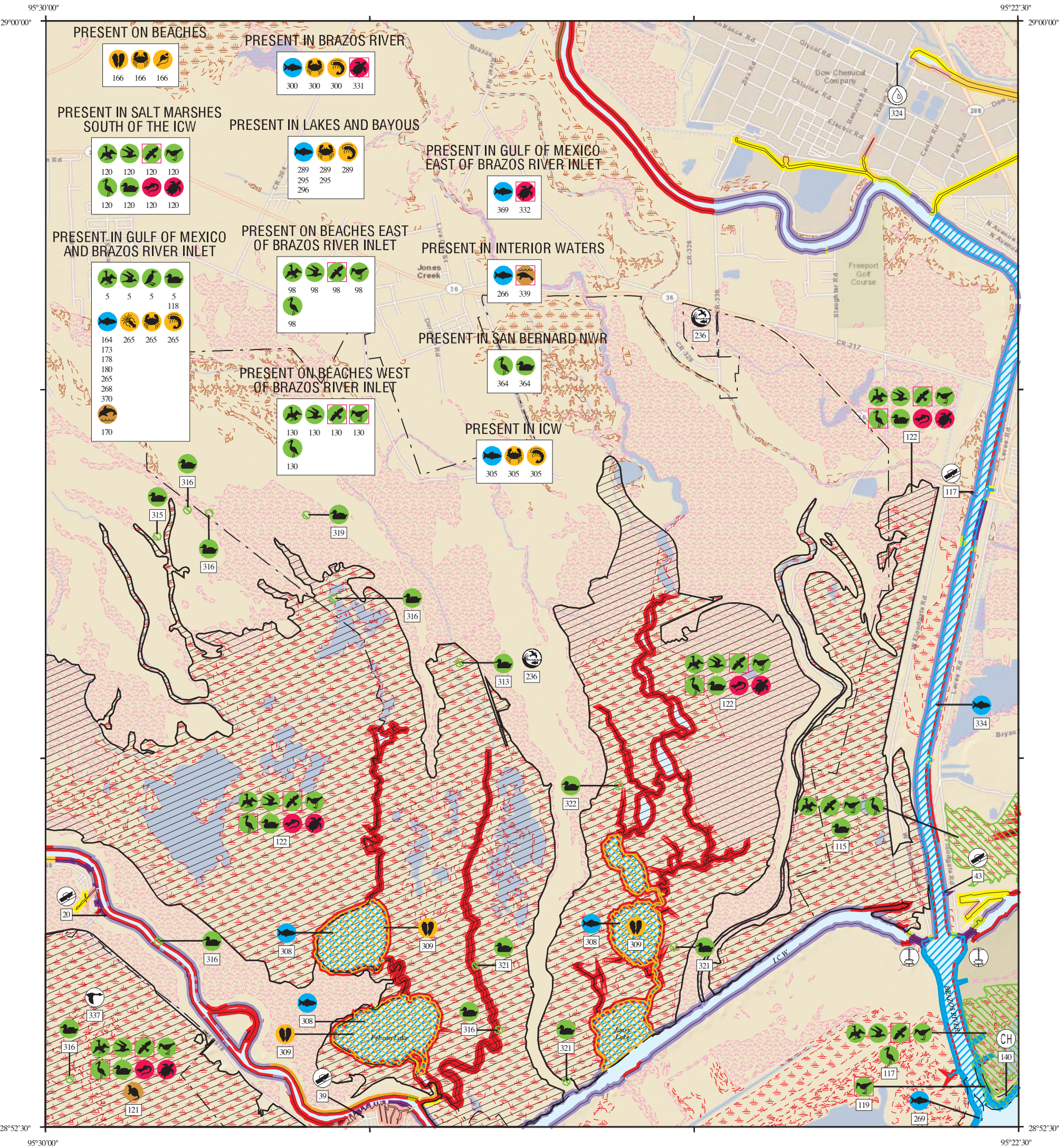
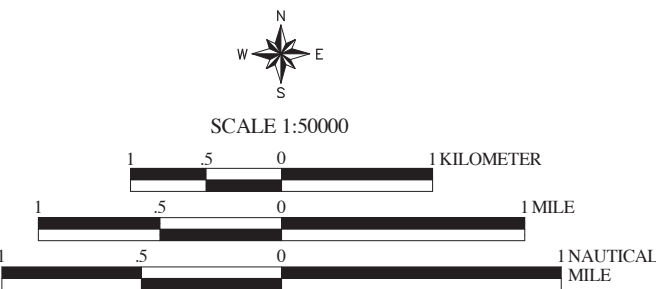


ENVIRONMENTAL SENSITIVITY INDEX MAP



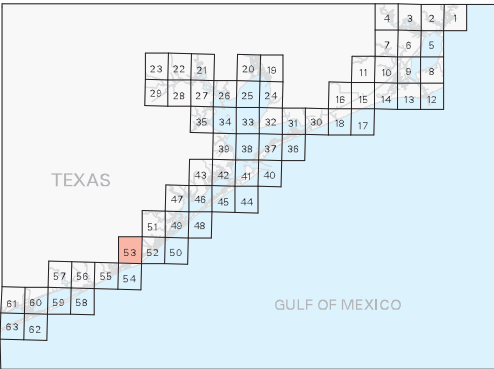
SHORELINE HABITATS (ESI)

- 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



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Emergency Response Division



Upper Texas Coast: ESIMAP 53

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	X		-	-	-
	Masked booby	UNCOMMON			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	-	-	-
98	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least tern			X	X	X	X	X	X	X	X				-	-	-
	Peregrine falcon	T	X	X	X	X				X	X	X	X	X	-	-	-
	Shorebirds		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	X					APR-JUL	-	-
115	Diving birds		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	-	-	-
	Osprey		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	-	-	-
	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	-	-	-
117	American white pelican		X	X	X								X	X	-	-	-
	Gulls		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Osprey		X	X	X	X	X			X	X	X	X		-	-	-
	Peregrine falcon	T	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	-	-	-
118	Redhead	1000-20000 BIRDS	X	X	X								X	X	-	-	-
119	Piping plover	T T 10 INDIV	X	X	X	X	X			X	X	X	X	X	-	-	-
120	Diving birds		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	-	-	-
	Marsh birds		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	-	-	-
	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	-	-	-
	Shorebirds	HIGH	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	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	-	-	-
	Wilson's plover			X	X	X	X	X	X						-	-	-
121	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	-	-	-
	Bald eagle	T	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		-	-	-
	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		-	-	-
	Gulls		X	X	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	-	MAR-APR JUL-NOV	-
	Marsh birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Osprey		X	X	X	X	X			X	X	X	X		-	-	-
	Pelicans		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	-	-	-
	Terns		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	-	-	-
	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	-	MAR-MAY JUL-NOV	-
122	American avocet	100S	X	X	X	X	X			X	X	X	X	X	-	MAR-APR JUL-NOV	-
	American oystercatcher	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bald eagle	T	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	PRESENT		X	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	PRESENT	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	PRESENT	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	-	-	-
	Shorebirds	1000S	X	X	X	X	X			X	X	X	X	X	-	-	-
	Snow goose	HIGH	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 53 (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
122	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	1000S	X X X X X X X X X X X	-	FEB-MAY JUL-NOV	-
	White-tailed kite		X X X X X X X X X X X	-	-	-
	Willet	100S	X X X X X X X X X X X	-	APR-APR AUG-AUG	-
	Wood stork	T		X X X X X	-	-
	Yellowlegs	100S	X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
130	Brown pelican		X X X X X X X X X X X	-	-	-
	Gulls		X X X X X X X X X X X	-	-	-
	Least tern		X X X X X X X X	-	-	-
	Peregrine falcon	T	X X X X X X X X X	-	-	-
	Piping plover	T T 8 INDIV	X X X X X X X X X X X	-	-	-
	Shorebirds	HIGH	X X X X X X X X X X X	-	-	-
	Snowy plover	HIGH	X X X X X X X X X X X	FEB-AUG	-	-
	Terns		X X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Wilson's plover	HIGH	X X X X X X X X	APR-JUL	-	-
313	Greater white-fronted goose	10S	X X X X X X X X	-	-	-
	Ross's goose	100S	X X X X X X X X	-	-	-
	Snow goose	100S	X X X X X X X X	-	-	-
315	Greater white-fronted goose	10S	X X X X X X X X	-	-	-
316	Ross's goose	100S	X X X X X X X X	-	-	-
	Snow goose	100S	X X X X X X X X	-	-	-
319	Greater white-fronted goose	100S	X X X X X X X X	-	-	-
	Ross's goose	1000S	X X X X X X X X	-	-	-
	Snow goose	1000S	X X X X X X X X	-	-	-
321	Ross's goose	1000S	X X X X X X X X	-	-	-
	Snow goose	1000S	X X X X X X X X	-	-	-
322	Ross's goose	10S	X X X X X X X X	-	-	-
	Snow goose	10S	X X X X X X X X	-	-	-
364	American coot	10000S	X X X X X X X X	-	-	-
	American wigeon	10000S	X X X X X X X X	-	-	-
	Blue-winged teal	1000S	X X X X X X X X X	-	-	-
	Bufflehead	10S	X X X X X X X X	-	-	-
	Canada goose	100S	X X X X X X X X	-	-	-
	Canvasback	100S	X X X X X X X X	-	-	-
	Fulvous whistling-duck	10S	X X X X X X X X X X X	MAY-AUG	-	-
	Gadwall	10000S	X X X X X X X X	-	-	-
	Greater white-fronted goose	100S	X X X X X X X X	-	-	-
	Green-winged teal	10000S	X X X X X X X X	-	-	-
	Lesser scaup	1000S	X X X X X X X X	-	-	-
	Mallard	10S	X X X X X X X X	-	-	-
	Mottled duck	100S	X X X X X X X X X X X	FEB-AUG	-	JUN-AUG
	Northern pintail	1000S	X X X X X X X X	-	-	-
	Northern shoveler	10000S	X X X X X X X X	-	-	-
	Redhead	10S	X X X X X X X X	-	-	-
	Ring-necked duck	100S	X X X X X X X X	-	-	-
	Ruddy duck	100S	X X X X X X X X	-	-	-
	Sandhill crane	10S	X X X X X X X X	-	-	-
	Snow goose	10000S	X X X X X X X X	-	-	-
	Wood duck	10S	X X X X X X X X X X X	FEB-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 X	-	-	-	APR-OCT	-
173	Bonnethead shark		X X X X X X X X X X X	-	SEP-NOV	-	FEB-MAR NOV-DEC	FEB-DEC
	Tarpon	COMMON	X X X X X	-	-	-	-	JUN-OCT
178	Bull shark	ABUNDANT	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	-	-	-	MAR-DEC	MAR-DEC
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	AUG-APR	-	-	APR-NOV	JAN-DEC
	Atlantic spadefish		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 X	-	-	-	-	-
	Bay anchovy		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	FEB-JUL	-	MAR-JUL	AUG-JAN	JAN-DEC
	Blackfin tuna		X X X X X X	-	-	-	-	MAY-OCT
	Cobia		X X X X	-	-	-	-	-
	Creville jack		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	-	-	APR-NOV	JAN-DEC	JAN-DEC
	Gray triggerfish	ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Gulf butterfish	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 X	JUL-OCT	-	-	-	MAR-OCT
	Hardhead catfish		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	-	-	-	-	-
	Pinfish		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	AUG-OCT	-	-	-	JAN-DEC
	Red snapper		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	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 X X	-	-	-	-	DEC-FEB
	Silver seatrout		X X X X X X X X X X X	-	-	-	-	-
	Southern flounder		X 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 X	-	-	-	-	SEP-FEB
	Star drum	COMMON	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 X X	OCT-DEC	-	-	-	SEP-FEB
269	Striped mullet	HIGHLY ABUNDANT	X X X X X X X	-	-	-	-	MAY-NOV
289	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	MAR-DEC	JAN-DEC
	Bay whiff	COMMON	X X X X X X X X X X X	-	-	-	MAR-DEC	JAN-DEC
	Gafftopsail catfish	COMMON	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	-	-	-	-	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	MAY-NOV
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	MAY-OCT	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 53 (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
289	Pinfish	COMMON	X X X X X X X X	-	-	-	APR-NOV	APR-NOV
	Sand seatrout	COMMON	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	-	-	-	NOV-JUL	JAN-DEC
	Silversides	RARE	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	-	-	-	JAN-DEC	JAN-DEC
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	-	FEB-NOV	JAN-DEC
	Spotfin mojarra	RARE	X X X X	-	-	-	-	-
	Striped mullet	COMMON	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	-	-	-	FEB-OCT	-
295	Black drum	COMMON	X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-OCT	SEP-NOV	JAN-DEC
296	Red drum	ABUNDANT	X X X X X X X X X X	-	-	SEP-NOV	JAN-DEC	JAN-DEC
300	Alligator gar	COMMON	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	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Bay anchovy	COMMON	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	-	-	-	FEB-NOV	JAN-DEC
	Black drum		X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	COMMON	X X X	-	-	-	JUN-AUG	-
	Gafftopsail catfish	COMMON	X X X X X	APR-MAY	-	-	APR-SEP	APR-SEP
	Gizzard shad	COMMON	X X X X X X X X X X	-	-	-	-	JAN-DEC
	Gulf killifish	ABUNDANT	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	-	-	-	JAN-DEC	APR-OCT
	Hardhead catfish	ABUNDANT	X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	APR-OCT	JAN-DEC
	Pinfish	COMMON	X X X X X	-	-	-	APR-OCT	APR-OCT
	Red drum	ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X	-	-	-	OCT-JUN	JAN-DEC
	Silversides	COMMON	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	-	-	-	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	-	-	-	MAR-OCT	JAN-DEC
	Spotfin mojarra	COMMON	X X X X X X	-	-	-	-	-
	Spotted seatrout	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	White mullet	ABUNDANT	X X X X X X X X X X	-	-	-	JAN-DEC	-
305	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Atlantic spadefish	COMMON	X X X X X X X	-	-	-	MAY-DEC	-
	Bay anchovy	COMMON	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	-	-	-	-	JAN-DEC
	Black drum	COMMON	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	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
	Gafftopsail catfish	COMMON	X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gray snapper	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Hardhead catfish	ABUNDANT	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 X X X X	-	-	-	MAR-NOV	MAR-NOV
	Red drum	ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X	-	-	-	OCT-JUN	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	OCT-FEB	JAN-DEC
	Southern flounder	COMMON	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	JAN-DEC
	Spotted seatrout	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
308	Red drum	HIGH	X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
334	Common snook	RARE	X X X X X X X X X X	JUN-JUL	-	-	-	MAY-AUG
	Gray snapper		X X X X X X X X X X	-	-	-	JAN-DEC	-
369	Spinner shark		X X X X X	MAY-JUN	MAY-JUN	MAY-JUL	MAY-OCT	MAY-OCT
370	Spinner shark		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
166	Atlantic ghost crab		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	MAR-MAY SEP-NOV	-	-	-	JAN-DEC
	Lettered olive		X X X X X X X X X X	-	-	-	-	-
	Mole crab		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	-	-	-	-	-
265	Atlantic seabob shrimp		X X X X	-	-	-	-	OCT-JAN
	Blue crab	ABUNDANT	X X X X X X X X X X	-	-	JAN-DEC	-	-
	Brief squid		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	-	-	-	-	MAR-OCT
	Lesser blue crab		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	MAR-SEP	-	-	-	JAN-DEC
289	Brown shrimp	ABUNDANT	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	MAR-OCT	MAR-OCT	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf stone crab	COMMON	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	-	-	-	MAY-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X	-	-	JUN-OCT	JUN-DEC	MAY-JUN
295	Blue crab	HIGHLY ABUNDANT	X X X X X X X X X X	MAY-NOV	MAY-NOV	MAY-DEC	JAN-DEC	JAN-DEC
300	Blue crab	ABUNDANT	X X X X X X X X X X	MAY-NOV	MAY-NOV	MAY-DEC	JAN-DEC	JAN-DEC
	Brown shrimp	ABUNDANT	X X X X X X X X X	-	-	FEB-APR	APR-NOV	-
	Grass shrimp	COMMON	X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf stone crab	COMMON	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	-	-	-	APR-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X	-	-	JUN-OCT	JUN-DEC	MAY-JUN
305	Blue crab	HIGHLY ABUNDANT	X X X X X X X X X X	MAY-NOV	MAY-NOV	MAY-DEC	JAN-DEC	JAN-DEC
	Brown shrimp	ABUNDANT	X X X X X X X X X X	-	-	FEB-APR	APR-DEC	-
	Gulf stone crab	COMMON	X X X X X X X X X X	NOV-MAR	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	White shrimp	ABUNDANT	X X X X X X	-	-	JUN-OCT	JUN-DEC	MAY-JUN
309	Eastern oyster	PRESENT	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	-	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
120	Diamondback terrapin		X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
	Gulf salt marsh snake		X X X X X X X X X X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
121	Diamondback terrapin		X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
	Gulf salt marsh snake		X X X X X X X X X X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
122	Diamondback terrapin		X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
	Gulf salt marsh snake		X X X X X X X X X X	MAR-MAY	JUL-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 53 (cont.)

BIOLOGICAL RESOURCES: (cont.)

REPTILE: (cont.)

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Interesting	Juveniles	Adults
331	Kemp's ridley sea turtle	E E COMMON	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	-	-	-	MAR-NOV	-
	Hawksbill sea turtle	E E OCCASIONAL	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	-	-	-	APR-NOV	APR-NOV
	Loggerhead sea turtle	T T OCCASIONAL	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
121	Northern river otter		X X X X X X X X X X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
20	2 JS RAMP		
39	BENNETS MOTEL RAMP		
43	BRAZOS RIVER RAMP AT EAST LENER RD		
117	SUNNY TRAVIS BOAT RAMP		

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
140	PIPING PLOVER CRITICAL HABITAT	USFWS	

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
236	JUSTIN HURST WMA	TPWD	

WATER INTAKE:

HUN#	Name	Contact	Phone
324	DOW CHEMICAL COMPANY PLANT B		

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
337	SAN BERNARD NATIONAL WILDLIFE REFUGE		