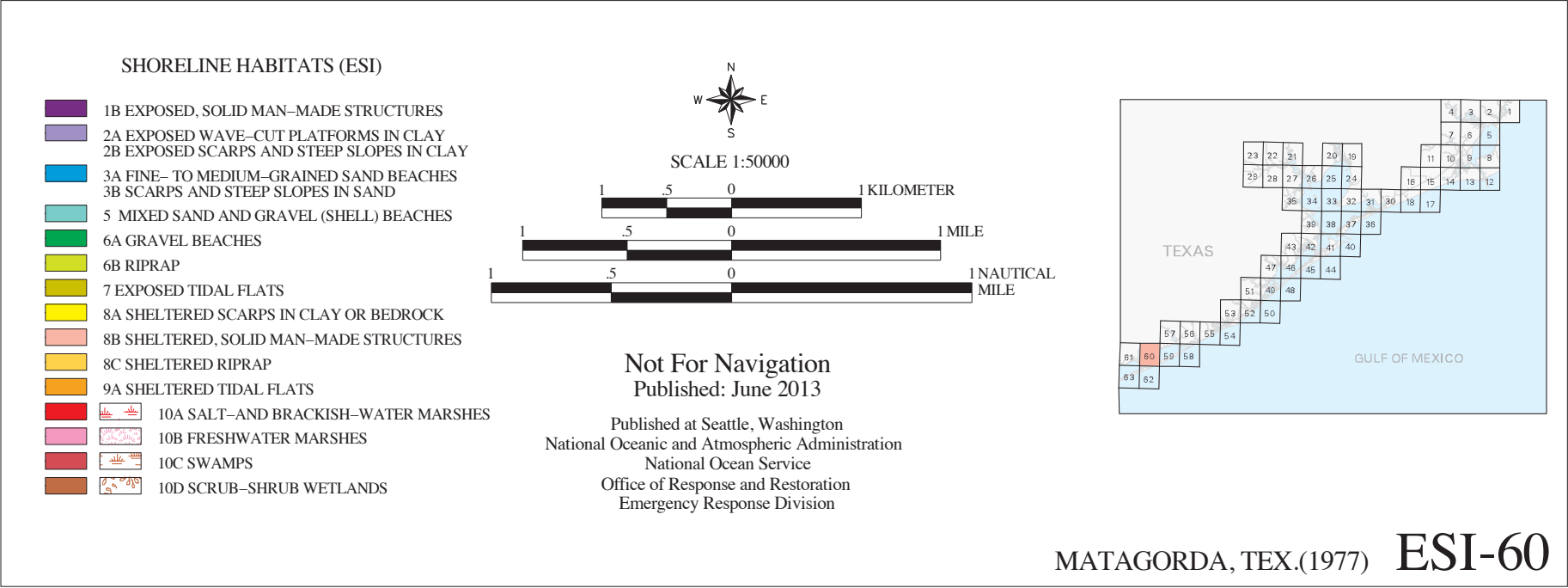
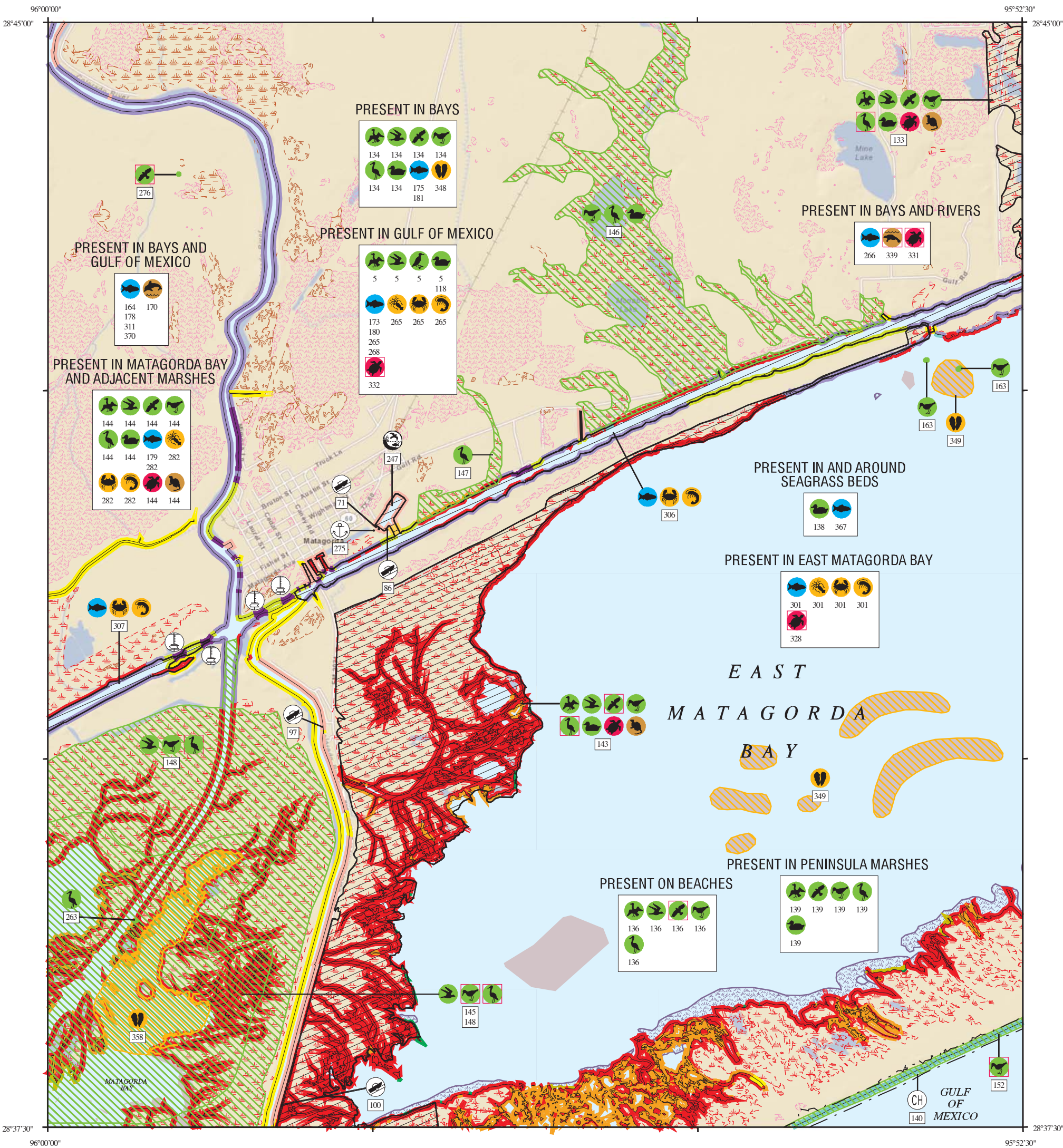


ENVIRONMENTAL SENSITIVITY INDEX MAP



Upper Texas Coast: ESIMAP 60

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	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	X	-	-	-
	Magnificent frigatebird	COMMON						X	X	X	X	X	X	X	-	-	-	
	Masked booby	UNCOMMON			X	X	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	X	-	-	-
	118	Redhead	1000-20000 BIRDS	X	X	X							X	X	X	-	-	-
133	American avocet	100S	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		-	-	-	
	Dabbling ducks	HIGH	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	-	MAR-MAY JUL-NOV	-	
	Dunlin	1000S	X	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	-	MAR-APR JUL-NOV	-	
	Marsh birds		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	-	-	-	
	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	-	-	-	
	Sandhill crane	HIGH	X	X	X							X	X	X	-	-	-	
	Shorebirds	1000S	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	-	-	-	
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	-	MAR-MAY JUL-NOV	-		
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	X	-	-	-	
	Diving ducks		X	X	X	X	X				X	X	X		-	-	-	
	Geese		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	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	-	-	-	
	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	-	-	-	
	136	American avocet		X	X	X	X	X			X	X	X	X	X	-	MAR-APR JUL-NOV	-
	Black-bellied plover	100S	X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-MAY JUL-NOV	-	
Black-necked stilt				X	X	X	X	X	X	X	X	X		-	-	-		
Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-		
Least tern				X	X	X	X	X	X	X	X	X		-	-	-		
Peregrine falcon	T	X	X	X	X				X	X	X	X	X	-	-	-		
Red knot	HIGH			X	X	X				X	X	X	X	-	-	-		
Sanderling	100S	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	-	-	-		
Snowy plover		X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-	-	
Wading birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-		
Wilson's plover				X	X	X	X	X	X					APR-JUL	-	-	-	
138	Dabbling ducks		X	X	X	X	X				X	X	X	X	-	-	-	
	Redhead	HIGH	X	X	X						X	X	X		-	-	-	
	Scaup	HIGH	X	X	X	X	X				X	X	X		-	-	-	
	Waterfowl	HIGH	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	-	-	-	
139	Marsh birds		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	HIGH	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	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	
143	American avocet	100S	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	-	-	-	
	Aplomado falcon		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	-	MAR-MAY JUL-NOV	-	
	Dunlin	1000S	X	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	-	MAR-APR JUL-NOV	-	
	Marsh birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	
	Peregrine falcon	T	X	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	X		-	-	-		
Reddish egret	T PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-		
Shorebirds	1000S	X	X	X	X	X			X	X	X	X	X	-	-	-		



Upper Texas Coast: ESIMAP 60 (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
143	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	-	-	-
	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	-
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	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	X	-	-	-
	Snowy plover		45 INDIV	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
146	Sandhill crane			X	X	X								X	X	-	-	-
	Shorebirds			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	FEB-SEP	-	-
	Waterfowl			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Willet			X	X	X	X	X	X	X	X	X	X	X	X	-	APR-APR	-
																	AUG-AUG	-
147	Wading birds			X	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	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	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	-	MAR-APR	-
																	JUL-NOV	-
	Red knot		PRESENT		X	X	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	-
152	Piping plover	T T	17 INDIV	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
163	American oystercatcher		1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
263	Great egret		15 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-APR	-
	Tricolored heron		75 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
276	Bald eagle	T	2 NESTS	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
164	Atlantic sharpnose shark					X	X	X	X	X	X					-	-	-	APR-OCT	-
173	Bonnethead shark			X	X	X	X	X	X	X	X	X	X	X	X	-	SEP-NOV	-	FEB-MAR	FEB-DEC
																		NOV-DEC		
	Tarpon		COMMON						X	X	X	X	X			-	-	-	-	JUN-OCT
175	Bonnethead shark					X	X	X	X	X	X	X	X			-	SEP-NOV	-	APR-NOV	-
178	Bull shark		ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
179	Bull shark		COMMON	X	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	X					MAY-JUN	MAY-JUN	MAY-JUL	MAY-OCT	MAY-OCT
180	Blacktip shark				X	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	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	X	-	-	-	-	-
	Banded drum					X	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						-	-	-	-	MAY-OCT
	Cobia					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	X	-	-	MAY-AUG	MAY-DEC	JAN-DEC
	Gafftopsail catfish								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	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	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	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				-	-	-	-	JUN-OCT
	Spanish mackerel		ABUNDANT		X	X	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	X	X	-	-	-	MAR-NOV	-
268	Striped mullet		ABUNDANT	X	X						X	X	X	X		OCT-DEC	-	-	-	SEP-FEB
282	Alligator gar		COMMON	X	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	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	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	X	-	-	-	MAR-AUG	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.

## BIOLOGICAL RESOURCES: (cont.)

[illegible]

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults	
265	Atlantic seabob shrimp		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				-	-	-	-	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	
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	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	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	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	X	NOV-MAR	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC	
	Lesser blue crab	RARE				X	X	X	X	X	X	X	X		-	-	-	APR-APR	MAY-DEC	
301	Atlantic seabob shrimp	RARE								X	X	X	X		-	-	-	-	AUG-NOV	
	Blue crab	HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	MAR-NOV	JAN-DEC	JAN-DEC	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	JAN-DEC	JAN-DEC	
	Brown shrimp	ABUNDANT		X	X	X	X	X	X	X	X	X	X	X	-	-	FEB-APR	MAR-DEC	-	
	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	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC	
	Lesser blue crab	COMMON				X	X	X	X	X	X	X	X		-	-	-	APR-NOV	-	
	White shrimp	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	APR-NOV	MAY-DEC	JAN-DEC	
306	Blue crab	HIGHLY ABUNDANT	X	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	X	-	-	FEB-APR	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 60 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
306	White shrimp	COMMON	X X X X X X X X X X X X	-	-	APR-NOV	MAY-DEC	JAN-DEC
307	Blue crab	HIGHLY ABUNDANT	X 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 X	-	-	FEB-APR	JAN-DEC	-
	White shrimp	COMMON	X 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 X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
349	Eastern oyster	REEF	X X X X X X X X X X X X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
358	Eastern oyster	HIGH	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	Interesting	Juveniles	Adults
133	Diamondback terrapin		X X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
143	Diamondback terrapin		X X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
144	Diamondback terrapin	HIGH	X X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
328	Diamondback terrapin		X X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
	Green sea turtle	T T OCCASIONAL	X X X X X X X X X X	-	-	-	MAR-NOV	-
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	-

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D
133	Northern river otter		X X X X X X X X X X X X
143	Northern river otter		X X X X X X X X X X X X
144	Northern river otter		X X X X X X X X X X X X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
71	HARBOR BOAT RAMP		
86	MATAGORDA TURNING BASIN BOAT STALLS		
97	PUBLIC BOAT RAMP		
100	RAWLINGS RAMP		

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
140	PIPING PLOVER CRITICAL HABITAT	USFWS	

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
247	THERMAL GAME FISH REFUGE	TPWD	

MARINA:

HUN#	Name	Contact	Phone
275	MATAGORDA HARBOR	HAROLD MARTIN	979/863-2103