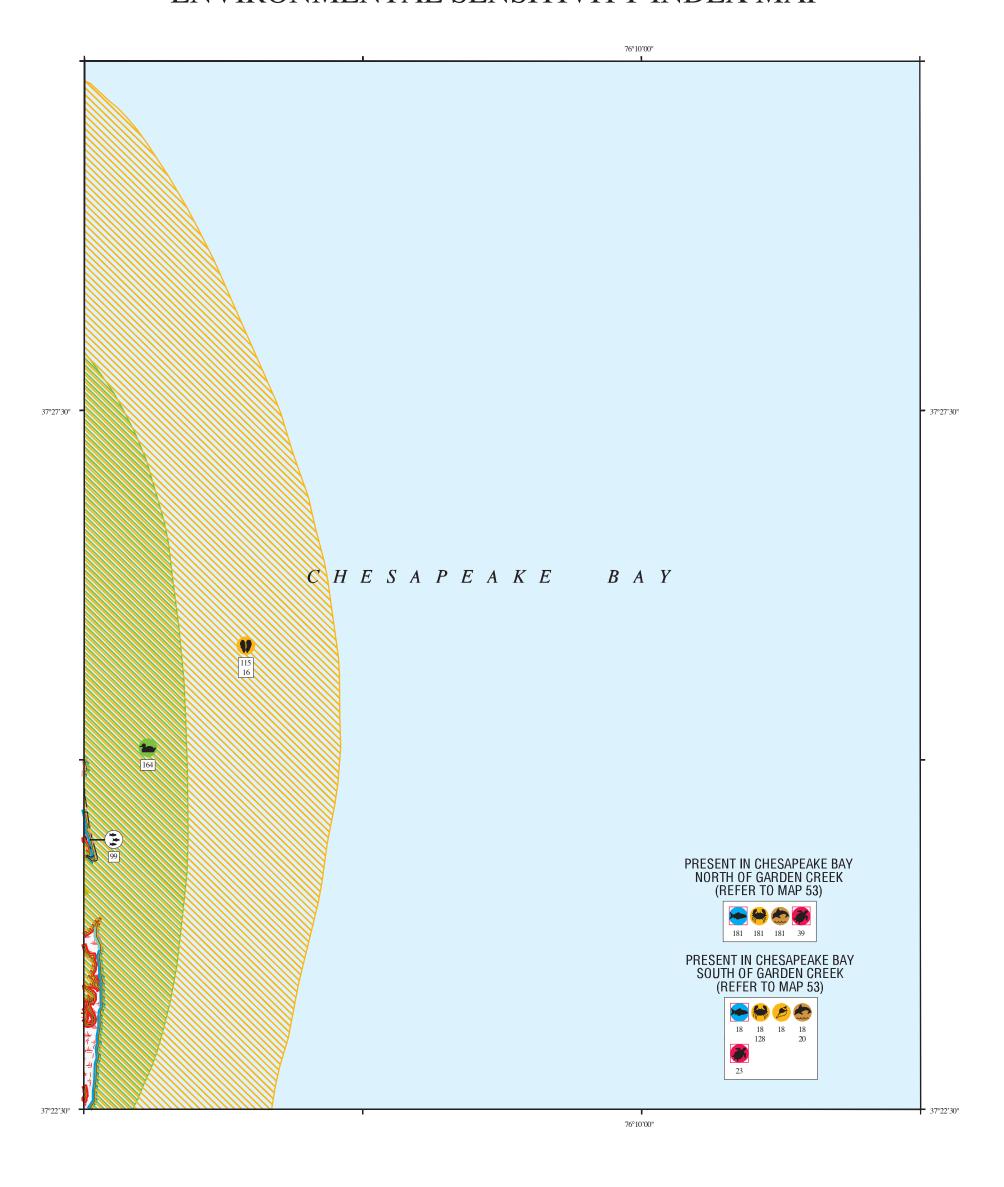
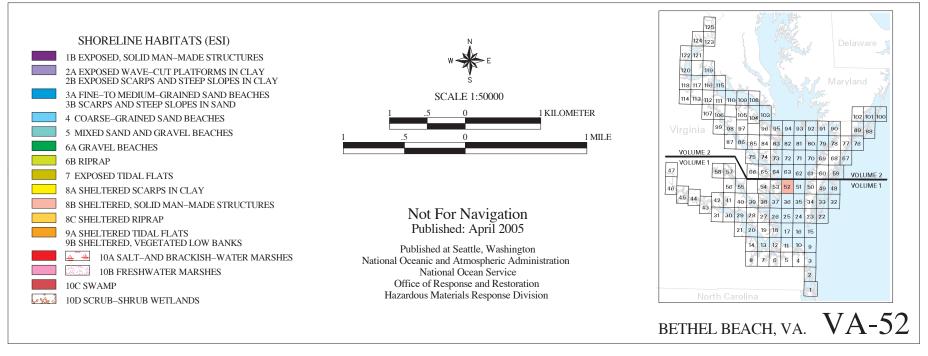
ENVIRONMENTAL SENSITIVITY INDEX MAP





Virginia: ESIMAP 52

BIOLOGICAL RESOURCES:

BIRD	:
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RAR# Species

RAR#	Species		Conc.							Migrating		_	
	Bufflehead		HIGH	XXX				XXX		-	-		
	Canvasback		MODERATE	XXX				XXX		-	-		
	Common goldeneye Long-tailed duck		MODERATE	XXX				X X X X X X X X X X X X X X X X X X X			_		
	Mergansers			XXX							-		
	Mute swan		MODEDAME	XXX				XXX	- - -	-	-		
	Ring-necked duck Ruddy duck		MODERATE HIGH	XXX				XXX	- - -	_	_		
	Scaup		MODERATE	XXX				X X X	-	-	-		
	Scoters		HIGH MODERATE	XXX					-	-	-		
	Tundra swan		MODERATE	XXX	. X			XXX	_	_	_		
FISH													
RAR#	Species	S F	Conc.	JFM	I A	мј	JAS	OND	Spawning	Eggs	Larvae	Juveniles	Adults
18	Alewife					 X X			-	-	-	-	FEB-JUN
	American eel							X X X		-	-	JAN-DEC	SEP-DEC
	American shad Atlantic croaker			XXX				X X X		-	-	NOV-MAR AUG-DEC	JAN-JUN MAY-NOV
	Atlantic mackerel			Х	X	ΛΛ	A A A	. A A A		_	_	-	MAR-APR
	Atlantic menhaden							X X X X			MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside Atlantic spadefish			XXX	X.	ХХ		XXX	MAR-JUL -	-	-	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
	Atlantic sturgeon	С		ххх	X	ХХ			-	-	-	-	JAN-OCT
	Black down			XXX					APR-SEP	- -	- 7 DD TIIN	JAN-DEC	JAN-DEC
	Black drum Black sea bass						XXX	XX	APR-JUN JUN-OCT	APR-JUN -	APR-JUN -	APR-NOV APR-OCT	APR-NOV APR-OCT
	Blueback herring			X X X	X	ХХ		X X		-	-	NOV-MAR	JAN-JUN
	Bluefish Butterfish			v			XXX	XX	_	_	_	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Clearnose skate			Λ			XXX		-	_	-	-	MAY-NOV
	Gobies			XXX					APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Harvestfish Hickory shad			ххх			XXX	XX	-	-	-	JUL-OCT NOV-MAR	APR-OCT JAN-JUN
	Hogchoker			XXX	X	ХХ	X X X	X X X	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside Minnows								APR-MAY	-	-	JAN-DEC	JAN-DEC
	Minnows Mummichog								APR-AUG APR-AUG	-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern kingfish				Χ	ХХ	X X X	X	-	-	-	_	APR-OCT
	Northern pipefish Northern puffer						X X X X		MAY-JUN MAY-AUG	-	_	JAN-DEC MAR-OCT	JAN-DEC MAR-OCT
	Northern searobin						XXX		MAY-JUL	-	-	-	MAR-OCT
	Red drum							XX	JUL-NOV	-	-	AUG-SEP	MAY-NOV
	Red hake			ХХ	X .	Χ	Х	XX	-	-	-	FEB-MAY	FEB-MAY SEP-NOV
	Sandbar shark					ХХ	ххх	X	-	_	-	MAY-OCT	MAY-OCT
	Scup (porgy)						X X X		-	-	-	JUN-OCT	MAR-OCT
	Silver hake Silver perch			XXX				XXX	- APR-MAY	_	_	- JAN-DEC	OCT-MAY JAN-DEC
	Spot								-	-	DEC-APR		MAR-NOV
	Spotted hake			Х	X	ХХ	Х	XX	-	-	-	MAR-JUN	MAR-JUN
	Spotted seatrout				X	хх	x x x	XX	MAY-JUL	_	_	APR-NOV	SEP-NOV APR-NOV
	Striped bass			ххх				XXX		-	-	JAN-DEC	JAN-DEC
	Striped killifish Summer flounder								APR-SEP	-	- OCT-MAY	JAN-DEC	JAN-DEC
	Tautog			XXX			XXX	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	OCT-MAY	JAN-DEC -	APR-OCT OCT-APR
	Threadfin shad			XX	X	Χ	X	XX	-	-	-	-	FEB-MAY
	Weakfish				v	v v	v v v	· v v	APR-AUG	_	MAY-AUG	APR-NOV	SEP-NOV APR-NOV
181	Alewife			ХХ					APK-AUG -	-	MAI-AUG -	APR=NOV	FEB-JUN
	American eel							X X X X		-	-	JAN-DEC	SEP-DEC
	American shad Atlantic croaker			XXX				X X X		-	_	NOV-MAR AUG-DEC	JAN-JUN MAY-NOV
	Atlantic mackerel			X	X	21 21	21 21 2	. 21 21 21	-	_	-	-	MAR-APR
	Atlantic menhaden							XXX			MAY-NOV -	JAN-DEC	MAY-OCT
	Atlantic silverside Atlantic spadefish			XXX	. X .	ХХ		XXX	MAR-JUL -	_	_	JAN-DEC AUG-OCT	JAN-DEC AUG-NOV
	Atlantic sturgeon	С		X X X			X X X	X	-	-	-	-	JAN-OCT
	Bay anchovy Black drum			XXX					APR-SEP APR-JUN	- APR-JUN	- APR-JUN	JAN-DEC APR-NOV	JAN-DEC APR-NOV
	Black sea bass						XXX		JUN-OCT	- ALK 00N		APR-OCT	APR-OCT
	Blueback herring			XXX				X X		-	-	NOV-MAR	JAN-JUN
	Bluefish Butterfish			X			X X X		_	_	_	MAY-NOV JUL-NOV	APR-NOV MAR-NOV
	Clearnose skate					ХХ	X X X	XX	-	-	-	-	MAY-NOV
	Gobies Harvestfish			XXX			X X X X		APR-SEP -	APR-SEP	APR-OCT	JAN-DEC JUL-OCT	JAN-DEC APR-OCT
	Hickory shad			ххх				XX	-	-	_	NOV-MAR	JAN-JUN
	Hogchoker								MAY-SEP		MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside Minnows								APR-MAY APR-AUG	-	_	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog				X	ХХ	X X X	X X X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Northern kingfish Northern pipefish			yyv			X X X		- MAY-JUN	-	_	- JAN-DEC	APR-OCT JAN-DEC
	Northern puffer						XXX		MAY-AUG	-	-	MAR-OCT	MAR-OCT
	Northern searobin			Х			XXX		MAY-JUL	-	-	-	MAR-OCT
	Red drum Red hake			ХХ				XX	JUL-NOV -	-	_	AUG-SEP FEB-MAY	MAY-NOV FEB-MAY
				25									SEP-NOV
	Sandbar shark Scup (porgy)			17			XXX		-	-	-	MAY-OCT JUN-OCT	MAY-OCT
	Scup (porgy) Silver hake			XXX			XXX		-	-	_	JUN-OCT -	MAR-OCT OCT-MAY
	Silver perch			XXX	X	ХХ		X X X	APR-MAY	-	-	JAN-DEC	JAN-DEC
	Spot Spotted hake					X X X X		XXXX	-	_	DEC-APR -	MAR-NOV MAR-JUN	MAR-NOV MAR-JUN
	opococa make			Λ		A A	Δ		•			THILL OUN	MAR-JUN SEP-NOV
	Spotted seatrout						X X X		MAY-JUL	-	-	APR-NOV	APR-NOV
	Striped bass Striped killifish							X X X X	- APR-SEP	-	-	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Summer flounder							XXX	APK-SEP	-	OCT-MAY	JAN-DEC JAN-DEC	APR-OCT
	Tautog			XXX	X			X X X	-	-	-	-	OCT-APR
	Threadfin shad			ХХ	. Х	X	X	XX	-	-	-	-	FEB-MAY SEP-NOV
	Weakfish				Х	ХХ	X X X	XX	APR-AUG	-	MAY-AUG	APR-NOV	APR-NOV
JNVF	RTEBRATE:												
	Species	SF	Conc.	JFM	[A]	т. м	JAS	חומס	Spawning	Eaas	Larvae	Juveniles	Adults
					-								
16	Northern quahog (hard clam)			XXX	X	ХХ	XXX	XXX	MAY-OCT	MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC

S F Conc. J F M A M J J A S O N D Nesting Migrating Molting

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 52 (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 Ju		Adults		
18	Horseshoe crab		x x x x x x x x x x x x x	-	-	- Ji		JAN-DEC		
	Knobbed whelk			-	-	– J2	AN-DEC	JAN-DEC		
115	Eastern oyster			JUN-SEP	JUN-SEP			JAN-DEC		
128	Blue crab			-	MAY-SEP			JAN-DEC		
181	Blue crab		X X X X X X X X X X X X X	-	-	MAY-NOV J	AN-DEC	JAN-DEC		
MARI	MARINE MAMMAL:									
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping Mo	olting			
18	Harbor porpoise		X X X X X X X	-	-	-	-			
20	Bottlenose dolphin		X X X X X X X	-	-	-	-			
181	Bottlenose dolphin		X X X X X X X	-	-	-	-			
	Harbor porpoise		X X X X X X	-	-	-	-			
REPT	ILE:									
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internestin	g Juvenile	s Adults		
23	Green sea turtle	тт	X X X X X X	-	-	-	MAY-NOV	-		
	Kemp's ridley sea turtle	E E	X X X X X X X	-	-	_	MAY-NOV	MAY-NOV		
	Leatherback sea turtle	E E	X X X X X X X	-	-	-	-	MAY-NOV		
	Loggerhead sea turtle	ТТ	X X X X X X X	-	-	_	MAY-NOV	MAY-NOV		
39	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	-		
	Green sea turtle	ТТ	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	-		

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
99	BETHEL BEACH NATURAL AREA PRESERVE	VA DCR DNH	804/445-9117