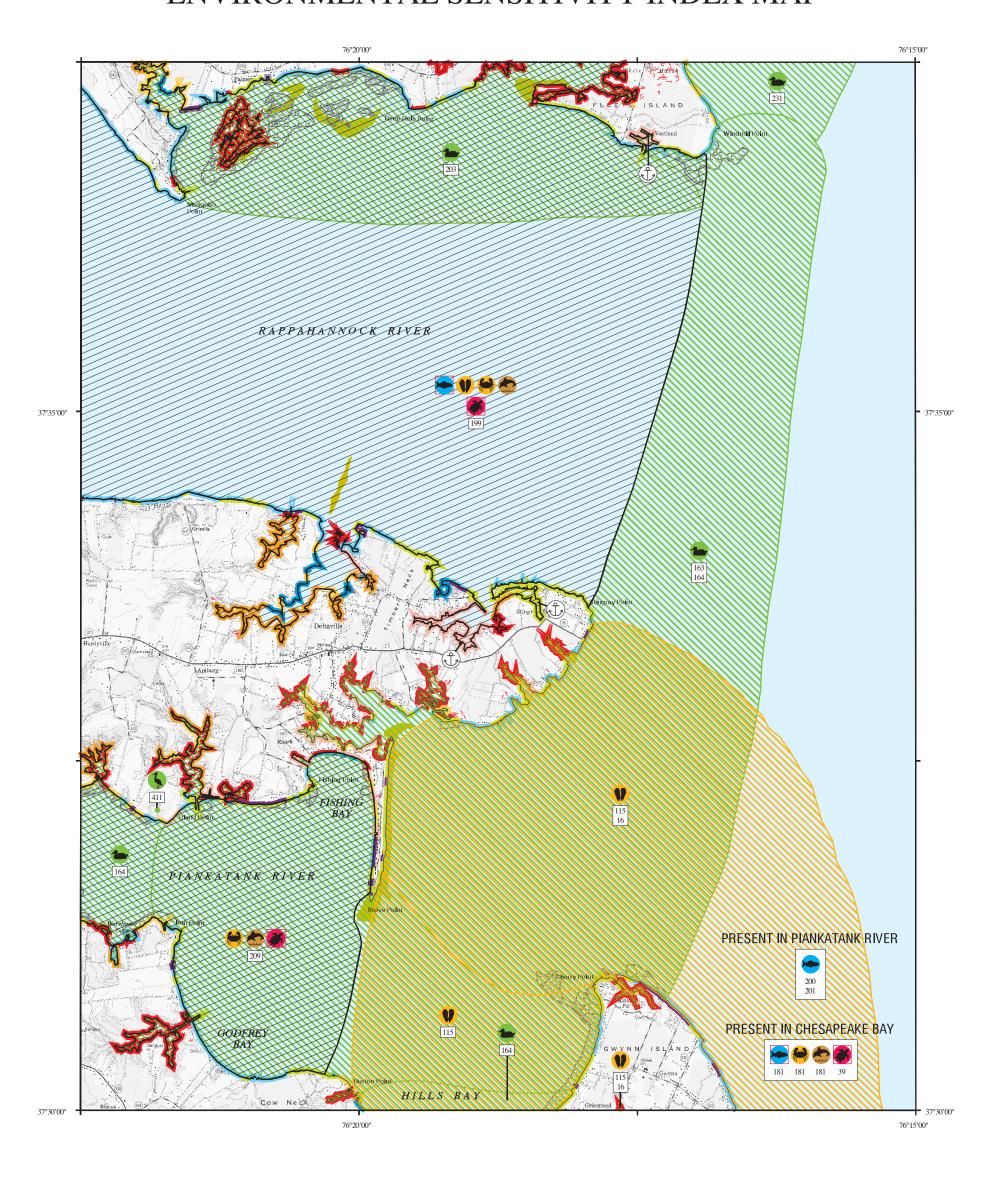
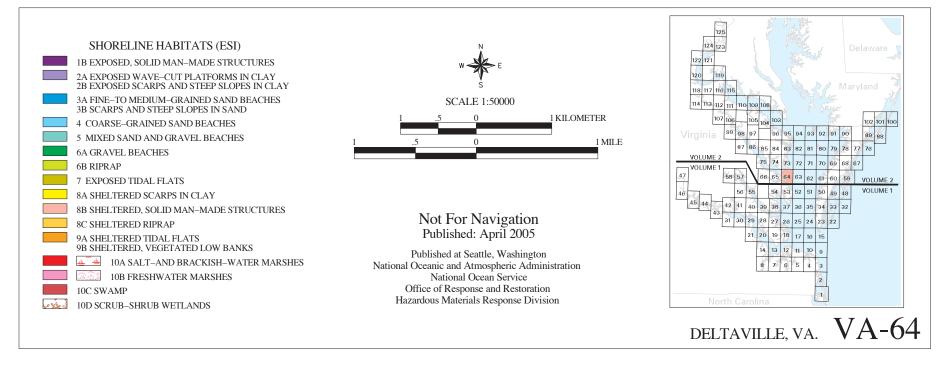
# ENVIRONMENTAL SENSITIVITY INDEX MAP





### Virginia: ESIMAP 64

### BIOLOGICAL RESOURCES:

199 Threadfin shad

Weakfish

American eel

American shad

Atlantic croaker

Atlantic mackerel

Atlantic menhaden

Atlantic sturgeon

Bay anchovy

Black sea bass

Blueback herring

Clearnose skate

Black drum

Bluefish

Gobies

Butterfish

Atlantic silverside Atlantic spadefish

С

Alewife

#### BIRD:

BIRD	):							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting		
							-	
163	American black duck	MODERATE	XXXXXXXXXX	-	-	-		
	American wigeon	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Brant		$X X X X \qquad X X X$	-	-	-		
	Canada goose	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Gadwall	MODERATE	XXXX X XXX	-	-	-		
	Mallard	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
164	Bufflehead	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Canvasback	MODERATE	XXXX X XXX	-	-	-		
	Common goldeneye		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Long-tailed duck	MODERATE	XXXX X XXX	-	-	-		
	Mergansers		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Mute swan		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Ring-necked duck	MODERATE	XXXX X XXX	-	-	-		
	Ruddy duck	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Scaup	MODERATE	XXXX X XXX	-	-	-		
	Scoters	HIGH	XXXX X XXX	-	-	-		
	Tundra swan	MODERATE	XXXX X XXX	-	-	-		
203	American black duck	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Bufflehead	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Canada goose	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Canvasback	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Common goldeneye		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Green-winged teal		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Long-tailed duck		XXXX XXX	-	-	-		
	Mallard	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Mergansers	MODERATE	XXXX XXX	-	-	-		
	Mute swan		X X X X X X X X X X X X X X X X X X X	-	-	-		
	Ring-necked duck	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Ruddy duck	HIGH	X X X X X X X X X X X X X X X X X X X	-	-	_		
	Scaup	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
	Tundra swan	MODERATE	X X X X X X X X X X X X X X X X X X X	-	-	-		
231	Bufflehead	MODERATE	$X X X X \qquad \qquad X X X$	_	-	-		
	Common goldeneye		$X \ X \ X \ X $	-	-	-		
	Long-tailed duck		$X X X X \qquad X X X$	-	-	-		
	Mergansers		$X X X X \qquad X X X$	-	-	-		
	Mute swan		$X \ X \ X \ X $	-	-	-		
	Ruddy duck		$X X X X \qquad X X X$	-	-	-		
	Scaup		$X X X X \qquad \qquad X X X$	_	-	_		
	Scoters		$X X X X \qquad X X X$	-	-	-		
411	Great blue heron	3 NESTS	imes  ime	MAY-JUL	-	-		
FISH	l:							
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		imes  ime	-	-	-	JAN-DEC	SEP-DEC
	American shad		X X X X X X X X X X X X X X X X X X X	_	-	_	NOV-MAR	JAN-JUN
	Atlantic croaker		X X X X X X X X X	-	-	-	AUG-DEC	MAY-NOV
	Atlantic mackerel		X X	-	-	-	-	MAR-APR
	Atlantic menhaden		imes  ime	-	-	MAY-NOV	JAN-DEC	MAY-OCT
	Atlantic silverside		imes  ime	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		imes  ime	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 X X X X X 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		11 11 11 11 11 11 11	_	-	-	11111 140 4	
	Butteriish		XXXXXXXXX	-	-	-	JUL-NOV	MAR-NOV
	Clearnose skate							MAR-NOV MAY-NOV
	Clearnose skate Gobies		X X X X X X X X X X X X X X X X X X X	- - APR-SEP	- - APR-SEP	- - APR-OCT	JUL-NOV - JAN-DEC	MAY-NOV JAN-DEC
	Clearnose skate Gobies Harvestfish		X X X X X X X X X X X X X X X X X X X	- - APR-SEP -	- - APR-SEP	- - APR-OCT -	JUL-NOV - JAN-DEC JUL-OCT	MAY-NOV JAN-DEC APR-OCT
	Clearnose skate Gobies		X X X X X X X X X X X X X X X X X X X	- - APR-SEP -	- - APR-SEP	- - APR-OCT	JUL-NOV - JAN-DEC	MAY-NOV JAN-DEC
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker		X X X X X X X X X X X X X X X X X X X	- APR-SEP - - MAY-SEP	APR-SEP - MAY-SEP	- - APR-OCT - - MAY-SEP	JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside		X X X X X X X X X X X X X X X X X X X	- APR-SEP - - MAY-SEP APR-MAY	- APR-SEP -	- - APR-OCT - - MAY-SEP -	JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG	APR-SEP MAY-SEP -	- - - APR-OCT - - MAY-SEP -	JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG	APR-SEP - MAY-SEP	- - - APR-OCT - - MAY-SEP - -	JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG	APR-SEP MAY-SEP	- - - APR-OCT - - MAY-SEP - - -	JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG	APR-SEP MAY-SEP -	- - - APR-OCT - - MAY-SEP - - - -	JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG	APR-SEP MAY-SEP	- - - APR-OCT - - MAY-SEP - - -	JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG APR-AUG MAY-JUN	APR-SEP MAY-SEP	- - - APR-OCT - - MAY-SEP - - - - -	JUL-NOV  JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG	APR-SEP MAY-SEP	- - - APR-OCT - - MAY-SEP - - - - - -	JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG APR-JUN MAY-JUN MAY-AUG MAY-JUL	APR-SEP MAY-SEP	- - - APR-OCT - - MAY-SEP - - - - -	JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC MAR-OCT -	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV	APR-SEP MAY-SEP	- - - APR-OCT - - MAY-SEP - - - - - -	JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC MAR-OCT - AUG-SEP	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV	APR-SEP MAY-SEP	- - - APR-OCT - - MAY-SEP - - - - - -	JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC MAR-OCT - AUG-SEP	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV	- - APR-SEP - - - MAY-SEP - - - - - - - -	- - - APR-OCT - - MAY-SEP - - - - - - -	JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC - JAN-DEC MAR-OCT - AUG-SEP FEB-MAY	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark		X X X X X X X X X X X X X X X X X X X	APR-SEP - MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV	- - - APR-SEP - - MAY-SEP - - - - - - - -	- - - APR-OCT - - MAY-SEP - - - - - - -	JUL-NOV - JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy)		X X X X X X X X X X X X X X X X X X X	APR-SEP  APR-SEP  APR-MAY  APR-AUG  APR-AUG  MAY-JUN  MAY-AUG  MAY-JUL  JUL-NOV  -  -  -  -	- - APR-SEP - - MAY-SEP - - - - - - - -	- 	JUL-NOV  JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC  AN-DEC MAR-OCT - AUG-SEP FEB-MAY  MAY-OCT JUN-OCT	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake Sandbar shark Scup (porgy) Silver hake		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-MAY APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV - APR-MAY		-             -	JUL-NOV  JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC AN-DEC MAR-OCT - AUG-SEP FEB-MAY MAY-OCT JUN-OCT -	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake  Sandbar shark Scup (porgy) Silver hake Silver perch		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-MAY APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV - APR-MAY		-             -	JUL-NOV  JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC AN-DEC MAR-OCT - AUG-SEP FEB-MAY  MAY-OCT JUN-OCT JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake  Sandbar shark Scup (porgy) Silver hake Silver perch Spot		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY			JUL-NOV  JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY  MAY-OCT JUN-OCT - JAN-DEC MAR-NOV	MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake  Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG - MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY			JUL-NOV  JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY  MAY-OCT JUN-OCT - JAN-DEC MAR-NOV	MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAY-OCT MAY-NOV MAR-JUN
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake  Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY			JUL-NOV  JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY  MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN  APR-NOV	MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-NOV MAR-JUN SEP-NOV APR-NOV
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake  Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake		X X X X X X X X X X X X X X X X X X X	APR-SEP MAY-SEP APR-MAY APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY MAY-JUL -			JUL-NOV  JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC  JAN-DEC MAR-OCT  AUG-SEP FEB-MAY  MAY-OCT JUN-OCT  JAN-DEC MAR-NOV MAR-JUN  APR-NOV JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT MAR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake  Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake			APR-SEP APR-MAY APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV - APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY APR-MAY APR-SEP			JUL-NOV  JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY  MAY-OCT JUN-OCT JAN-DEC MAR-NOV MAR-JUN  APR-NOV	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-OCT MAR-OCT MAR-OCT MAY-NOV MAY-OCT MAR-OCT MAR-NOV MAR-JUN SEP-NOV APR-NOV
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake  Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake  Spotted seatrout Striped bass Striped killifish		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-MAY APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-MAY APR-MAY APR-SEP			JUL-NOV  JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT - AUG-SEP FEB-MAY  MAY-OCT JUN-OCT - JAN-DEC MAR-NOV MAR-JUN  APR-NOV JAN-DEC JAN-DEC JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAR-JUN SEP-NOV APR-NOV JAN-DEC JAN-DEC APR-OCT
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake  Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake  Spotted seatrout Striped bass Striped killifish Summer flounder		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-MAY APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV APR-MAY APR-MAY APR-MAY APR-MAY APR-SEP			JUL-NOV  JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT  AUG-SEP FEB-MAY  MAY-OCT JUN-OCT  JAN-DEC MAR-NOV MAR-JUN  APR-NOV JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAY-DEC MAR-NOV MAY-DEC MAR-NOV MAY-NOV APR-NOV APR-NOV JAN-DEC APR-OCT OCT-APR
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake  Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake  Spotted seatrout Striped bass Striped killifish Summer flounder Tautog		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-MAY APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV - APR-MAY APR-MAY APR-SEP			JUL-NOV  JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT  AUG-SEP FEB-MAY  MAY-OCT JUN-OCT  JAN-DEC MAR-NOV MAR-JUN  APR-NOV JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-JUN JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAY-NOV APR-NOV JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT OCT-APR FEB-MAY
	Clearnose skate Gobies Harvestfish Hickory shad Hogchoker Inland silverside Minnows Mummichog Northern kingfish Northern pipefish Northern puffer Northern searobin Red drum Red hake  Sandbar shark Scup (porgy) Silver hake Silver perch Spot Spotted hake  Spotted seatrout Striped bass Striped killifish Summer flounder Tautog		X X X X X X X X X X X X X X X X X X X	APR-SEP APR-MAY APR-AUG APR-AUG APR-AUG MAY-JUN MAY-AUG MAY-JUL JUL-NOV - APR-MAY APR-MAY APR-SEP			JUL-NOV  JAN-DEC JUL-OCT NOV-MAR JAN-DEC JAN-DEC JAN-DEC JAN-DEC MAR-OCT  AUG-SEP FEB-MAY  MAY-OCT JUN-OCT  JAN-DEC MAR-NOV MAR-JUN  APR-NOV JAN-DEC	MAY-NOV JAN-DEC APR-OCT JAN-DEC JAN-DEC JAN-DEC JAN-DEC APR-OCT JAN-DEC MAR-OCT MAY-NOV FEB-MAY SEP-NOV MAY-OCT MAR-OCT OCT-MAY JAN-DEC MAR-NOV MAY-DEC MAR-NOV MAY-DEC MAR-NOV MAY-NOV APR-NOV APR-NOV JAN-DEC APR-OCT OCT-APR

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.

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JUN-OCT

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X X X X X X X X

X X X X X X X X X X X X MAR-JUL

X X X X X X X X X X X X APR-SEP

X X X X

X X X X X X X X APR-JUN

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X X X X X X X X X X X X APR-SEP

X X X X X X X X X X X

FEB-MAY SEP-NOV

APR-NOV

FEB-JUN

SEP-DEC

JAN-JUN

MAY-NOV

MAR-APR

MAY-OCT

JAN-DEC

AUG-NOV

JAN-OCT

JAN-DEC

APR-NOV

APR-OCT

JAN-JUN

APR-NOV

MAR-NOV

MAY-NOV

JAN-DEC

APR-NOV

JAN-DEC

NOV-MAR

AUG-DEC

JAN-DEC

JAN-DEC

AUG-OCT

JAN-DEC

APR-NOV

APR-OCT

NOV-MAR

MAY-NOV

JUL-NOV

JAN-DEC

MAY-AUG

MAY-NOV

APR-JUN

APR-OCT

APR-JUN

APR-SEP

## Virginia: ESIMAP 64 (cont.)

BIOLOGICAL RESOURCES: (cont.)

	: (cont.)				_	_		
RAR#	Species	S F Conc.		spawning	ьggs	Larvae	Juveniles	Adults
199	Harvestfish		X X X X X X X	_	-	_	JUL-OCT	APR-OCT
	Hickory shad			-	-	-	NOV-MAR	JAN-JUN
	Hogchoker		$\times \times $		MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Inland silverside		$\times \times $		-	-	JAN-DEC	JAN-DEC
	Minnows		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Mummichog		X X X X X X X X X X X X X X X X X X X		-	-	JAN-DEC -	JAN-DEC
	Northern kingfish Northern pipefish		X X X X X X X X X X X X X X X X X X X	- M7 V - TIIN	_	_	JAN-DEC	APR-OCT
	Northern puffer		X X X X X X X X	MAY-AUG	_	_	MAR-OCT	JAN-DEC MAR-OCT
	Northern searobin		XXXXXXXX	MAY-JUL	_	_	-	MAR-OCT
	Red drum		XXXXXX		_	_	AUG-SEP	MAY-NOV
	Red hake		X X X X	-	-	-	FEB-MAY	FEB-MAY
								SEP-NOV
	Sandbar shark		$X\ X\ X\ X\ X$	-	-	-	MAY-OCT	MAY-OCT
	Scup (porgy)		$\times \times $	-	-	-	JUN-OCT	MAR-OCT
	Silver hake		X X X X X X X X X X X X X X X X X X X		-	-	-	OCT-MAY
	Silver perch		X X X X X X X X X X X X X		-	-	JAN-DEC	JAN-DEC
	Spot		X X X X X X X X X X X X	_	_	DEC-APR -	MAR-NOV MAR-JUN	JAN-DEC
	Spotted hake		X X X X X X X	_	_	_	MAR-JUN	MAR-JUN SEP-NOV
	Spotted seatrout		$\times \times \times \times \times \times \times$	MAY-JUI	_	_	APR-NOV	APR-NOV
	Striped bass		X 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		_	_	JAN-DEC	JAN-DEC
	Summer flounder		$\times \times $		-	OCT-MAY	JAN-DEC	APR-OCT
	Tautog		X X X X X X X X X X X X X X X X X X X	-	-	-	-	OCT-APR
200	American shad		X X X X X	-	-	-	-	FEB-JUN
	Hickory shad		X X X X X	-	-	-	-	FEB-JUN
	Striped bass		$X \ X \ X \ X \ X \ X \ X \ X \ X$	-	-	-	-	OCT-JUN
201	American eel		$X \; X \; $	-	-	-	JAN-DEC	-
	Atlantic menhaden		X X X X X X X	_	_	-	MAY-NOV	-
	Bay anchovy		X X X X X X X X X X X X X X X X X X X		- MAY-SEP	- MAY-SEP	JAN-DEC	JAN-DEC
	Hogchoker Killifish		X X X X X X X X X X X X X X X X X X X		MAI-SEP	MAI-SEP	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Mummichog		X X X X X X X X X X X X X		_	_	JAN-DEC	JAN-DEC
	Silversides		X X X X X X X X X X X X X		MAR-JUL	APR-SEP	JAN-DEC	JAN-DEC
	511.0101000			11111 002	11111 002	11111 021	01111 220	01111 220
INVE	RTEBRATE:							
RAR#		S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
	Northern quahog (hard clam)		$\times \times $		MAY-OCT	MAY-OCT	JAN-DEC	JAN-DEC
	Eastern oyster		$X \; X \; $		JUN-SEP	JUN-SEP	JAN-DEC	JAN-DEC
	Blue crab		X X X X X X X X X X X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
199	Blue crab		X X X X X X X X X X X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
	Eastern oyster Horseshoe crab		X X X X X X X X X X X X X X X X X X X	JUN-SEP	JUN-SEP -	JUN-SEP -	JAN-DEC JAN-DEC	JAN-DEC JAN-DEC
	Northern quahog (hard clam)		X X X X X X X X X X X X X		MAY-OCT		JAN-DEC	JAN-DEC
209	Blue crab		X X X X X X X X X X X X X	-	-	MAY-NOV	JAN-DEC	JAN-DEC
MARI	NE 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	-	-	-	-	
400	Harbor porpoise		XXXXXXX		_	_	_	
199	Bottlenose dolphin		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-	-	_	
200	Harbor porpoise Bottlenose dolphin		X X X X X X X	_	_	_	_	
209	Harbor porpoise		XXXXXXXXX	_	_	_	_	
	narbor porporac		77 77 77 77					
REPT	ILE:							
RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internes	ting Juveni	les Adults
39	Green sea turtle	T T	$X\ X\ X\ X\ X\ X$	-	-	-	MAY-NO	J –
	Kemp's ridley sea turtle	E E	$X\ X\ X\ X\ X\ X$	-	-	-	MAY-NO	J –
	Leatherback sea turtle	E E	$X\;X\;X\;X\;X\;X\;X$	-	-	-	-	
	Loggerhead sea turtle	ТТ	X X X X X X X	-	-	-	MAY-NO	
199	Green sea turtle	ТТ	XXXXXX	-	-	-	MAY-NO	
	Kemp's ridley sea turtle	E E	X	_	_	_	MAY-NO	
	Leatherback sea turtle Loggerhead sea turtle	E E T T	$\begin{array}{c} X\;X\;X\;X\;X\;X\;X\\ X\;X\;X\;X\;X\;X\;X\end{array}$	_	_	_	- MAY-NO	
209	Green sea turtle	ТТ	x x x x x x x x x x x x x x x x x x x	_	_	_	MAY-NOV	
200	Kemp's ridley sea turtle	E E	XXXXXXX	_	_	_	MAY-NOV	
	Leatherback sea turtle	E E	XXXXXXX	_	_	_	-	
	Loggerhead sea turtle	T T	$X \times X \times X \times X$	_	_	_	MAY-NO	