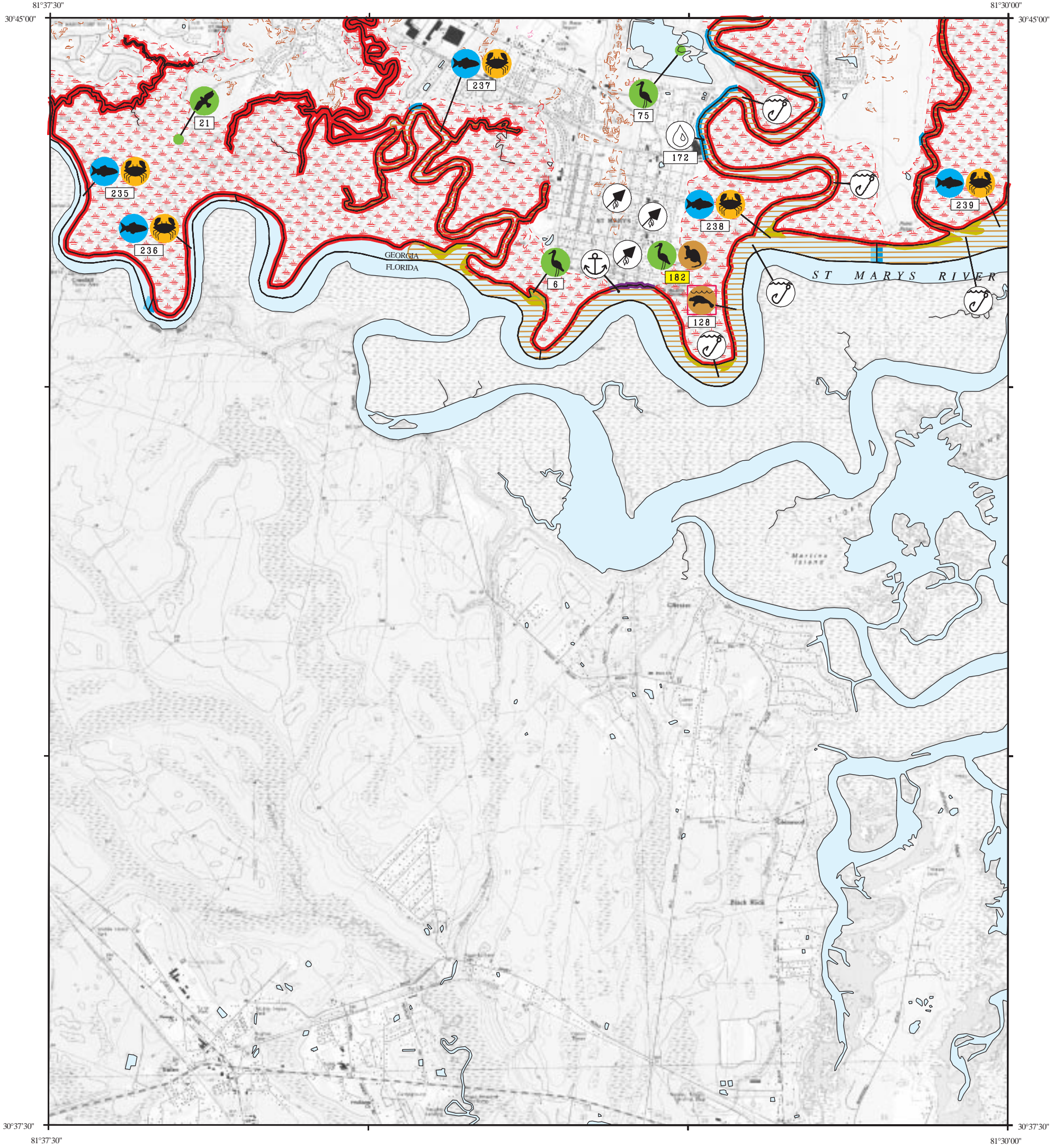
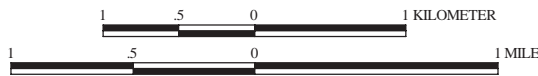


# ENVIRONMENTAL SENSITIVITY INDEX MAP

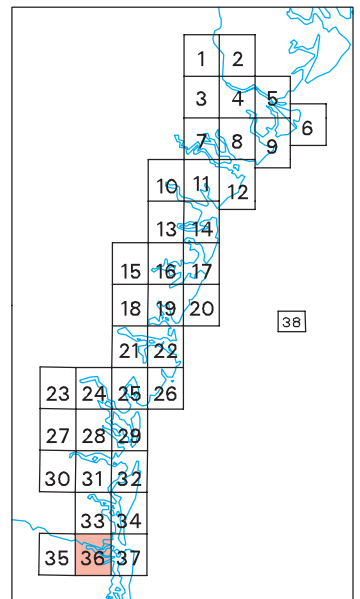


## SHORELINE HABITAT RANKINGS

- 1B EXPOSED, SOLID MAN-MADE STRUCTURES
- 3A FINE- TO MEDIUM- GRAINED SAND BEACHES
- 3B SCARPS AND STEEP SLOPES IN SAND
- 6A GRAVEL BEACHES
- 6B RIPRAP
- 7 EXPOSED TIDAL FLATS
- 8A SHELTERED SCARPS IN MUD
- 8B SHELTERED, SOLID MAN-MADE STRUCTURES
- 8C SHELTERED RIPRAP
- 9A SHELTERED TIDAL FLATS
- 9B VEGETATED LOW RIVERINE BANKS
- 10A SALT- AND BRACKISH- WATER MARSHES
- 10B FRESHWATER MARSHES
- 10C SWAMPS
- 10D SCRUB-SHRUB WETLANDS



**Not For Navigation**  
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 National Ocean Service  
 Office of Ocean Resources Conservation and Assessment Division  
 Hazardous Materials Response and Assessment Division





BIOLOGICAL RESOURCES:

FISH:

RAR#	Species	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Outmig.	Larvae	Juveniles	Adults
237	Hogchoker	3	3	3	3	3	3	3	4	4	4	3	3	3	3	3	APR-SEP	-	MAY-OCT	JAN-DEC	JAN-DEC
	King mackerel								2	2	2	2	2	2	2	2	-	-	-	JUN-DEC	-
	Ladyfish	2	2	2	2	2	2	3	3	3	2	2	2	2	2	2	-	-	APR-NOV	JAN-DEC	JUN-OCT
	Mummichog	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	APR-OCT	-	APR-OCT	JAN-DEC	JAN-DEC
	Pinfish	2	2	2	2	3	4	4	4	4	4	4	3	2			-	-	JAN-MAY	JAN-DEC	MAY-NOV
	Red drum	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	JUN-OCT	-	JUN-NOV	JAN-DEC	APR-NOV
	Seatrout (weakfish)	3	3	3	3	3	3	5	5	5	3	3	3	3	3	3	MAR-OCT	-	APR-NOV	JAN-DEC	JAN-DEC
	Sheepshead	3	3	3	3	3	3	3	3	4	4	4	3				-	-	JUL-DEC	JAN-DEC	JAN-DEC
	Silver perch	3	3	3	4	4	4	4	4	5	5	5	3				APR-AUG	-	APR-SEP	JAN-DEC	JAN-DEC
	Southern flounder	3	3	3	4	4	4	4	4	4	4	4	3				-	-	FEB-APR	JAN-DEC	JAN-DEC
	Southern kingfish (whiting)	3	3	4	4	4	4	4	4	4	4	3	3	3	3	3	SEP-SEP	-	MAY-NOV	JAN-DEC	JAN-DEC
	Spanish mackerel								2	2	2	2	2	2	2	2	-	-	-	JUN-NOV	JUL-SEP
	Spot	3	4	4	5	5	5	5	5	5	5	4	4	4	4	4	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Spotted seatrout	4	4	3	3	3	4	4	4	4	4	4	3	3	3	3	APR-OCT	-	APR-OCT	JAN-DEC	JAN-DEC
	Star drum	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	APR-JUL	-	APR-SEP	JAN-DEC	JAN-DEC
	Striped anchovy	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	APR-JUN	-	APR-JUL	JAN-DEC	JAN-DEC
	Striped bass	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	MAR-MAY	-	MAR-MAY	JAN-DEC	JAN-DEC
	Striped mullet	4	4	4	5	5	5	5	5	5	5	5	5	4			-	-	NOV-APR	JAN-DEC	JAN-DEC
	Summer flounder	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	JAN-APR	JAN-DEC	JAN-DEC
	Tarpon	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	JUL-SEP	JAN-DEC	MAY-OCT
238	American eel	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	JAN-MAY	JAN-DEC	NOV-FEB
	American shad	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JUN-DEC	DEC-APR
	Atlantic croaker	3	3	4	5	5	5	5	5	5	5	4	3				-	-	NOV-APR	JAN-DEC	APR-DEC
	Atlantic menhaden	3	3	4	4	5	4	4	4	4	3	2					-	-	DEC-JUN	JAN-DEC	APR-OCT
	Atlantic sharpnose shark				2	3	3	3	3	2							MAY-AUG	-	-	MAY-OCT	APR-OCT
	Atlantic spadefish	3	3	3	3	4	4	4	4	3	3	3	3	3	3	3	-	-	-	JAN-DEC	MAY-JAN
	Atlantic sturgeon	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	MAR-DEC
	Bay anchovy	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	MAY-OCT	-	MAY-NOV	JAN-DEC	JAN-DEC
	Black drum	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	MAY-MAY	-	MAR-JUN	JAN-DEC	JAN-DEC
	Black seabass	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	MAY-JAN
	Blueback herring	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	MAR-APR	-	MAR-APR	JAN-DEC	FEB-JUL
	Bluefish	2	2	2	2	3	3	3	3	3	3	3	2				-	-	-	JAN-DEC	-
	Cobia								2	2	2	2	2	2	2	2	-	-	-	JUN-OCT	JUN-OCT
	Gag grouper	2			2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	MAY-NOV	MAY-JAN
	Hardhead catfish				3	4	5	5	5	4	4	3					APR-JUN	-	APR-JUL	APR-NOV	APR-NOV
	Hickory shad	3	3	2	2	2	2	2	2	2	2	2	3				-	-	-	MAR-APR	DEC-APR
	Hogchoker	3	3	3	3	4	4	4	3	3	3	3	3	3	3	3	APR-SEP	-	MAY-OCT	JAN-DEC	JAN-DEC
	King mackerel								2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	-
	Ladyfish	2	2	2	2	2	3	3	3	2	2	2	2	2	2	2	-	-	APR-NOV	JAN-DEC	JUN-OCT
	Mummichog	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	APR-OCT	-	APR-OCT	JAN-DEC	JAN-DEC
	Pinfish	2	2	2	2	3	4	4	4	4	4	3	2				-	-	JAN-MAY	JAN-DEC	MAY-NOV
	Red drum	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	JUN-OCT	-	JUN-NOV	JAN-DEC	APR-NOV
	Seatrout (weakfish)	3	3	3	3	3	3	5	5	5	3	3	3	3	3	3	MAR-OCT	-	APR-NOV	JAN-DEC	JAN-DEC
	Sheepshead	3	3	3	3	3	3	3	3	4	4	4	3				-	-	JUL-DEC	JAN-DEC	JAN-DEC
	Silver perch	3	3	3	4	5	5	5	5	5	5	5	3				APR-AUG	-	APR-SEP	JAN-DEC	JAN-DEC
	Southern flounder	3	3	3	4	4	4	4	4	4	4	4	3				-	-	FEB-APR	JAN-DEC	JAN-DEC
	Southern kingfish (whiting)	3	3	3	4	4	4	5	5	4	3	3	3	3	3	3	APR-SEP	-	MAY-NOV	JAN-DEC	JAN-DEC
	Spanish mackerel								2	3	3	2	2	2	2	2	-	-	-	APR-NOV	JUL-SEP
	Spot	4	4	4	5	5	5	5	5	5	4	4	4	4	4	4	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Spotted seatrout	3	3	3	3	4	4	4	4	4	3	3	3	3	3	3	APR-OCT	-	APR-OCT	JAN-DEC	JAN-DEC
	Star drum	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	APR-JUL	-	APR-SEP	JAN-DEC	JAN-DEC
	Striped anchovy	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	APR-JUN	-	APR-JUL	JAN-DEC	JAN-DEC
	Striped bass	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	JAN-DEC
	Striped mullet	4	4	4	5	5	5	5	5	5	5	5	4				-	-	NOV-APR	JAN-DEC	JAN-DEC
	Summer flounder	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	JAN-APR	JAN-DEC	JAN-DEC
	Tarpon	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	JUL-SEP	JAN-DEC	MAY-OCT
	SALINITY TIME PERIOD	T	L	L	L	T	T	T	T	H	H	H	H	T							

INVERTEBRATE:

RAR#	Species	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Larvae	Mating	Juveniles	Adults
235	American oyster (eastern)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	MAY-DEC	MAY-JAN	-	JAN-DEC	JAN-DEC
	Blue crab	3	2	3	4	4	4	4	4	4	4	4	4	4	3	3	MAY-OCT	MAY-NOV	MAR-OCT	JAN-DEC	JAN-DEC
	Brown shrimp	3	2	2	2	3	4	4	4	4	3	3	3	3	3	3	-	NOV-JAN	-	JAN-DEC	JUL-SEP
	Grass shrimp	4			4	4	4	4	4	4	4	4	4	4	4	4	MAY-OCT	MAY-NOV	-	MAY-JAN	MAY-JAN
	Knobbed whelk	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	MAY-MAY	-	JAN-DEC	JAN-DEC
	SALINITY TIME PERIOD	T	L	L	L	T	T	T	T	H	H	H	H	T							

BIOLOGICAL RESOURCES:

INVERTEBRATE:

RAR#	Species	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Larvae	Mating	Juveniles	Adults
235	Pink shrimp				2	2	2	2	3	3	3	3	3	3	2		MAY-JUL			JAN-DEC	JUL-JAN
	Quahog spp. (hard clam)				2	2	2	2	2	2	2	2	2	2	2		MAY-NOV	MAY-JAN		JAN-DEC	JAN-DEC
	White shrimp				3	2	2	2	4	5	5	5	5	5	4	3		MAY-AUG		JAN-DEC	MAY-AUG
																				DEC-JAN	
236	American oyster (eastern)				4	4	4	4	4	4	4	4	4	4	4		APR-DEC	APR-JAN		JAN-DEC	JAN-DEC
	Blue crab				3	3	4	4	4	4	4	4	4	4	3		APR-OCT	MAY-NOV	MAR-OCT	JAN-DEC	JAN-DEC
	Brown shrimp				3	3	3	3	3	4	4	4	3	3	3			NOV-MAR		JAN-DEC	JUL-SEP
	Grass shrimp				4	4	4	4	4	4	4	4	4	4	4		MAY-OCT	MAY-NOV		JAN-DEC	JAN-DEC
	Knobbed whelk				2	2	2	2	2	2	2	2	2	2	2			MAR-MAY		JAN-DEC	JAN-DEC
																	SEP-NOV				
	Pink shrimp				2	2	2	3	3	3	3	3	3	3	2			APR-JUL		JAN-DEC	JUL-JAN
	Quahog spp. (hard clam)				2	2	2	2	2	2	2	2	2	2	2		APR-NOV	APR-JAN		JAN-DEC	JAN-DEC
	White shrimp				3	3	3	4	5	5	5	5	5	4	3			APR-AUG		JAN-DEC	DEC-AUG
237	American oyster (eastern)				4	4	4	4	4	4	4	4	4	4	4		APR-DEC	APR-JAN		JAN-DEC	JAN-DEC
	Blue crab				3	3	4	4	4	4	4	5	5	5	4		APR-OCT	MAY-NOV	MAR-AUG	JAN-DEC	JAN-DEC
	Brown shrimp				3	3	3	3	4	4	4	5	4	4	3			NOV-MAR		JAN-DEC	JUL-SEP
	Grass shrimp				4	4	4	4	4	4	4	4	4	4	4		MAY-OCT	MAY-NOV		JAN-DEC	JAN-DEC
	Knobbed whelk				2	2	2	2	2	2	2	3	3	3	3		SEP-OCT	MAR-MAY		JAN-DEC	JAN-DEC
																	SEP-NOV				
	Pink shrimp				2	2	2	3	3	3	3	3	3	3	3			APR-JUL		JAN-DEC	JUL-JAN
	Quahog spp. (hard clam)				2	2	2	2	2	2	2	2	2	2	2		APR-NOV	APR-JAN		JAN-DEC	JAN-DEC
	White shrimp				3	3	3	4	5	5	5	5	5	4	3			APR-AUG		JAN-DEC	JAN-DEC
238	American oyster (eastern)				4	4	4	4	4	4	4	4	4	4	4		APR-DEC	APR-JAN		JAN-DEC	JAN-DEC
	Blue crab				4	3	4	4	5	5	5	5	5	5	4		APR-OCT	MAY-NOV	MAR-APR	JAN-DEC	JAN-DEC
	Brown shrimp				3	3	3	3	4	5	5	5	4	4	3			NOV-MAR		JAN-DEC	JUL-SEP
	Grass shrimp				4	4	4	4	4	4	4	4	4	4	4		MAY-OCT	MAY-NOV		JAN-DEC	JAN-DEC
	Knobbed whelk				3	2	2	2	3	3	3	3	3	3	3		SEP-OCT	MAR-JUN		JAN-DEC	JAN-DEC
																	SEP-NOV				
	Pink shrimp				3	2	2	3	3	3	3	3	3	3	3			APR-JUL		JAN-DEC	JUL-JAN
	Quahog spp. (hard clam)				2	2	2	2	2	2	2	2	2	2	2		APR-NOV	APR-JAN		JAN-DEC	JAN-DEC
	White shrimp				3	3	3	4	5	5	5	5	5	4	3			APR-AUG		JAN-DEC	JAN-DEC
239	American oyster (eastern)				4	4	4	4	4	4	4	4	4	4	4		APR-DEC	APR-JAN		JAN-DEC	JAN-DEC
	Blue crab				4	4	4	4	5	5	5	5	5	5	4		MAR-OCT	MAY-NOV		JAN-DEC	JAN-DEC
	Brown shrimp				3	3	3	4	5	5	5	5	4	4	3			NOV-MAR		JAN-DEC	JUL-SEP
	Grass shrimp				4	4	4	4	4	4	4	4	4	4	4		MAY-OCT	MAY-NOV		JAN-DEC	JAN-DEC
	Knobbed whelk				3	3	3	3	3	3	3	3	3	3	3		MAR-APR	MAR-JUN		JAN-DEC	JAN-DEC
																	SEP-OCT	SEP-NOV			
	Pink shrimp				3	3	3	3	3	3	3	3	3	3	3			APR-JUL		JAN-DEC	JUL-JAN
	Quahog spp. (hard clam)				2	2	2	2	2	2	2	2	2	2	2		APR-NOV	APR-JAN		JAN-DEC	JAN-DEC
	White shrimp				3	3	3	4	5	5	5	5	5	4	3			APR-AUG		JAN-DEC	JAN-DEC
SALINITY TIME PERIOD					T	L	L	L	T	T	T	T	H	H	H	T					

M MAMMAL:

RAR#	Species	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting
128	West Indian manatee	S/F	E/E	HIGH				X	X	X	X	X	X	X	X		-	-	-	-

T MAMMAL:

RAR#	Species	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D
182	Rare rodent			OCCURRENCE	X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

WATER INTAKE:

HUN#	Name	Owner	Contact	Phone
172	WATER INTAKE	GILMAN PAPER CO.		(912)882-3310