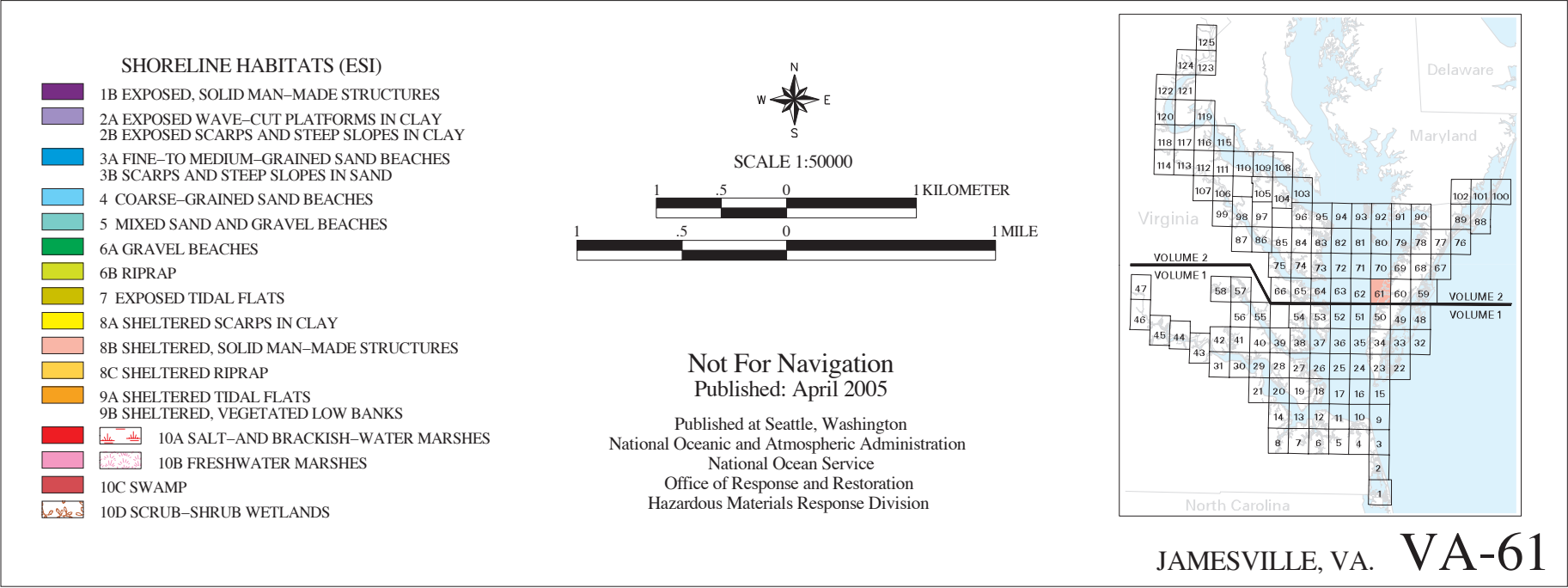
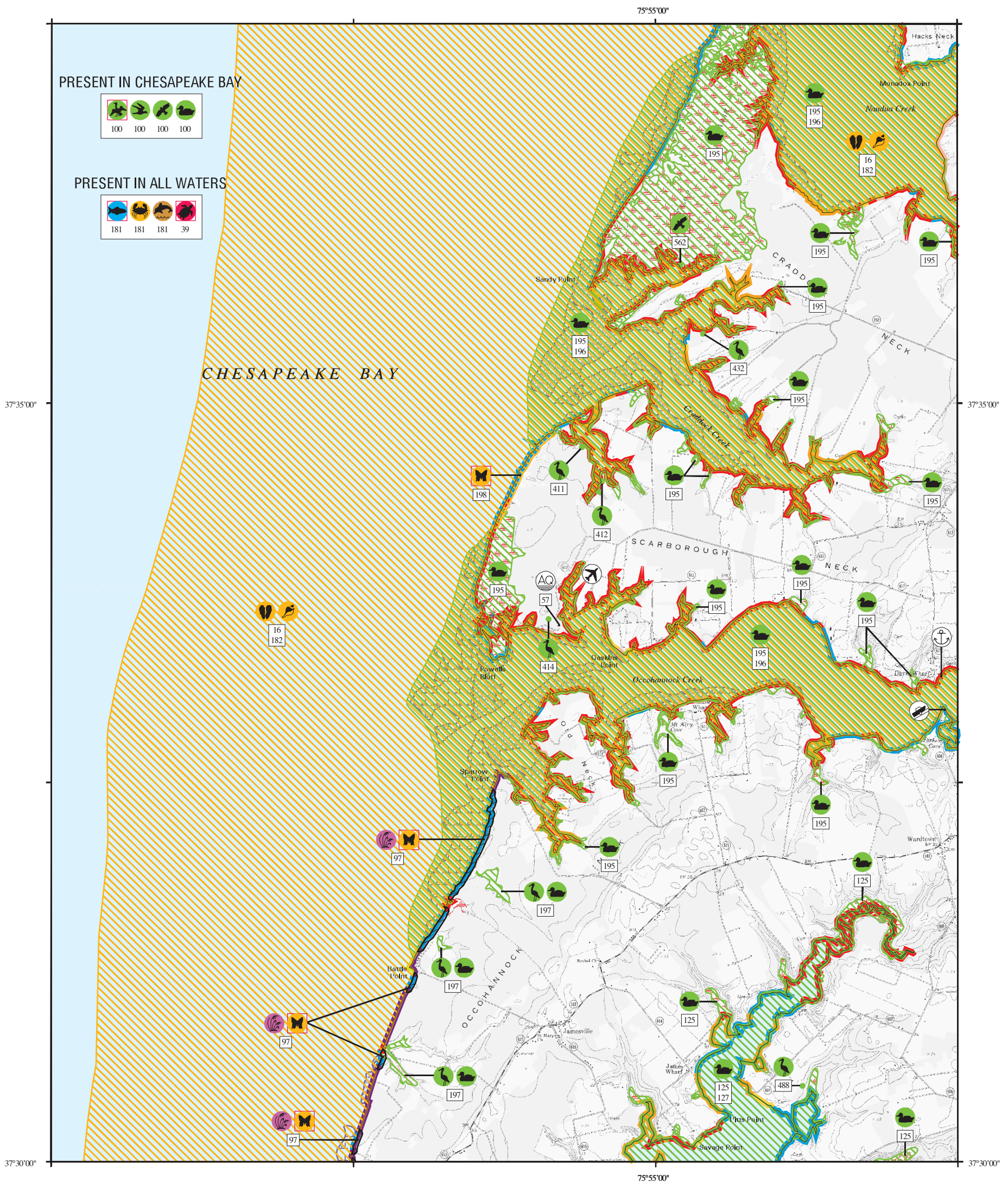


# ENVIRONMENTAL SENSITIVITY INDEX MAP



Virginia: ESIMAP 61

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				-	-	-
125	American black duck	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	American wigeon		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		X	X	X	X					X	X	X		-	-	-
	Green-winged teal		X	X	X	X					X	X	X		-	-	-
	Mallard	MODERATE	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Snow goose		X	X	X	X					X	X	X		-	-	-
127	Bufflehead	HIGH	X	X	X	X					X	X	X		-	-	-
	Long-tailed duck		X	X	X	X					X	X	X		-	-	-
	Mergansers		X	X	X	X					X	X	X		-	-	-
	Ring-necked duck		X	X	X	X					X	X	X		-	-	-
	Scaup		X	X	X	X					X	X	X		-	-	-
	Scoters	HIGH	X	X	X	X					X	X	X		-	-	-
	Tundra swan		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		-	-	-
197	Dabbling ducks		X	X	X	X					X	X	X		-	-	-
	Wading birds					X	X	X	X	X	X				-	-	-
	Wood duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
411	Great blue heron	3 NESTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
412	Great blue heron	6 NESTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
414	Great blue heron	18 NESTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
432	Great blue heron	10 NESTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
488	Great blue heron	100 NESTS	X	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	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	X		-	-	-	AUG-OCT	AUG-NOV
	Atlantic sturgeon	C	X	X	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			APR-JUN	APR-JUN	APR-JUN	APR-NOV	APR-NOV
	Black sea bass					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	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					-	-	-	-	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				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	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	X	X	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
97	Maritime dune scrub		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
16	Northern quahog (hard clam)		X	X	X	X	X	X	X	X	X	X	X	X	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
97	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

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 61 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE: (cont.)

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
182	Knobbed whelk		X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
198	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						
	Harbor porpoise		X X X X X	X	-	-	-

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					MAY-NOV	-
	Kemp's ridley sea turtle	E E					MAY-NOV	-
	Leatherback sea turtle	E E					-	MAY-NOV
	Loggerhead sea turtle	T T					MAY-NOV	-

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
57	AQUACULTURE: HARD CLAMS		