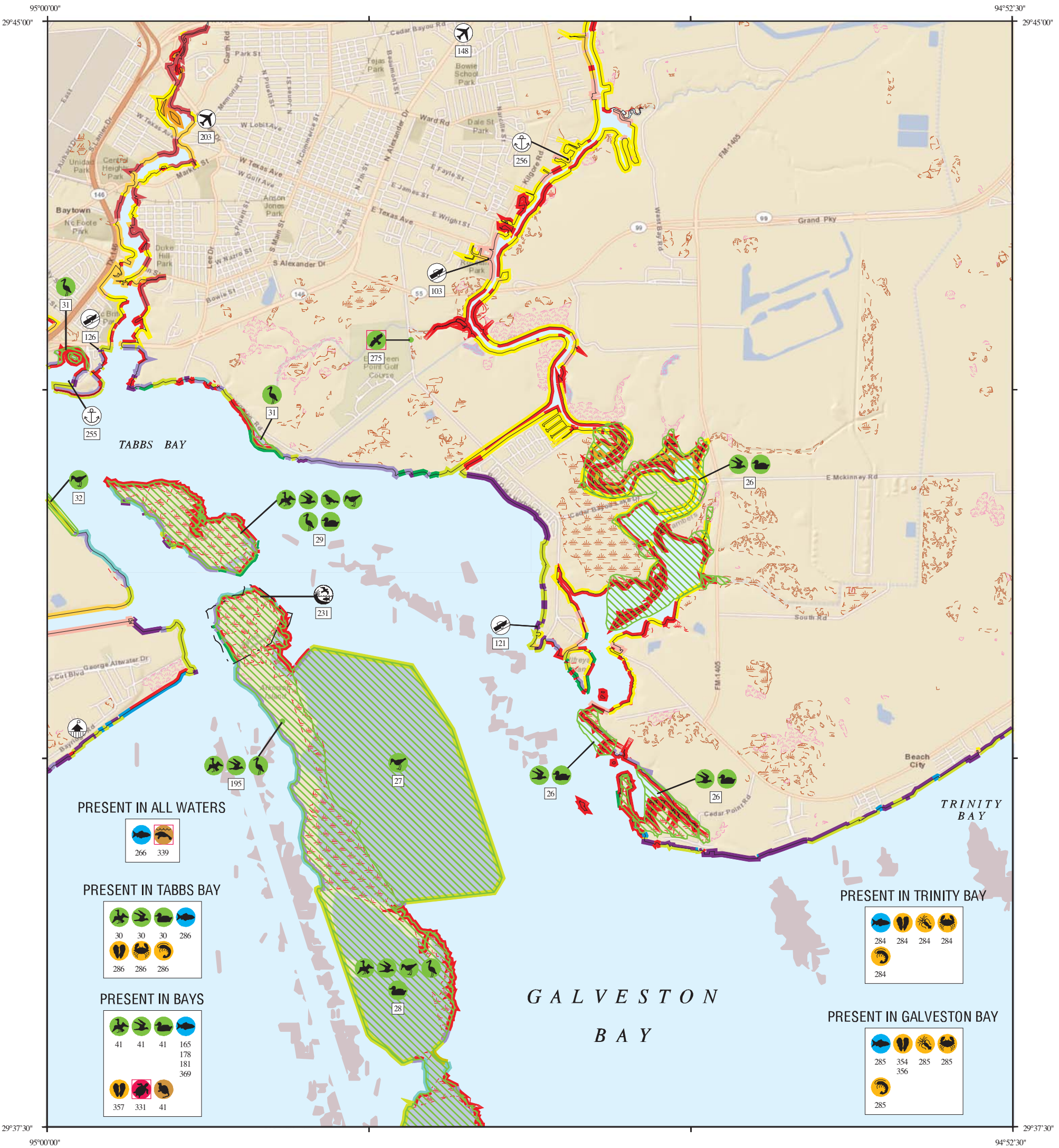


ENVIRONMENTAL SENSITIVITY INDEX MAP



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

SCALE 1:50000

1 KILOMETER

1 MILE

1 NAUTICAL MILE

Not For Navigation
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National Ocean Service
Office of Response and Restoration
Emergency Response Division

TEXAS

GULF OF MEXICO

Upper Texas Coast: ESIMAP 26

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
26	Gulls		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Terns		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Waterfowl		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
27	Shorebirds	HIGH	X	X	X	X		X	X	X	X	X	X	X	-	-	-
28	Cormorants		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Gulls		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Pelicans		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shorebirds		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	-	-	-
	Waterfowl		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
29	Cormorants		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Gulls		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Migratory songbirds				X	X									-	-	-
	Pelicans		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shorebirds		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	-	-	-
	Waterfowl		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
30	Cormorants		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Grebes	HIGH	X	X	X	X	X		X	X	X	X	X	X	-	-	-
	Gulls		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Loons	HIGH	X	X	X	X			X	X	X	X	X	X	-	-	-
	Pelicans		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Terns		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	-	-	-
31	Wading birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
32	Shorebirds		X	X	X	X		X	X	X	X	X	X	X	-	-	-
41	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	-	-	-
	Diving birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Diving ducks		X	X	X	X			X	X	X	X	X	X	-	-	-
	Grebes		X	X	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	X	X	X	-	-	-
	Pelicans		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Terns		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
195	American white pelican	210 INDIV	X	X	X					X	X	X	X	X	-	-	-
	Black skimmer	25-65 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-
	Brown pelican	148 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Caspian tern	24 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Forster's tern	7-1526 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Great blue heron	4-8 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	-
	Great egret	6 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-APR	-
	Gull-billed tern	8-66 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Laughing gull	27-51 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Least tern	15-114 PAIRS		X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-
	Roseate spoonbill	13-15 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Royal tern	24 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Sandwich tern	4 PAIRS		X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Yellow-crowned night-heron	3 PAIRS		X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-
275	Bald eagle	T 1 NEST	X	X	X	X	X	X	X	X	X	X	X	X	OCT-JUL	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
165	Atlantic sharpnose shark					X	X	X	X	X	X	X	X	X	JUN-JUN	MAY-JUN	JUN-OCT	-	APR-OCT
178	Bull shark	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
181	Blacktip shark			X	X	X	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	X	X	X	-	-	-	MAR-NOV	-
284	Alligator gar	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Atlantic bumper	RARE					X	X							-	-	-	-	AUG-SEP
	Atlantic croaker	HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Bay anchovy	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	MAR-NOV	MAR-NOV	MAR-NOV	FEB-NOV	JAN-DEC
	Bay whiff	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAY-AUG	MAY-AUG
	Black drum	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Blue catfish	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	COMMON		X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
	Gafftopsail catfish	COMMON		X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Gulf butterflyfish	RARE					X	X							-	-	-	-	-
	Gulf killifish	RARE	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden	HIGHLY ABUNDANT	X	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	X	MAY-AUG	MAY-SEP	MAY-SEP	JUN-OCT	JAN-DEC
	Pinfish	COMMON		X	X	X	X	X	X	X					-	-	-	MAR-SEP	-
	Red drum	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Sand seatrout	COMMON	X	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	X	-	-	-	JUN-JUN	JAN-DEC
																	SEP-MAR		
	Silver perch	RARE	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-SEP	MAY-SEP	OCT-OCT	JAN-DEC
	Silversides	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Smallmouth buffalo		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Southern flounder	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	COMMON					X	X	X	X					-	-	-	AUG-NOV	-
	Spanish mackerel	COMMON								X	X				-	-	-	SEP-OCT	SEP-OCT
	Spot	HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	JAN-DEC
	Spotfin mojarra	RARE					X	X							-	-	-	-	-
	Spotted gar	COMMON	X	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	X	-	-	MAR-JUL	AUG-NOV	JAN-DEC
	Striped mullet	COMMON	X	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	-
285	Atlantic bumper	COMMON						X	X	X					-	-	-	-	AUG-OCT
	Atlantic croaker	HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Atlantic spadefish	RARE					X	X	X						-	-	-	AUG-OCT	-
	Bay anchovy	HIGHLY ABUNDANT	X	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	X	-	-	-	APR-APR	JAN-DEC
	Black drum	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	COMMON		X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	SEP-NOV
	Gafftopsail catfish	COMMON		X	X	X	X	X	X	X					APR-MAY	-	-	APR-OCT	MAR-OCT
	Gizzard shad	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Gulf butterflyfish	RARE	X	X	X	X									-	-	-	-	-
	Gulf killifish	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden	HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Hardhead catfish	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	MAY-SEP	MAY-SEP	MAY-OCT	JAN-DEC
	Pinfish	RARE		X	X	X	X								-	-	-	APR-AUG	-
	Red drum	COMMON	X	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	X	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Silver perch	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-MAR	JAN-DEC
																	OCT-NOV		
	Silversides	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC

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 26 (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
285	Southern flounder	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	COMMON	X X X X X X X X X	-	-	-	MAY-NOV	-
	Spanish mackerel	COMMON	X X X X X	-	-	-	JUN-OCT	JUN-OCT
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	MAR-SEP	JAN-DEC
	Spotted seatrout	COMMON	X X X X X X X X X X X	APR-OCT	APR-OCT	APR-OCT	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 X	-	-	-	JUN-OCT	-
286	Alligator gar	COMMON	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
	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	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	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	COMMON	X X X X X X X X X	-	-	-	MAR-NOV	SEP-NOV
	Gafftopsail catfish	COMMON	X 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
	Gulf killifish	RARE	X X X X X X X X X X X	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	JUL-SEP	JAN-DEC
	Pinfish	COMMON	X X X X X	-	-	-	APR-AUG	-
	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	-	-	-	JUL-SEP	JAN-DEC
						NOV-APR		
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	NOV-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
	Smallmouth buffalo	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Southern flounder	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	RARE	X X X X X	-	-	-	AUG-OCT	-
	Spanish mackerel	RARE	X X X X X	-	-	-	SEP-NOV	SEP-NOV
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	FEB-NOV	JAN-DEC
	Spotfin mojarra	RARE	X X X X X	-	-	-	-	-
	Spotted gar	ABUNDANT	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	APR-OCT	APR-OCT	APR-OCT	SEP-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	-	-	-	JUN-NOV	-
369	Spinner shark		X X X X X X	MAY-JUN	MAY-JUN	MAY-JUL	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
284	Atlantic rangia	ABUNDANT	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	HIGHLY ABUNDANT	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC
	Brief squid	RARE	X X X X X	JUN-NOV	JUN-NOV	JUN-NOV	JUN-NOV	JUN-NOV
	Brown shrimp	COMMON	X X X X X X X X X X X	-	-	FEB-APR	APR-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-OCT	MAY-DEC	JAN-DEC
285	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC
	Brief squid	COMMON	X X X X X X X X X X X	MAR-DEC	MAR-DEC	MAR-DEC	MAR-DEC	MAR-DEC
	Brown shrimp	ABUNDANT	X X X X X X X X X X X	-	-	FEB-APR	APR-JAN	-
	Grass shrimp	ABUNDANT	X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Lesser blue crab	COMMON	X X X X X X X X X	-	-	-	JUL-OCT	SEP-DEC
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	JUN-OCT	JUN-DEC	JAN-DEC
286	Atlantic rangia	ABUNDANT	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	HIGHLY ABUNDANT	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC
	Brown shrimp	ABUNDANT	X X X X X X X X X X	-	-	FEB-APR	APR-NOV	-
	Grass shrimp	ABUNDANT	X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Lesser blue crab	COMMON	X X X X X X X	-	-	-	APR-OCT	-
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	APR-OCT	APR-DEC	JAN-DEC
354	Eastern oyster	LOW	X X X X X X X X X X X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
356	Eastern oyster	UNCONSOLIDATED	X X X X X X X X X X X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
357	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
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
41	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
103	ROSELAND PARK		
121	THOMPSON FISH CAMP		
126	VH MCBRIDE BOAT RAMP		

HELIPORT:

HUN#	Name	Contact	Phone
148	BAYCOAST MEDICAL CENTER		
203	SAN JACINTO METHODIST HOSPITAL		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
231	ATKINSON ISLAND WMA	TPWD	

MARINA:

HUN#	Name	Contact	Phone
255	BAYLAND PARK MARINA		281/422-8900
256	BAYTOWN MARINA		