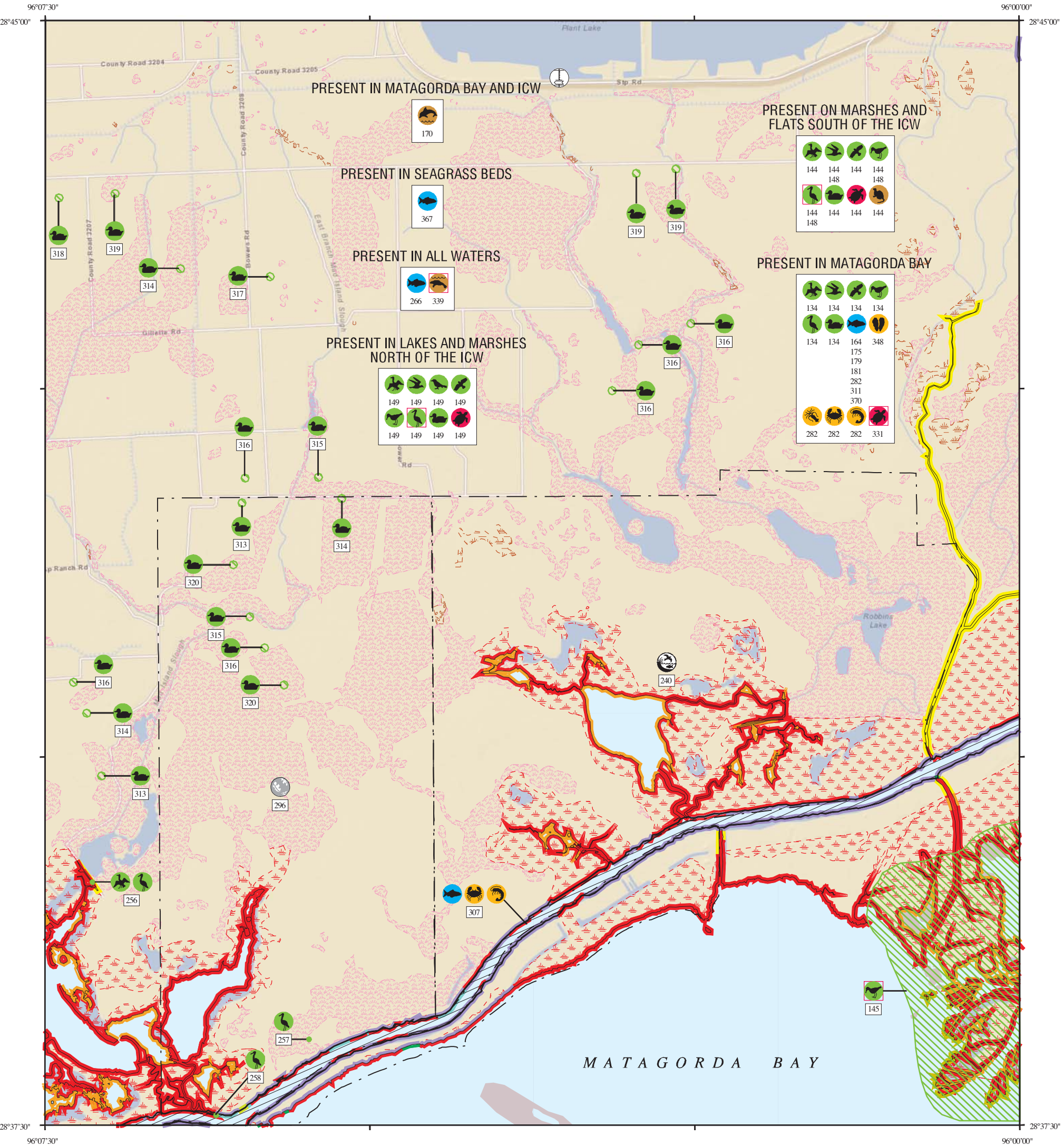
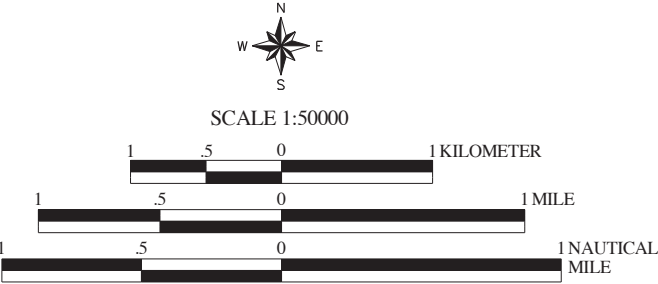


ENVIRONMENTAL SENSITIVITY INDEX MAP



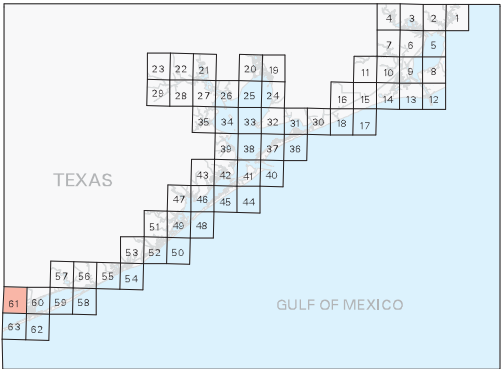
SHORELINE HABITATS (ESI)

- 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



Upper Texas Coast: ESIMAP 61

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
			-	-	-	-	-	-	-	-	-	-	-	-			
134	Black skimmer		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Cormorants		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Dabbling ducks		X	X	X	X				X	X	X	X		-	-	-
	Diving ducks		X	X	X	X					X	X	X		-	-	-
	Geese		X	X	X						X	X	X		-	-	-
	Grebes		X	X	X	X	X			X	X	X	X		-	-	-
	Gulls		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Loons		X	X	X	X					X	X	X		-	-	-
	Pelicans		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Raptors		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shorebirds		X	X	X	X		X	X	X	X	X	X	X	-	-	-
	Terns		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Wading birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
144	Aplomado falcon		X	X	X			X					X		-	-	-
	Brown pelican	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Clapper rail	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	FEB-SEP	-	-
	Gulls		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Marsh birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Mottled duck	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	JUN-AUG
	Osprey	HIGH	X	X	X	X			X	X	X	X			-	-	-
	Raptors		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shorebirds		X	X	X	X		X	X	X	X	X	X	X	-	-	-
	Terns	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Wading birds	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
145	Piping plover	T T 38 INDIV	X	X	X	X		X	X	X	X	X	X	X	-	-	-
	Snowy plover	45 INDIV	X	X	X	X		X	X	X	X	X	X	X	-	-	-
148	American avocet	100S	X	X	X	X		X	X	X	X	X	X	X	-	MAR-APR	-
																JUL-NOV	
	American oystercatcher	10S	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Black skimmer	100S	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Black-bellied plover	100S	X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-MAY	-
																JUL-NOV	
	Black-necked stilt	10S		X	X	X	X	X	X	X	X	X			-	-	-
	Dowitchers	1000S	X	X	X	X		X	X	X	X	X	X	X	-	MAR-MAY	-
																JUL-NOV	
	Dunlin	1000S	X	X	X	X			X	X	X	X			-	-	-
	Killdeer	10S	X	X	X	X	X	X	X	X	X	X	X	X	-	DEC-MAR	-
	Long-billed curlew	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	-	FEB-APR	-
																JUN-NOV	
	Marbled godwit	10S	X	X	X	X		X	X	X	X	X	X	X	-	MAR-APR	-
																JUL-NOV	
	Red knot	PRESENT			X	X	X		X	X	X	X			-	-	-
	Reddish egret	T PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Western sandpiper	1000S	X	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	X	-	APR-APR	-
																AUG-AUG	
	Yellowlegs	100S	X	X	X	X		X	X	X	X	X	X	X	-	MAR-MAY	-
																JUL-NOV	
149	American avocet	100S	X	X	X	X		X	X	X	X	X	X	X	-	MAR-APR	-
																JUL-NOV	
	American oystercatcher	10S	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Black skimmer	100S	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Black-bellied plover	100S	X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-MAY	-
																JUL-NOV	
	Black-necked stilt	10S		X	X	X	X	X	X	X	X	X			-	-	-
	Diving birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Dowitchers	1000S	X	X	X	X		X	X	X	X	X	X	X	-	MAR-MAY	-
																JUL-NOV	
	Dunlin	1000S	X	X	X	X			X	X	X	X			-	-	-
	Killdeer	10S	X	X	X	X	X	X	X	X	X	X	X	X	-	DEC-MAR	-
	Long-billed curlew	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	-	FEB-APR	-
																JUN-NOV	
	Marbled godwit	10S	X	X	X	X		X	X	X	X	X	X	X	-	MAR-APR	-
																JUL-NOV	
	Marsh birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Migratory songbirds						X	X							-	-	-
	Osprey		X	X	X	X			X	X	X	X			-	-	-
	Raptors		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red knot	PRESENT			X	X	X		X	X	X				-	-	-
	Reddish egret	T PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Sandhill crane	HIGH	X	X	X				X	X	X				-	-	-
	Shorebirds	1000S	X	X	X	X		X	X	X	X	X	X	X	-	-	-
	Snow goose	HIGH	X	X	X					X	X	X			-	-	-
	Wading birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Waterfowl	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Western sandpiper	1000S	X	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	X	-	APR-APR	-
																AUG-AUG	
	Yellowlegs	100S	X	X	X	X		X	X	X	X	X	X	X	-	MAR-MAY	-
																JUL-NOV	
256	Black-crowned night-heron	2-3 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-MAY	-
	Cattle egret	72-130 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Great blue heron	2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	-
	Great egret	2-26 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-APR	-
	Green heron	2 INDIV		X	X	X	X	X	X	X	X				APR-JUN	-	-
	Little blue heron	2-40 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Neotropic cormorant	3 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-OCT	-	-
	Roseate spoonbill	1-9 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Snowy egret	19-30 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Tricolored heron	1-5 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	White ibis	17 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Yellow-crowned night-heron	2 PAIRS		X	X	X	X	X	X	X					APR-SEP	-	-
257	Cattle egret	250 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Little blue heron	200 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Snowy egret	50 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
258	Cattle egret	5-289 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Great blue heron	1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	-
	Great egret	1-73 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-APR	-
	Little blue heron	17-24 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Roseate spoonbill	28-31 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Snowy egret	5-104 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Tricolored heron	9-17 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
313	Greater white-fronted goose	10S	X	X	X					X	X	X			-	-	-
	Ross's goose	100S	X	X	X						X	X	X		-	-	-
	Snow goose	100S	X	X	X						X	X	X		-	-	-
314	Greater white-fronted goose	100S	X	X	X	X					X	X	X		-	-	-
	Ross's goose	100S	X	X	X						X	X	X		-	-	-
	Snow goose	100S	X	X	X						X	X	X		-	-	-
315	Greater white-fronted goose	10S	X	X	X	X					X	X	X		-	-	-
316	Ross's goose	100S	X	X	X						X	X	X		-	-	-
	Snow goose	100S	X	X	X						X	X	X		-	-	-

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 61 (cont.)

BIOLOGICAL RESOURCES: (cont.)

BIRD: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
317	Canada goose	100S	X X X X	-	-	-
318	Canada goose	100S	X X X X	-	-	-
	Ross's goose	1000S	X X X	-	-	-
	Snow goose	1000S	X X X	-	-	-
319	Greater white-fronted goose	100S	X X X X	-	-	-
	Ross's goose	1000S	X X X	-	-	-
	Snow goose	1000S	X X X	-	-	-
320	Canada goose	10S	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
164	Atlantic sharpnose shark		X X X X X X X	-	-	-	APR-OCT	-
175	Bonnethead shark		X X X X X X X	-	SEP-NOV	-	APR-NOV	-
179	Bull shark	COMMON	X X X X X X X X X X X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
	Spinner shark		X X X X X	MAY-JUN	MAY-JUN	MAY-JUL	MAY-OCT	MAY-OCT
181	Blacktip shark		X X X X X X X X	MAY-JUN	MAY-JUN	MAY-NOV	MAR-NOV	MAY-JUN
266	Tarpon	RARE	X X X X X X X X	-	-	-	MAR-NOV	-
282	Alligator gar	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Atlantic bumper	COMMON	X X X X	-	-	-	-	JUL-OCT
	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	MAY-DEC
	Atlantic spadefish	RARE	X X	-	-	-	AUG-SEP	-
	Bay anchovy	COMMON	X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	APR-NOV	JAN-DEC
	Bay whiff	COMMON	X X X X X X X X X X X	-	-	-	MAR-AUG	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Common snook	VERY RARE	X X X X X X X	-	-	-	APR-NOV	-
	Crevalle jack	COMMON	X X X X X X X	-	-	-	APR-NOV	-
	Gafftopsail catfish	ABUNDANT	X X X X X X X	APR-MAY	-	-	APR-NOV	APR-NOV
	Gizzard shad	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Gray snapper	COMMON	X X X X X X X X X X X	-	-	-	AUG-OCT	JAN-DEC
	Gulf butterflyfish	COMMON	X X X X X X	-	-	-	-	-
	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	MAY-OCT	JAN-DEC
	Pinfish	COMMON	X X X X X X X X X X X	-	-	-	MAR-OCT	JAN-DEC
	Red drum	COMMON	X X X X X X X X X X X	-	-	SEP-NOV	JAN-DEC	JAN-DEC
	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	-	-	-	NOV-JUN	JAN-DEC
	Silver perch	COMMON	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-DEC	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	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	RARE	X X X X X	-	-	-	JUN-NOV	-
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	FEB-OCT	JAN-DEC
	Spotfin mojarra	RARE	X X X X X	-	-	-	-	-
	Spotted seatrout	COMMON	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-OCT	JUN-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 X X X	-	-	-	APR-OCT	-
307	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	MAY-DEC
	Atlantic spadefish	RARE	X X X X X X X X X X X	-	-	-	JAN-DEC	-
	Bay anchovy	COMMON	X X X X X X X X X X X	MAR-NOV	MAR-NOV	MAR-NOV	JAN-NOV	JAN-DEC
	Bay whiff	RARE	X X X X X X X X X X X	-	-	-	MAR-NOV	JAN-DEC
	Gafftopsail catfish	COMMON	X X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gray snapper	COMMON	X X X X X X X X X X X	-	-	-	AUG-OCT	JAN-DEC
	Gulf menhaden	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	-
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	MAY-OCT	JAN-DEC
	Red drum	COMMON	X X X X X X X X X X X	-	-	AUG-NOV	JAN-DEC	JAN-DEC
	Sand seatrout	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-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 X X	-	-	-	JAN-DEC	NOV-JUL
	Spotted seatrout	COMMON	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-OCT	SEP-NOV	JAN-DEC
	Striped mullet	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
311	Finetooth shark		X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
367	Dwarf seahorse		X X X X X X X X X X X	-	-	-	-	-
370	Spinner shark		X X X X X X	-	-	-	MAY-OCT	MAY-OCT

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
282	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	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Brief squid	ABUNDANT	X X X X X X X X X X X	MAR-DEC	MAR-DEC	MAR-DEC	JAN-DEC	JAN-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
	Gulf stone crab	COMMON	X X X X X X X X X X X	NOV-MAR	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Lesser blue crab	RARE	X X X X X X X	-	-	-	APR-APR	MAY-DEC
307	Blue crab	HIGHLY ABUNDANT	X X X X X X X X X X X	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Brown shrimp	ABUNDANT	X X X X X X X X X X X	-	-	FEB-APR	JAN-DEC	-
	White shrimp	COMMON	X X X X X X X X X X X	-	-	MAY-NOV	JUN-DEC	JAN-DEC
348	Eastern oyster	REEF	X X X X X X X X X X X	MAR-DEC	MAR-DEC	-	-	JAN-DEC

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
144	Diamondback terrapin	HIGH	X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
149	Diamondback terrapin		X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
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
144	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
240	MAD ISLAND WMA	TPWD	

NATURE CONSERVANCY:

HUN#	Name	Contact	Phone
296	CLIVE RUNNELLS FAM MAD ISL MARSH PRESRV		

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.