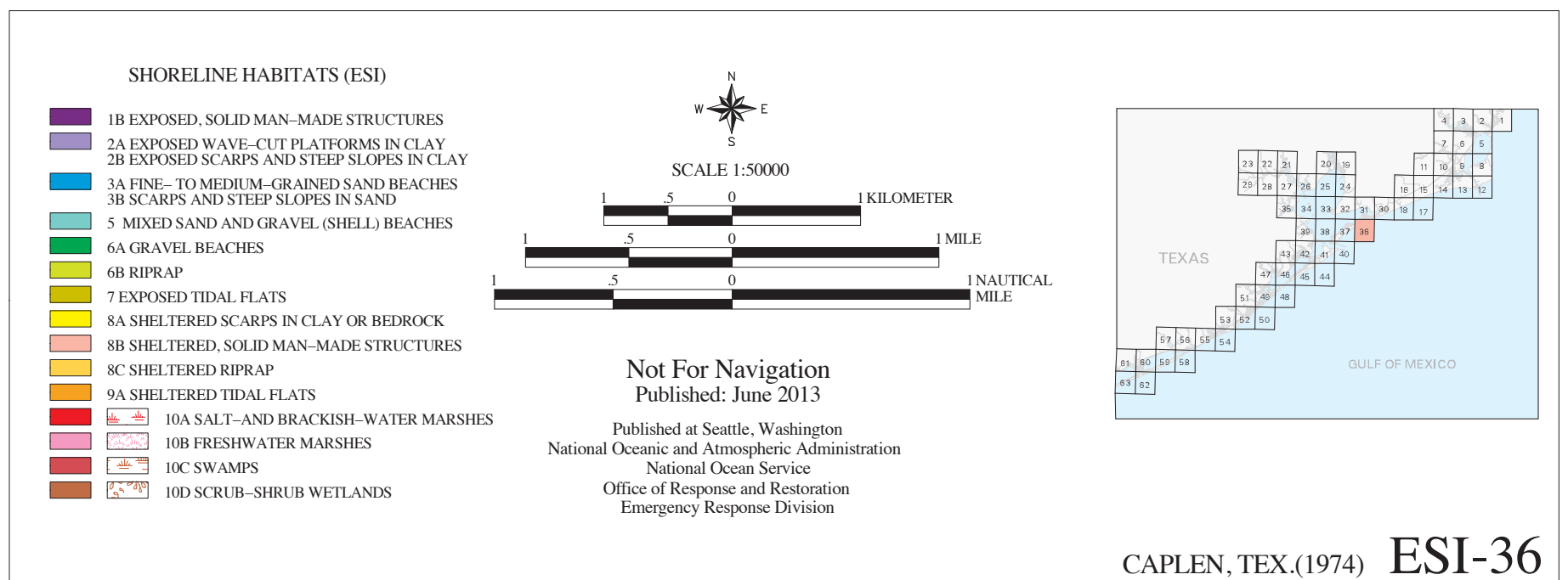
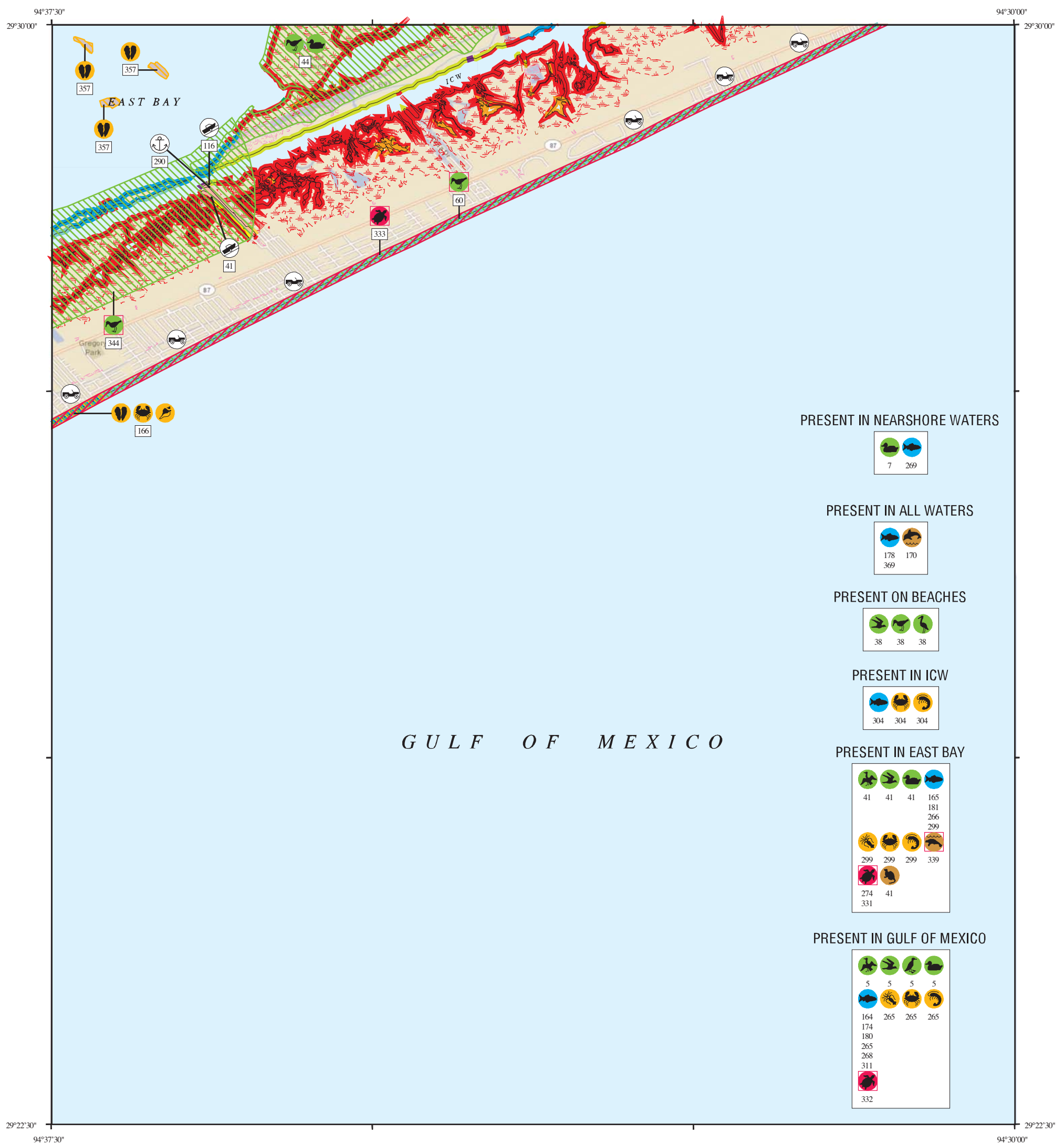


ENVIRONMENTAL SENSITIVITY INDEX MAP



Upper Texas Coast: ESIMAP 36

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
5	American white pelican	COMMON	X	X	X	X	X			X	X	X	X	X	-	-	-
	Brown pelican	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead	UNCOMMON	X	X	X								X	X	-	-	-
	Canvasback	UNCOMMON	X	X	X						X	X	X		-	-	-
	Cormorants	COMMON	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		-	-	-
	Greater scaup	UNCOMMON	X	X	X								X	X	-	-	-
	Grebes	UNCOMMON	X	X	X	X	X			X	X	X	X		-	-	-
	Gulls	COMMON-ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Lesser scaup	COMMON	X	X	X	X					X	X	X		-	-	-
	Loons		X	X	X	X					X	X	X		-	-	-
	Magnificent frigatebird	COMMON					X	X	X	X	X	X			-	-	-
	Masked booby	UNCOMMON			X	X	X	X	X	X	X	X			-	-	-
	Northern gannet	COMMON	X	X	X	X					X	X	X		-	-	-
	Scoters	RARE	X	X	X	X							X	X	-	-	-
	Shearwaters	UNCOMMON								X	X	X	X		-	-	-
	Storm-petrels	RARE					X	X	X						-	-	-
	Terns	COMMON-ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
7	Redhead	0-300 BIRDS	X	X	X								X	X	-	-	-
38	Black-bellied plover		X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-MAY JUL-NOV	-
	Red knot				X	X	X			X	X	X	X		-	-	-
	Ruddy turnstone		X	X	X	X			X	X	X	X	X	X	-	-	-
	Sanderling	100S	X	X	X	X	X			X	X	X	X	X	-	APR-MAY AUG-AUG	-
	Shorebirds	100S	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	-	-	-
	Wading birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Wilson's plover			X	X	X	X	X	X	X					APR-JUL	-	-
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		-	-	-
	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	-	-	-
	Terns		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
44	Dabbling ducks		X	X	X	X				X	X	X	X		-	-	-
	Shorebirds		X	X	X	X	X	X	X	X	X	X	X		-	-	-
60	Piping plover	T T 16 INDIV	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
344	Piping plover	T T	X	X	X	X	X	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
164	Atlantic sharpnose shark					X	X	X	X	X	X	X			-	-	-	APR-OCT	-
165	Atlantic sharpnose shark					X	X	X	X	X	X	X			JUN-JUN	MAY-JUN	JUN-OCT	-	APR-OCT
174	Bonnethead shark		X	X								X	X	X	-	SEP-NOV	-	FEB-MAR NOV-DEC	-
	Tarpon	RARE						X	X	X	X	X			-	-	-	-	JUN-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
180	Blacktip shark			X	X	X	X	X	X	X	X	X	X		-	-	-	MAR-DEC	MAR-DEC
181	Blacktip shark			X	X	X	X	X	X	X	X	X			MAY-JUN	MAY-JUN	MAY-NOV	MAR-NOV	MAY-JUN
265	Atlantic bumper					X	X	X	X	X	X	X			-	-	-	-	MAY-NOV
	Atlantic croaker	HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	AUG-APR	-	-	APR-NOV	JAN-DEC
	Atlantic spadefish		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	APR-NOV	JAN-DEC
	Atlantic tripletail		X	X	X	X	X	X	X	X	X	X	X		-	-	-	-	-
	Banded drum				X	X	X	X	X						-	-	-	-	-
	Bay anchovy		X	X	X	X	X	X	X	X	X	X	X	X	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	Black drum		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	MAR-JUL	AUG-JAN	JAN-DEC
	Blackfin tuna					X	X	X	X	X	X				-	-	-	-	MAY-OCT
	Cobia					X	X	X	X						-	-	-	-	-
	Crevalle jack		X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAR-NOV	-	JAN-DEC
	Florida pompano		X	X	X	X	X	X	X	X	X	X	X		-	-	MAY-AUG	MAY-DEC	JAN-DEC
	Gafftopsail catfish					X	X	X	X	X					-	-	-	-	-
	Gray snapper		X	X	X	X	X	X	X	X	X	X	X	X	-	-	APR-NOV	JAN-DEC	JAN-DEC
	Gray triggerfish	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Greater amberjack		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Gulf butterflyfish	HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X		-	-	-	JAN-DEC	JAN-DEC
	Gulf menhaden			X	X	X	X	X	X	X					JUL-OCT	-	-	-	MAR-OCT
	Hardhead catfish		X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	-	-	-	JAN-DEC
	King mackerel					X	X	X	X	X					-	-	-	-	MAY-OCT
	Lane snapper		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Pinfish		X	X	X	X	X	X	X	X	X	X	X	X	AUG-APR	-	-	-	JAN-DEC
	Red drum		X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	-	-	-	JAN-DEC
	Red snapper		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Sand seatrout	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	MAR-SEP	-	SEP-FEB
	Sheepshead		X	X	X	X	X	X	X	X	X	X	X		-	-	JAN-MAY	-	JAN-DEC
	Silver perch	HIGHLY ABUNDANT	X	X							X				-	-	-	-	DEC-FEB
	Silver seatrout		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Southern flounder		X	X						X	X	X	X		SEP-FEB	-	-	OCT-DEC	SEP-FEB
	Southern kingfish					X	X	X	X	X					-	-	-	-	JUN-OCT
	Spanish mackerel	ABUNDANT		X	X	X	X	X	X	X	X	X			MAY-SEP	MAY-SEP	-	MAR-NOV	MAR-NOV
	Spot		X	X	X	X	X	X	X	X			X		DEC-APR	-	-	-	DEC-SEP
	Spotted seatrout		X	X						X	X	X	X		-	-	-	-	SEP-FEB
	Star drum	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
266	Tarpon	RARE		X	X	X	X	X	X	X	X				-	-	-	MAR-NOV	-
268	Striped mullet	ABUNDANT	X	X						X	X	X	X		OCT-DEC	-	-	-	SEP-FEB
269	Striped mullet	HIGHLY ABUNDANT				X	X	X	X	X	X				-	-	-	-	MAY-NOV
299	Alligator gar	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Atlantic bumper	RARE								X					-	-	-	-	SEP-SEP
	Atlantic croaker	HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-JUN	JAN-DEC	MAR-DEC
	Atlantic spadefish	RARE		X	X	X	X	X	X	X	X				-	-	-	JUL-SEP	-
	Bay anchovy	ABUNDANT	X	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	X	-	-	-	APR-SEP	JAN-DEC
	Black drum	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					-	-	-	MAR-NOV	-
	Gafftopsail catfish	ABUNDANT		X	X	X	X	X	X	X					APR-MAY	-	-	MAR-NOV	MAR-NOV
	Gizzard shad	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Gulf butterflyfish	RARE		X	X	X	X	X	X	X					-	-	-	-	-
	Gulf killifish	ABUNDANT	X	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	X	-	-	-	JAN-DEC	MAR-NOV
	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	COMMON		X	X	X	X	X	X	X					-	-	-	MAR-OCT	JUL-NOV
	Red drum	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	SEP-NOV	JAN-DEC	JAN-DEC
	Sand seatrout	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	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 36 (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
299	Sheepshead	COMMON	X X X X X X X X X X X X	-	-	-	JUN-JUN DEC-MAR	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	SEP-NOV	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
	Southern flounder	ABUNDANT	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	RARE	X X X X X X X X X X	-	-	-	JUN-NOV	-
	Spanish mackerel	COMMON	X X X X X X X X	-	-	-	SEP-OCT	SEP-OCT
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X X	-	-	-	MAR-OCT	JAN-DEC
	Spotfin mojarra	RARE	X X X X X X X X	-	-	-	-	-
	Spotted seatrout	COMMON	X 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 X	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	X X X X X X X X	-	-	-	MAY-OCT	-
304	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	MAR-DEC
	Atlantic spadefish	COMMON	X X X X X X X X X X X X	-	-	-	MAR-DEC	-
	Bay anchovy	ABUNDANT	X 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 X	-	-	-	-	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Gafftopsail catfish	COMMON	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 X X X X X X X X	-	-	-	-	-
	Gulf menhaden	ABUNDANT	X X X X X X X X X X X X	-	-	-	JAN-DEC	MAR-NOV
	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	COMMON	X X X X X X X X X X X X	-	-	-	MAR-OCT	JUL-NOV
	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	-	-	-	JUN-JUN DEC-MAR	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	SEP-NOV	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
	Southern flounder	COMMON	X 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 X	-	-	-	JAN-DEC	NOV-JUN
	Spotted seatrout	COMMON	X 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 X	-	-	-	JAN-DEC	JAN-DEC
311	Finetooth shark		X X X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
369	Spinner shark		X 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
166	Atlantic ghost crab		X X X X X X X X X X X X	APR-APR AUG-AUG	-	-	-	JAN-DEC
	Atlantic surfclam		X X X X X X X X X X X X	MAR-MAY SEP-NOV	-	-	-	JAN-DEC
	Lettered olive		X X X X X X X X X X X X	-	-	-	-	-
	Mole crab		X X X X X X X X X X X X	APR-MAY	-	-	-	JAN-DEC
	Speckled swimming crab	COMMON	X X X X X X X X X X X X	-	-	-	-	-
265	Atlantic seabob shrimp		X X X X X X X X X X	-	-	-	-	OCT-JAN
	Blue crab	ABUNDANT	X X X X X X X X X X X X	-	-	JAN-DEC	-	-
	Brief squid		X X X X X X X X X X X X	MAR-DEC	MAR-DEC	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		X X X X X X X X X X	-	-	-	-	MAR-OCT
	Lesser blue crab		X X X X X X X X X X X X	-	-	MAR-DEC	-	-
	White shrimp	ABUNDANT	X X X X X X X X X X X X	MAR-SEP	-	-	-	JAN-DEC
299	Atlantic seabob shrimp	RARE	X X X X X X X X	-	-	-	-	SEP-OCT
	Blue crab	HIGHLY ABUNDANT	X 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 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 X	-	-	FEB-APR	APR-NOV	-
	Grass shrimp	ABUNDANT	X X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gulf stone crab	RARE	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Lesser blue crab	COMMON	X X X X X X X X X X X X	-	-	-	APR-OCT	APR-NOV
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X X	-	-	MAY-OCT	MAY-DEC	JAN-DEC
304	Blue crab	HIGHLY ABUNDANT	X 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 X X	-	-	FEB-APR	APR-NOV	-
	Gulf stone crab	RARE	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Lesser blue crab	ABUNDANT	X X X X X X X X X X	-	-	-	SEP-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X X	-	-	MAY-OCT	MAY-DEC	JAN-DEC
357	Eastern oyster	REEF	X 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 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	Internesting	Juveniles	Adults
274	Diamondback terrapin		X 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 X X	-	-	-	APR-NOV	-
332	Green sea turtle	T T OCCASIONAL	X X X X X X X X X X	-	-	-	MAR-NOV	-
	Hawksbill sea turtle	E E OCCASIONAL	X X X X X X X X X X	-	-	-	MAR-OCT	-
	Kemp's ridley sea turtle	E E COMMON	X X X X X X X X X X	-	-	-	APR-NOV	APR-NOV
	Loggerhead sea turtle	T T OCCASIONAL	X X X X X X X X X X X X	-	-	-	JAN-DEC	-
333	Kemp's ridley sea turtle	E E 0-6 NESTS	X X X X X X X X	MAR-JUL	APR-SEP	-	APR-SEP	MAR-JUL
	Loggerhead sea turtle	T T 0-1 NEST	X X X X X X X X X X	APR-SEP	MAY-OCT	-	MAY-OCT	APR-SEP

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 X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
41	BOAT RAMP	A.B & PAT CHARPIOT	409/684-3067
116	STINGAREE MARINA		

MARINA:

HUN#	Name	Contact	Phone
290	STINGAREE MARINA		409/684-9530

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