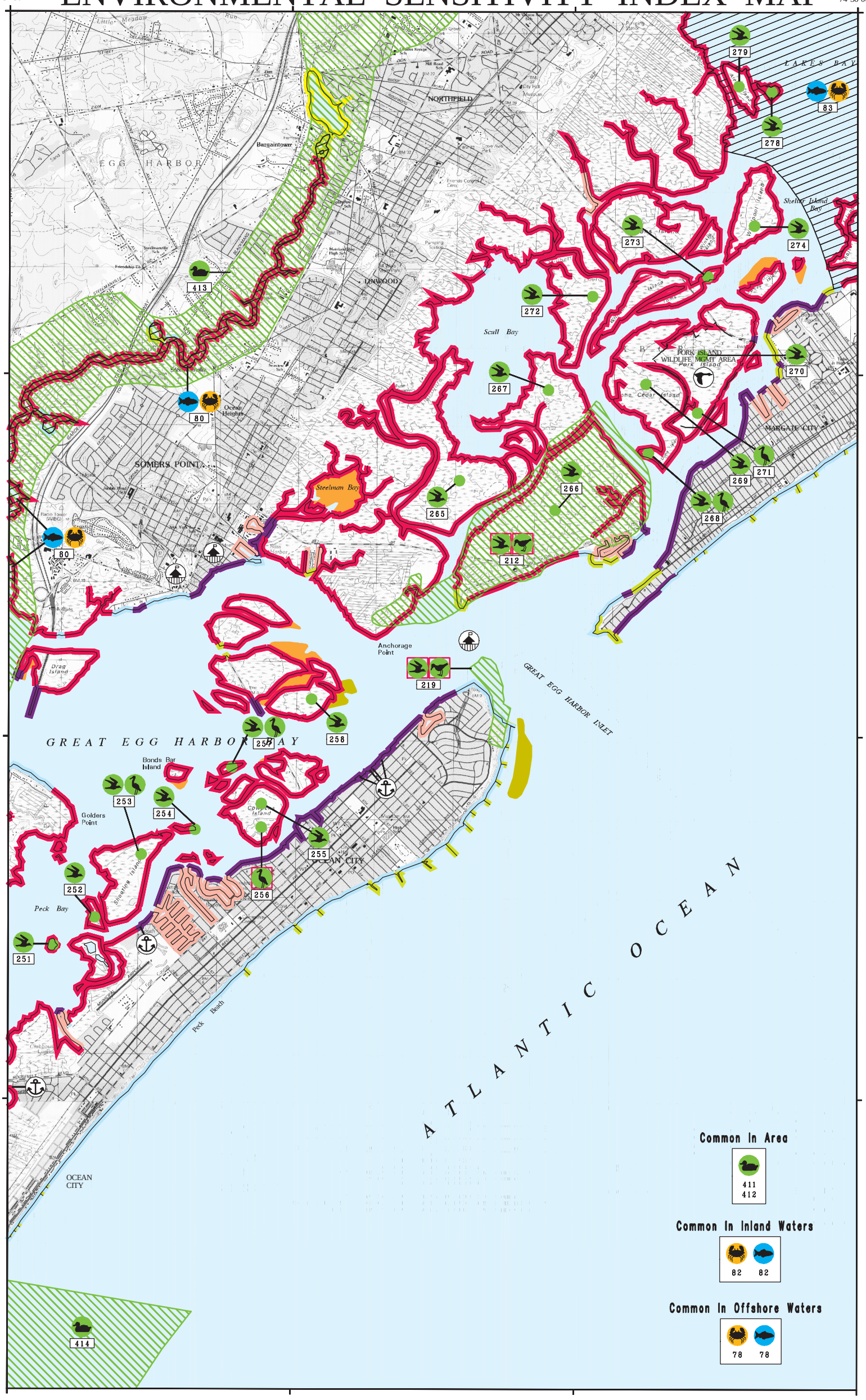
ENVIRONMENTAL SENSITIVITY INDEX MAP



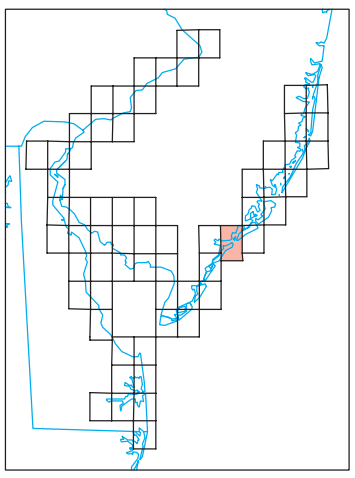
Prepared for:

HAZARDOUS MATERIALS RESPONSE
and ASSESSMENT DIVISION
National Oceanic and Atmospheric Administration
Seattle, Washington
and
The States of DELAWARE,
NEW JERSEY, and PENNSYLVANIA

N
W E
S

1 .5 0 1 KILOMETER
1 .5 0 1 MILE

Not For Navigation
Published: August 1996



DELAWARE, NEW JERSEY, and PENNSYLVANIA ESIMAP 49

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	ST	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Laying	Hatching	Fledging
212	Common tern							X	X	X	X	X	X					APR-JUL	APR-MAY	MAY-JUN	JUN-JUL
	Forster's tern							X	X	X	X	X	X					MAY-JUL	-	JUN-JUN	JUL-JUL
	Least tern	NJ	S	E					X	X	X	X	X					MAY-JUL	MAY-JUN	JUN-JUN	JUN-JUL
	Piping plover	NJ	S/F	E/T			X	X	X	X	X	X	X	X				APR-AUG	MAY-JUN	MAY-JUL	JUN-AUG
	Shorebirds								X	X		X	X	X	X			-	-	-	-
219	Least tern	NJ	S	E					X	X	X	X	X					MAY-JUL	MAY-JUN	JUN-JUN	JUN-JUL
	Piping plover	NJ	S/F	E/T			X	X	X	X	X	X	X	X				APR-AUG	MAY-JUN	MAY-JUL	JUN-AUG
251	Common tern				1			X	X	X	X	X	X					APR-JUL	APR-MAY	MAY-JUN	JUN-JUL
	Herring gull				1		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
252	Herring gull				2		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
253	Black-crowned night heron				2			X	X	X	X	X	X	X				MAR-JUN	MAY-JUN	-	-
	Common tern				72			X	X	X	X	X	X					APR-JUL	APR-MAY	MAY-JUN	JUN-JUL
	Herring gull				41		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
254	Common tern				18			X	X	X	X	X	X					APR-JUL	APR-MAY	MAY-JUN	JUN-JUL
255	Great black-backed gull				11		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
	Herring gull				427		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
256	Cattle egret				2			X	X	X	X	X	X					MAR-AUG	MAR-APR	APR-MAY	JUN-AUG
	Glossy ibis				70			X	X	X	X	X	X	X				MAR-SEP	APR-MAY	APR-JUN	JUL-SEP
	Great egret				50			X	X	X	X	X	X	X	X	X		JUN-JUL	-	-	-
	Little blue heron				8				X	X	X	X	X	X	X	X		APR-JUL	APR-MAY	MAY-JUN	JUN-JUL
	Snowy egret				110				X	X	X	X	X	X				JUN-JUL	-	-	-
	Tricolored heron				3				X	X	X	X	X					APR-AUG	APR-MAY	APR-JUN	JUN-AUG
	Yellow-crowned night heron	NJ	S	T	5			X	X	X	X	X	X	X				MAR-JUN	MAR-APR	-	-
257	Herring gull				180		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
	Snowy egret				4				X	X	X	X	X	X				JUN-JUL	-	-	-
258	Laughing gull				120				X	X	X	X	X	X	X			APR-JUL	MAY-MAY	MAY-JUN	JUL-JUL
265	Forster's tern				17			X	X	X	X	X	X					MAY-JUL	-	JUN-JUN	JUL-JUL
266	Common tern				614			X	X	X	X	X	X					APR-JUL	APR-MAY	MAY-JUN	JUN-JUL
	Great black-backed gull				10		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
	Herring gull				110		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
	Laughing gull				870				X	X	X	X	X	X	X			APR-JUL	MAY-MAY	MAY-JUN	JUL-JUL
267	Common tern				300			X	X	X	X	X	X					APR-JUL	APR-MAY	MAY-JUN	JUN-JUL
	Forster's tern				12			X	X	X	X	X	X					MAY-JUL	-	JUN-JUN	JUL-JUL
	Great black-backed gull				1		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
	Laughing gull				860				X	X	X	X	X	X	X			APR-JUL	MAY-MAY	MAY-JUN	JUL-JUL
268	Black-crowned night heron				21			X	X	X	X	X	X	X	X			MAR-JUN	MAY-JUN	-	-
	Glossy ibis				65			X	X	X	X	X	X	X				MAR-SEP	APR-MAY	APR-JUN	JUL-SEP
	Herring gull				62		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
	Little blue heron				2				X	X	X	X	X	X	X	X		APR-JUL	APR-MAY	MAY-JUN	JUN-JUL
	Snowy egret				4				X	X	X	X	X	X				JUN-JUL	-	-	-
269	Common tern				62			X	X	X	X	X	X					APR-JUL	APR-MAY	MAY-JUN	JUN-JUL
	Herring gull				2		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
	Laughing gull				385				X	X	X	X	X	X	X			APR-JUL	MAY-MAY	MAY-JUN	JUL-JUL
270	Great black-backed gull				5		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
	Herring gull				415		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
271	Black-crowned night heron				5			X	X	X	X	X	X	X	X			MAR-JUN	MAY-JUN	-	-
	Glossy ibis				4			X	X	X	X	X	X	X				MAR-SEP	APR-MAY	APR-JUN	JUL-SEP
	Great egret				6			X	X	X	X	X	X	X	X	X		JUN-JUL	-	-	-
	Snowy egret				55				X	X	X	X	X	X				JUN-JUL	-	-	-
	Tricolored heron				9				X	X	X	X	X					APR-AUG	APR-MAY	APR-JUN	JUN-AUG
272	Common tern				5			X	X	X	X	X	X					APR-JUL	APR-MAY	MAY-JUN	JUN-JUL
	Forster's tern				45			X	X	X	X	X	X					MAY-JUL	-	JUN-JUN	JUL-JUL
	Laughing gull				5				X	X	X	X	X	X	X			APR-JUL	MAY-MAY	MAY-JUN	JUL-JUL
273	Common tern				4			X	X	X	X	X	X					APR-JUL	APR-MAY	MAY-JUN	JUN-JUL
	Laughing gull				35				X	X	X	X	X	X	X			APR-JUL	MAY-MAY	MAY-JUN	JUL-JUL
274	Common tern				48			X	X	X	X	X	X					APR-JUL	APR-MAY	MAY-JUN	JUN-JUL
	Forster's tern				35			X	X	X	X	X	X					MAY-JUL	-	JUN-JUN	JUL-JUL
	Great black-backed gull				1		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
	Laughing gull				1720				X	X	X	X	X	X	X			APR-JUL	MAY-MAY	MAY-JUN	JUL-JUL
278	Laughing gull				440				X	X	X	X	X	X	X			APR-JUL	MAY-MAY	MAY-JUN	JUL-JUL
279	Herring gull				1		X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-JUN	JUN-JUL	JUL-SEP
	Laughing gull				730				X	X	X	X	X	X	X			APR-JUL	MAY-MAY	MAY-JUN	JUL-JUL
411	American wigeon				400		X	X	X					X	X	X		-	-	-	-
	Black duck				9500		X	X								X		-	-	-	-
	Brant				18805		X	X	X					X	X	X		-	-	-	-
	Bufflehead				2100		X	X	X	X			X	X	X	X		-	-	-	-
	Canada goose				2000		X	X	X	X	X	X	X	X	X	X		-	-	-	-
	Canvasback				700		X	X	X	X				X	X	X		-	-	-	-
	Goldeneye				50		X	X	X							X		-	-	-	-
	Mallard				2000		X	X	X	X	X	X	X	X	X	X		-	-	-	-
	Merganser				600		X	X	X	X					X	X		-	-	-	-
	Northern pintail				200		X	X	X	X				X	X	X		-	-	-	-
	Northern shoveler				100		X	X	X	X				X	X	X		-	-	-	-
	Oldsquaw				1000		X	X	X	X					X	X		-	-	-	-
	Scaup				15000		X	X	X							X		-	-	-	-
	Scoter				16000									X	X	X		-	-	-	-
	Whistling swan (tundra swan)				50		X	X	X	X						X		-	-	-	-
412	American wigeon				500		X	X	X					X	X	X		-	-	-	-
	Black duck				3000		X	X								X		-	-	-	-
	Brant				13895		X	X	X					X	X	X		-	-	-	-
	Bufflehead				1300		X	X	X	X			X	X	X	X		-	-	-	-
	Canada goose				300		X	X	X	X	X	X	X	X	X	X		-	-	-	-
	Canvasback				400		X	X	X	X				X	X	X		-	-	-	-
	Goldeneye				100		X	X	X							X		-	-	-	-
	Green-winged teal				100		X	X	X					X	X	X		-	-	-	-
	Mallard				2200		X	X	X	X	X	X	X	X	X	X		-	-	-	-
	Merganser				200		X	X	X	X					X	X		-	-	-	-
	Oldsquaw				5000		X	X	X	X					X	X		-	-	-	-
	Scaup				11000		X	X	X							X		-	-	-	-
	Scoter				4000									X	X	X		-	-	-	-
413	American coot				400		X	X	X	X	X	X	X	X	X	X	X	MAY-MAY	MAY-JUN	JUN-JUL	AUG-SEP
	American wigeon				300		X	X	X					X	X	X		-	-	-	-
	Black duck				5100		X	X								X		-	-	-	-
	Brant				400		X	X	X					X	X	X		-	-	-	-
	Bufflehead				300		X	X	X	X			X	X	X	X		-	-	-	-
	Canada goose				4110		X	X	X	X	X	X	X	X	X	X		-	-	-	-
	Gadwall				100		X	X	X	X						X		-	-	-	-
	Goldeneye				500		X	X	X						X	X		-	-	-	-
	Green-winged teal				900		X	X	X					X	X	X		-	-	-	-
	Mallard				2730		X	X	X	X	X	X	X	X	X	X		-	-	-	-
	Merganser				400		X	X	X	X				X	X	X		-	-	-	-
	Mute swan				208		X	X	X	X	X	X	X	X	X	X	X	MAR-OCT	APR-MAY	MAY-JUN	SEP-OCT
	Northern pintail				900		X	X	X	X			X	X	X	X		-	-	-	-
	Scaup				3000		X	X	X						X	X		-	-	-	-
	Whistling swan (tundra swan)				200		X	X	X	X					X	X		-	-	-	-
414	American wigeon				1000		X	X	X					X	X	X		-	-	-	-
	Black duck				9800		X	X								X		-	-	-	-
	Brant				14510		X	X	X					X	X	X		-	-	-	-
	Bufflehead				1700		X	X	X	X			X	X	X	X		-	-	-	-
	Canada goose				300		X	X	X	X	X	X	X	X	X	X		-	-	-	-
	Canvasback				2000		X	X	X	X				X	X	X		-	-	-	-
	Goldeneye				20		X	X	X						X	X		-	-	-	-
	Green-winged teal				200		X	X	X					X	X	X		-	-	-	-
	Mallard				1100		X	X	X	X	X	X	X	X	X	X		-	-	-	-
	Merganser				700		X	X	X	X					X	X		-	-	-	-
	Northern pintail				100		X	X	X	X				X	X	X		-	-	-	-
	Oldsquaw				500		X	X	X	X					X	X		-	-	-	-
	Scaup				15000		X	X	X						X	X		-	-	-	-
	Scoter				10000									X	X	X		-	-	-	-

FISH:

RAR#	Species	ST	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Outmig.	Larvae/Juv
78	Alewife					X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-
	American shad							X	X	X								-	-	-
	Atlantic croaker					X			X	X	X	X	X	X	X	X		-	-	MAY-JAN
	Atlantic herring					X		X	X	X						X	X	-	MAR-JUN	-
	Atlantic menhaden							X	X	X	X	X	X	X	X			-	-	MAR-OCT
	Atlantic sturgeon					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	APR-AUG
	Black seabass								X	X	X	X	X	X	X			-	-	APR-OCT
	Blueback herring								X	X	X							APR-JUN	-	-
	Bluefish								X	X	X	X	X	X	X			-	-	JUL-SEP
	Northern kingfish								X	X	X	X	X	X	X	X		-	-	-
	Porgy (scup)								X	X	X	X	X	X	X	X	X	-	-	-
	Seatrout (weakfish)							X	X	X	X	X	X	X	X	X		APR-AUG	-	APR-SEP
	Spot							X	X	X	X	X	X	X	X	X	X	-	-	MAR-JUN
	Squirrel (red) hake (ling)					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Striped bass					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Summer flounder								X	X	X	X	X	X	X			-	-	APR-NOV

DELAWARE, NEW JERSEY, and PENNSYLVANIA ESIMAP 49 (continued)

BIOLOGICAL RESOURCES (continued):

FISH:

RAR#	Species	ST	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Outmig.	Larvae/Juv
78	Tautog					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	JUN-DEC
	Winter flounder					X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	-	MAY-OCT
80	Alewife					X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-
	Atlantic croaker					X		X	X	X	X	X	X	X	X	X		-	-	MAY-JAN
	Atlantic menhaden						X	X	X	X	X	X	X	X				-	-	MAR-OCT
	Blueback herring							X	X	X								APR-JUN	-	-
	Bluefish							X	X	X	X	X	X	X				-	-	JUL-SEP
	Seatrout (weakfish)						X	X	X	X	X	X	X	X	X			APR-AUG	-	APR-SEP
	Spot						X	X	X	X	X	X	X	X	X	X		-	-	MAR-JUN
	Striped bass					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Summer flounder							X	X	X	X	X	X	X	X			-	-	APR-NOV
	Tautog					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	JUN-DEC
	White perch					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Winter flounder					X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	-	MAY-OCT
	Yellow perch					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
82	Alewife					X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-
	American shad							X	X	X								-	-	-
	Atlantic croaker					X		X	X	X	X	X	X	X	X	X		-	-	MAY-JAN
	Atlantic sturgeon					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	APR-AUG
	Black seabass							X	X	X	X	X	X	X	X			-	-	APR-OCT
	Blueback herring							X	X	X								APR-JUN	-	-
	Bluefish							X	X	X	X	X	X	X				-	-	JUL-SEP
	Northern kingfish							X	X	X	X	X	X	X	X			-	-	-
	Porgy (scup)							X	X	X	X	X	X	X	X	X		-	-	-
	Seatrout (weakfish)						X	X	X	X	X	X	X	X	X			APR-AUG	-	APR-SEP
	Spot						X	X	X	X	X	X	X	X	X	X		-	-	MAR-JUN
	Squirrel (red) hake (ling)					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Striped bass					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Summer flounder								X	X	X	X	X	X	X			-	-	APR-NOV
	Tautog					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	JUN-DEC
	White perch					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Winter flounder					X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	-	MAY-OCT
83	Alewife					X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-
	Atlantic croaker					X		X	X	X	X	X	X	X	X	X		-	-	MAY-JAN
	Atlantic menhaden						X	X	X	X	X	X	X	X				-	-	MAR-OCT
	Black seabass							X	X	X	X	X	X	X	X			-	-	APR-OCT
	Blueback herring							X	X	X								APR-JUN	-	-
	Bluefish							X	X	X	X	X	X	X				-	-	JUL-SEP
	Seatrout (weakfish)						X	X	X	X	X	X	X	X	X			APR-AUG	-	APR-SEP
	Spot						X	X	X	X	X	X	X	X	X	X		-	-	MAR-JUN
	Squirrel (red) hake (ling)					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Striped bass					X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Summer flounder								X	X	X	X	X	X	X			-	-	APR-NOV
	Tautog					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	JUN-DEC
	White perch					X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Winter flounder					X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	-	MAY-OCT

SHELLFISH:

RAR#	Species	ST	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Larvae/Juv	Mating
78	Blue crab					X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	SEP-OCT	MAY-JUN
80	Blue crab					X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	SEP-OCT	MAY-JUN
82	Blue crab					X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	SEP-OCT	MAY-JUN
83	Blue crab					X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	SEP-OCT	MAY-JUN