LOW	X	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	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		-	-	-
484	Black-crowned night-heron	12 ADULTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Great egret	C 2 ADULTS		X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Snowy egret	7 ADULTS		X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
485	Black-crowned night-heron	21 ADULTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Glossy ibis	C 16 ADULTS		X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Great blue heron	4 ADULTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Great egret	C 20 ADULTS		X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Little blue heron	C 14 ADULTS		X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Snowy egret	13 ADULTS		X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
490	Herring gull	48 NESTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
491	Great black-backed gull	6 NESTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Herring gull	82 NESTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
492	Black-crowned night-heron	10 NESTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Glossy ibis	C 24 NESTS		X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Great blue heron	80 NESTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Great egret	C 385 NESTS		X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Little blue heron	C 38 NESTS		X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Snowy egret	57 NESTS		X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Yellow-crowned night-heron	C 4 NESTS		X	X	X	X	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							-	-	-	-	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	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
	Minnows		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	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					MAY-JUL	-	-	-	MAR-OCT
	Red drum					X	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	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	X		-	-	-	MAR-JUN	MAR-JUN
																		SEP-NOV	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	SEP-NOV
	Weakfish				X	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
251	Eastern oyster	LOW-MED	X	X	X	X	X	X	X	X	X	X	X	X	JUN-SEP	JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC

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					-	-	-	-
	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 80 (cont.)
BIOLOGICAL RESOURCES: (cont.)

REPTILE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Internesting	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	X	X	X	MAY-JUL	-	-	MAR-NOV	MAR-NOV

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.