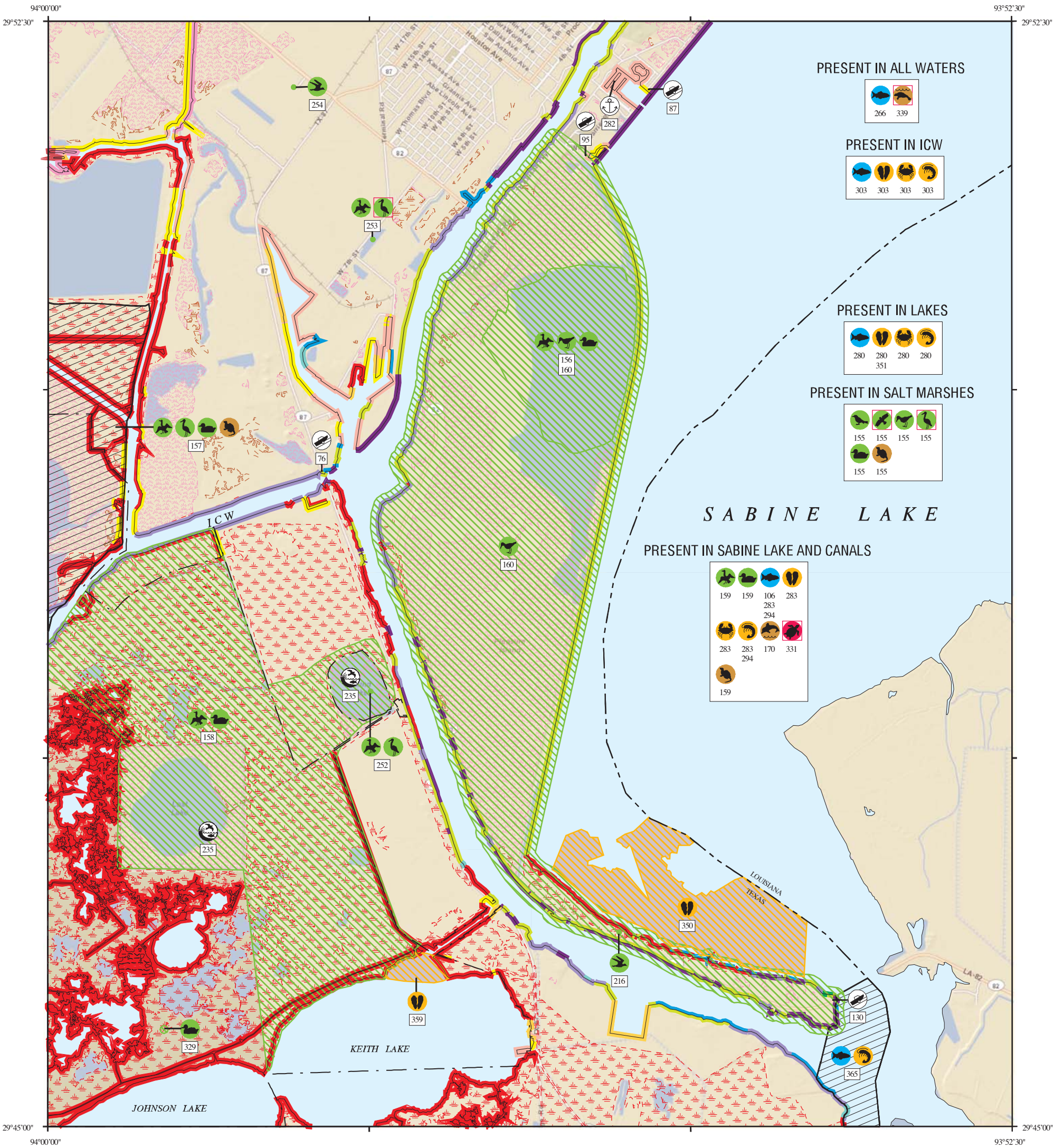


ENVIRONMENTAL SENSITIVITY INDEX MAP



SHORELINE HABITATS (ESI)

1B EXPOSED, SOLID MAN-MADE STRUCTURES	
2A EXPOSED WAVE-CUT PLATFORMS IN CLAY	
2B EXPOSED SCARPS AND STEEP SLOPES IN CLAY	
3A FINE- TO MEDIUM-GRAINED SAND BEACHES	
3B SCARPS AND STEEP SLOPES IN SAND	
5 MIXED SAND AND GRAVEL (SHELL) BEACHES	
6A GRAVEL BEACHES	
6B RIPRAP	
7 EXPOSED TIDAL FLATS	
8A SHELTERED SCARPS IN CLAY OR BEDROCK	
8B SHELTERED, SOLID MAN-MADE STRUCTURES	
8C SHELTERED RIPRAP	
9A SHELTERED TIDAL FLATS	
10A SALT-AND BRACKISH-WATER MARSHES	
10B FRESHWATER MARSHES	
10C SWAMPS	
10D SCRUB-SHRUB WETLANDS	

Not For Navigation
Published: June 2013

Published at Seattle, Washington
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Emergency Response Division

SCALE 1:50000

1 KILOMETER

1 MILE

1 NAUTICAL MILE

TEXAS

GULF OF MEXICO

Upper Texas Coast: ESIMAP 9

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
155	American bittern		X X X X X	X X X X	-	-
	Black rail		X X X X X X X X X X X	-	-	-
	Black-necked stilt	10S	X X X X X X X X	-	-	-
	Clapper rail		X X X X X X X X X X X	FEB-SEP	-	-
	Common moorhen		X X X X X X X X X X X	MAR-OCT	-	-
	Dowitchers	100S	X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
	Dunlin	100S	X X X X X X X X X	-	-	-
	Killdeer	100S	X X X X X X X X X X X	-	DEC-MAR	-
	King rail		X X X X X X X X X X X	APR-MAY	-	-
	Marsh birds		X X X X X X X X X X X	-	-	-
	Migratory songbirds		X X	-	-	-
	Peregrine falcon	T	X X X X X X X X X	-	-	-
	Shorebirds	1000S	X X X X X X X X X X X	-	-	-
	Sora		X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl	HIGH	X X X X X X X X X X X	-	-	-
	Western sandpiper	100S	X X X X X X X X X X X	-	FEB-MAY JUL-NOV	-
	Willet	100S	X X X X X X X X X X X	-	APR-APR AUG-AUG	-
	Wood stork	T	OCCASIONAL	X X X X X	-	-
	Yellow rail		X X X X X X X X X	-	-	-
	Yellowlegs	10S	X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
156	American white pelican		X X X X X X X	-	-	-
	Diving ducks		X X X X X X X X	-	-	-
	Ruddy duck		X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X X	-	-	-
157	Common loon		X X X X X X X X X	-	-	-
	Diving birds		X X X X X X X X X X X	-	-	-
	Diving ducks		X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X X	-	-	-
158	Canvasback	15000	X X X X X X X	-	-	-
	Cormorants		X X X X X X X X X X X	-	-	-
159	Diving birds		X X X X X X X X X X X	-	-	-
	Diving ducks		X X X X X X X X	-	-	-
160	Black-necked stilt	10S	X X X X X X X X X	-	-	-
	Dowitchers	100S	X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
	Dunlin	100S	X X X X X X X X X X	-	-	-
	Killdeer	100S	X X X X X X X X X X X	-	DEC-MAR	-
	Shorebirds	1000S	X X X X X X X X X X X	-	-	-
	Western sandpiper	100S	X X X X X X X X X X X	-	FEB-MAY JUL-NOV	-
	Willet	100S	X X X X X X X X X X X	-	APR-APR AUG-AUG	-
	Yellowlegs	10S	X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
216	Least tern	14 PAIRS	X X X X X X X X X	APR-SEP	-	-
252	Cattle egret	50 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Double-crested cormorant	2-150 INDIV	X X X X X X X X	-	-	-
	Great blue heron	3 PAIRS	X X X X X X X X X X X	FEB-JUN	-	-
	Great egret	3-20 PAIRS	X X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Green heron	8 INDIV	X X X X X X X X X	APR-JUN	-	-
	Little blue heron	2-15 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Snowy egret	1 PAIR	X X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	2-67 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	Yellow-crowned night-heron	5 PAIRS	X X X X X X X X X	APR-SEP	-	-
253	Anhinga	1 PAIR	X X X X X X X X X	APR-JUN	-	-
	Black-crowned night-heron	3-11 PAIRS	X X X X X X X X X X X	APR-AUG	APR-MAY	-
	Cattle egret	44-61 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Great egret	68-157 PAIRS	X X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Little blue heron	6-10 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Neotropic cormorant	21-210 PAIRS	X X X X X X X X X X X	FEB-OCT	-	-
	Roseate spoonbill	12-53 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	Snowy egret	26-153 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	7-43 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	White ibis	1-18 PAIRS	X X X X X X X X X X X	FEB-JUL	-	-
	White-faced ibis	T	8-12 PAIRS	X X X X X X X X X X X	FEB-AUG	-
254	Least tern	42-197 PAIRS	X X X X X X X X X	APR-SEP	-	-
329	Greater white-fronted goose		X X X X X X X	-	-	-
	Snow goose		X X X X X X X	-	-	-

FISH:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
106	Bull shark	COMMON	X X X X X X X X X X X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
266	Tarpon	RARE	X X X X X X X X X	-	-	-	MAR-NOV	-
280	Alligator gar	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Atlantic spadefish	RARE	X X X X	-	-	-	MAY-AUG	-
	Bay anchovy	ABUNDANT	X X X X X X X X X X X	MAR-NOV	MAR-NOV	MAR-NOV	FEB-DEC	JAN-DEC
	Bay whiff	COMMON	X X X X X X X X X X X	-	-	-	APR-SEP	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Blue catfish	RARE	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	COMMON	X X X	-	-	-	JUN-AUG	-
	Gizzard shad	ABUNDANT	X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Gulf menhaden	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	APR-OCT
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC
	Pinfish	COMMON	X X X X X X X X X X X	-	-	-	MAR-NOV	MAY-DEC
	Red drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Sand seatrout	RARE	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	DEC-JAN	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	SEP-SEP	JAN-DEC
	Silversides	COMMON	X X X X X X X X X X X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Southern flounder	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Spot	HIGHLY ABUNDANT	X X X X X X X X X	-	-	-	FEB-NOV	APR-NOV
	Spotted gar	COMMON	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	X X X X X X X X X X X	-	-	-	AUG-NOV	JAN-DEC
	Striped mullet	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	X X X X	-	-	-	JUN-SEP	-
283	Alligator gar	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Atlantic bumper	RARE	X X	-	-	-	-	AUG-SEP
	Atlantic spadefish	RARE	X X X X	-	-	-	JUL-OCT	-
	Bay anchovy	COMMON	X X X X X X X X X X X	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	Bay whiff	RARE	X X X X X X X X X X X	-	-	-	JUL-AUG	JAN-DEC
	Crevalle jack	COMMON	X X X	-	-	-	JUN-AUG	-
	Gafftopsail catfish	ABUNDANT	X X X X X X X	APR-MAY	-	-	APR-OCT	APR-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.

Upper Texas Coast: ESIMAP 9 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
283	Gizzard shad	ABUNDANT	X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Gulf killifish	COMMON	X X X X X X X X X X X	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	APR-DEC
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	JUN-SEP	JAN-DEC
	Pinfish	RARE	X X X X X X	-	-	-	APR-OCT	APR-OCT
	Sand seatrout	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	DEC-FEB	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	OCT-NOV	JAN-DEC
	Silversides	COMMON	X X X X X X X X X X X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Spanish mackerel	COMMON	X X X X X X	-	-	-	SEP-OCT	SEP-OCT
	Spotfin mojarra	RARE	X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Star drum		X X X X X X X X X X X	-	-	-	-	-
	Striped mullet	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	X X X X	-	-	-	JUN-SEP	-
294	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Red drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern flounder	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Spot	HIGHLY ABUNDANT	X X X X X X X X X	-	-	-	MAR-OCT	MAR-NOV
	Spotted seatrout	COMMON	X X X X X X X X X X X	APR-OCT	APR-OCT	APR-OCT	OCT-NOV	JAN-DEC
303	Alligator gar		X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Atlantic spadefish	RARE	X X X X X X X X	-	-	-	MAY-DEC	-
	Bay anchovy	COMMON	X X X X X X X X X X X	MAR-NOV	MAR-NOV	MAR-NOV	FEB-DEC	JAN-DEC
	Bay whiff	RARE	X X X X X X X X X X X	-	-	-	APR-SEP	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Blue catfish	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Bull shark	COMMON	X X X X X X X X X X X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
	Gafftopsail catfish	COMMON	X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	RARE	X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Gulf menhaden	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	APR-OCT
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC
	Red drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Sand seatrout	RARE	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	DEC-JAN	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	JUN-DEC	JUN-DEC
	Southern flounder	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	-	FEB-NOV	APR-NOV
	Spotted seatrout	COMMON	X X X X X X X X X X X	-	-	-	AUG-NOV	JAN-DEC
	Striped mullet	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
365	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	DEC-APR	DEC-APR	DEC-APR	APR-NOV
	Black drum	COMMON	X X X X X X X X X X X	FEB-JUL	-	MAR-JUL	AUG-JAN	JAN-DEC
	Red drum	COMMON	X X X X X X X X X X X	-	-	SEP-NOV	-	JAN-DEC
	Southern flounder	ABUNDANT	X X X X X X X X	-	-	-	-	OCT-NOV
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	FEB-JUN	FEB-JUN	JAN-DEC
	Spotted seatrout	COMMON	X X X X X X X X X X X	FEB-OCT	FEB-OCT	-	-	JAN-DEC

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
280	Atlantic rangia	HIGHLY ABUNDANT	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Brown shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAR-APR	MAR-DEC	-
	Grass shrimp	ABUNDANT	X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	MAY-DEC	JAN-DEC
283	Atlantic rangia	ABUNDANT	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Grass shrimp	COMMON	X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
294	Brown shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAR-APR	APR-DEC	-
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	APR-DEC	MAR-JAN
303	Atlantic rangia		X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Atlantic seabob shrimp	RARE	X X X X	-	-	-	-	AUG-NOV
	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Brown shrimp	COMMON	X X X X X X X X X X	-	-	MAR-APR	MAY-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	MAY-DEC	JAN-DEC
350	Eastern oyster	REEF	X X X X X X X X X X X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
351	Eastern oyster	UNCONSOLIDATED	X X X X X X X X X X X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
359	Eastern oyster	REEF	X X X X X X X X X X X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
365	Brown shrimp	ABUNDANT	X X X X X X X X X	-	-	FEB-APR	-	MAR-OCT
	White shrimp	ABUNDANT	X X X X X X X X	-	-	MAY-NOV	-	-

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
170	Bottlenose dolphin		X X X X X X X X X X X	-	JAN-DEC	-	-
339	West Indian manatee	E E VERY RARE	X X X	-	-	-	-

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Interneesting	Juveniles	Adults
331	Kemp's ridley sea turtle	E E COMMON	X X X X X X X X	-	-	-	APR-NOV	-

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D
155	Northern river otter		X X X X X X X X X X X
157	Northern river otter		X X X X X X X X X X X
159	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
76	HWY 87		
87	MIRACLE BEACH		
95	PLEASURE ISLAND		
130	WALTER HUMPHREY		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
235	J.D. MURPHREE WMA	TPWD	

MARINA:

HUN#	Name	Contact	Phone
282	PLEASURE ISLAND MARINA	BOB LEBLANC	409/982-4675

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.