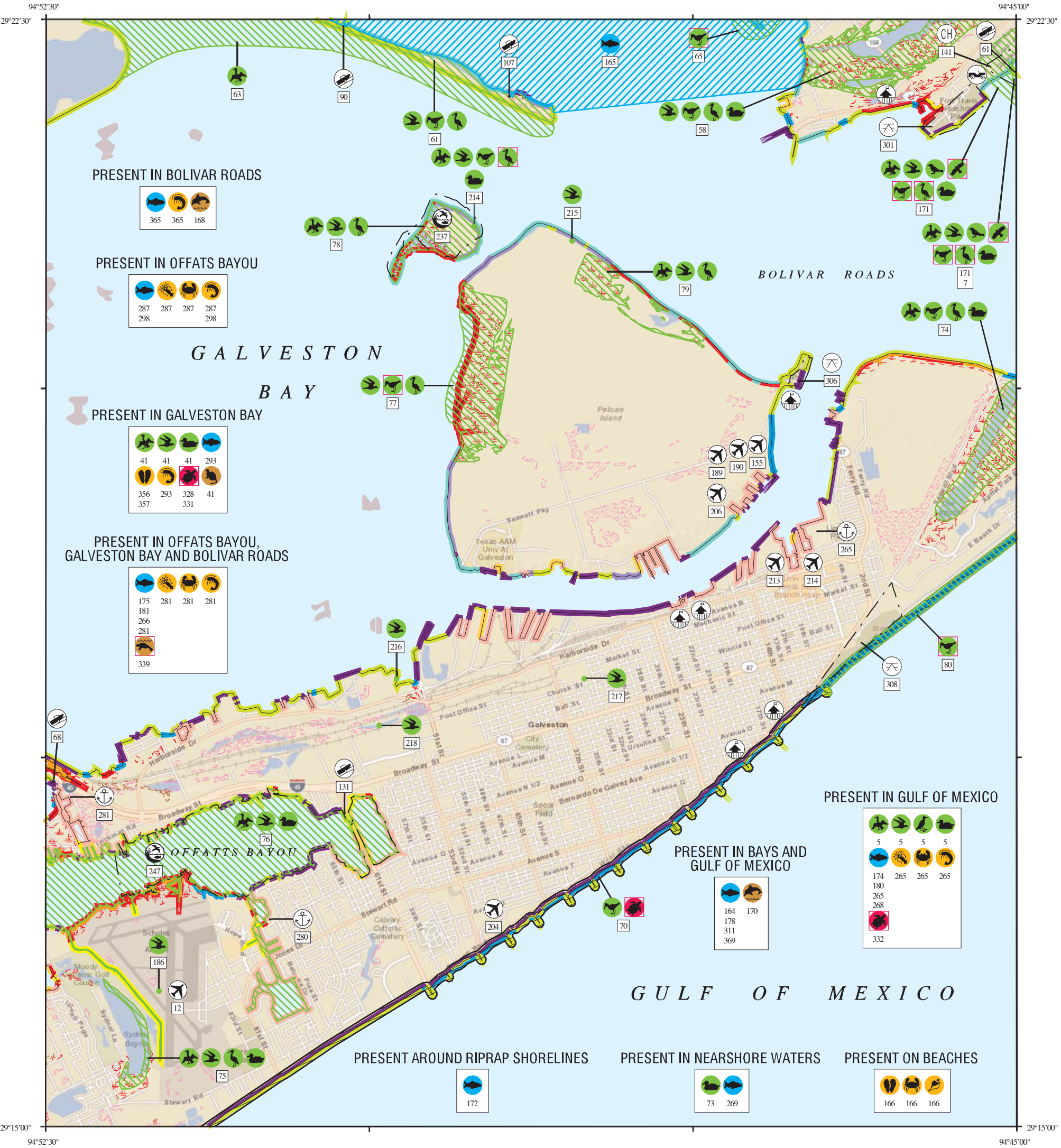
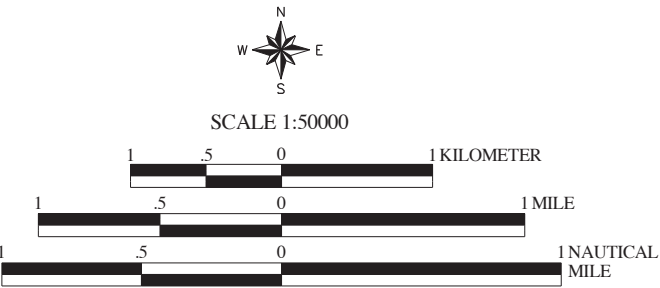


ENVIRONMENTAL SENSITIVITY INDEX MAP



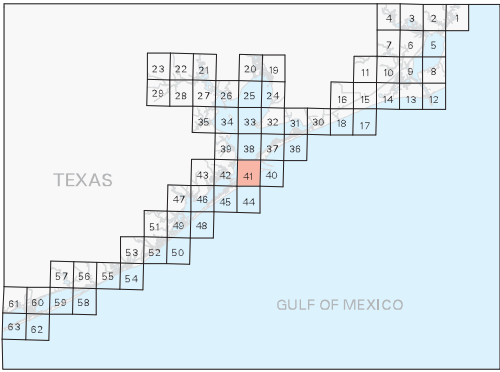
SHORELINE HABITATS (ESI)

- 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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National Ocean Service
Office of Response and Restoration
Emergency Response Division



Upper Texas Coast: ESIMAP 41

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	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	-	-	-
	Loons		X	X	X	X							X	X	-	-	-
	Magnificent frigatebird	COMMON					X	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	-	-	-
	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	-	-
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	-	-	-
	Grebes		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	-	-	-
	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	-	-	-
58	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	-	-	-
	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	-	-	-
	Waterfowl		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
61	Gulls		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	-	-	-
63	Grebes	HIGH	X	X	X	X	X			X	X	X	X	X	-	-	-
	Loons	HIGH	X	X	X	X				X	X	X	X	X	-	-	-
65	Piping plover	T T 1 INDIV	X	X	X	X		X	X	X	X	X	X	X	-	-	-
70	Black-bellied plover	100S	X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-MAY JUL-NOV	-
	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	-	-	-
	Wilson's plover			X	X	X	X	X	X	X					-	-	-
73	Redhead	100-7000 BIRDS	X	X	X								X	X	-	-	-
74	Grebes		X	X	X	X	X			X	X	X	X	X	-	-	-
	Loons		X	X	X	X							X	X	-	-	-
	Marsh birds		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	-	-	-
75	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		X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	JUN-AUG
	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	-	-	-
	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	-	-	-
76	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	-	-	-
	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	-	-	-
77	Forster's tern		X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Marsh birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Piping plover	T T	X	X	X	X		X	X	X	X	X	X	X	-	-	-
	Shorebirds		X	X	X	X		X	X	X	X	X	X	X	-	-	-
78	Black skimmer		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	-	-	-
	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	-	-	-
79	Brown pelican		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	-	-	-
	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	-	-	-
80	Piping plover	T T 3 INDIV	X	X	X	X		X	X	X	X	X	X	X	-	-	-
171	American avocet	1000S	X	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	-	-	-
	American white pelican		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			X	X	X	X	X	X	X	X	X			-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	FEB-SEP	-	-
	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	-	-	-
	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		-	-	-
	Forster's tern		X	X	X	X	X	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	-	-	-
	Killdeer	10S	X	X	X	X	X	X	X	X	X	X	X	X	-	DEC-MAR	-
	Least tern			X	X	X	X	X	X	X					-	-	-
	Long-billed curlew	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	-	FEB-APR JUN-NOV	-
	Loons		X	X	X	X							X	X	-	-	-
	Marbled godwit	100S	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	-	-	-

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 41 (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
171	Northern harrier		X X X - - - X X X X	-	-	-
	Peregrine falcon	T	X X X X - X X X X X	-	-	-
	Piping plover	T T 275 INDIV	X X X X X X X X X X	-	-	-
	Raptors		X X X X X X X X X X X	-	-	-
	Red knot		X X X - X X X X	-	-	-
	Reddish egret	T PRESENT	X X X X X X X X X X X	-	-	-
	Ruddy turnstone	PRESENT	X 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	-
	Seaside sparrow		X X X X X X X X X X X	MAR-SEP	-	-
	Shorebirds	10000S	X X X X X X X X X X X	-	-	-
	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	-	-	-
	Western sandpiper	1000S	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	-	APR-APR AUG-AUG	-
	Wilson's plover		X X X X X X X	-	-	-
	Yellowlegs	100S	X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
186	Least tern	11-89 PAIRS	X X X X X X X X X	APR-SEP	-	-
214	American oystercatcher	1-9 PAIRS	X X X X X X X X X X X	FEB-JUL	-	-
	Black-crowned night-heron	1-40 PAIRS	X X X X X X X X X X X	APR-AUG	APR-MAY	-
	Brown pelican	145-294 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	Cattle egret	4-10 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Forster's tern	14 PAIRS	X X X X X X X X X X X	MAR-AUG	-	-
	Fulvous whistling-duck	9 PAIRS	X X X X X X X X X X X	MAY-AUG	-	-
	Great blue heron	2-5 PAIRS	X X X X X X X X X X X	FEB-JUN	-	-
	Great egret	2-50 PAIRS	X X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Laughing gull	540-4950 PAIRS	X X X X X X X X X X X	FEB-AUG	-	-
	Neotropic cormorant	30-36 PAIRS	X X X X X X X X X X X	FEB-OCT	-	-
	Reddish egret	T 1-2 PAIRS	X X X X X X X X X X X	MAR-AUG	-	-
	Roseate spoonbill	5-20 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	Royal tern	87-300 PAIRS	X X X X X X X X X X X	FEB-AUG	-	-
	Sandwich tern	25-100 PAIRS	X X X X X X X X X	MAR-AUG	-	-
	Snowy egret	50-100 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	20-75 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	White ibis	7-20 PAIRS	X X X X X X X X X X X	FEB-JUL	-	-
	White-faced ibis	T 35 PAIRS	X X X X X X X X X X X	FEB-AUG	-	-
215	Forster's tern	7-37 PAIRS	X X X X X X X X X X X	MAR-AUG	-	-
	Laughing gull	4500-10350 PAIRS	X X X X X X X X X X X	FEB-AUG	-	-
216	Least tern	14 PAIRS	X X X X X X X	APR-SEP	-	-
217	Black skimmer	9 PAIRS	X X X X X X X X X X X	APR-SEP	-	-
	Least tern	4-19 PAIRS	X X X X X X X X	APR-SEP	-	-
218	Black skimmer	17-37 PAIRS	X X X X X X X X X X X	APR-SEP	-	-
	Gull-billed tern	4-17 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Least tern	4-42 PAIRS	X X X X X X X X	APR-SEP	-	-

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
172	Blennies		X X X X X X X X X X X	-	-	-	-	-
	Sheepshead		X X X X X X X X X X X	FEB-APR	-	-	-	JAN-DEC
174	Bonnethead shark		X X - - - X X X X	-	SEP-NOV	-	FEB-MAR NOV-DEC	-
	Tarpon	RARE	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	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
180	Blacktip shark		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	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	-	-	-	-	MAY-OCT
	Cobia		X X X X	-	-	-	-	-
	Crevalle 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 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 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	-	-	-	-	DEC-FEB
	Silver seatrout		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	-	-	-	-	JAN-DEC
266	Tarpon	RARE	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
269	Striped mullet	HIGHLY ABUNDANT	X X X X X X X	-	-	-	-	MAY-NOV
281	Atlantic bumper	ABUNDANT	X X X X X	-	-	-	-	JUN-OCT
	Atlantic spadefish	RARE	X X	-	-	-	AUG-SEP	-
	Bay anchovy	HIGHLY ABUNDANT	X X X X X X X X X X X	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	Bay whiff	COMMON	X X X X X X X X X X X	-	-	-	APR-MAY	JAN-DEC
	Crevalle jack	COMMON	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	APR-OCT
	Gizzard shad	RARE	X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Gulf butterflyfish	RARE	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	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	MAY-OCT	JAN-DEC
	Pinfish	COMMON	X X X X X X X X X X X	-	-	-	FEB-OCT	JUN-FEB

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 41 (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
281	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	-	-	-	DEC-MAR	JAN-DEC
	Silver perch	COMMON	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-JUN	JAN-DEC
							OCT-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 kingfish	COMMON	X X X X X X X X X	-	-	-	APR-NOV	-
	Spanish mackerel	COMMON	X X X X X X X X	-	-	-	APR-NOV	APR-NOV
	Spotfin mojarra	RARE	X X X	-	-	-	-	-
	Striped mullet	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	White mullet	ABUNDANT	X X X X X X	-	-	-	MAY-OCT	-
287	Atlantic bumper	COMMON	X	-	-	-	-	SEP-SEP
	Atlantic spadefish	RARE	X X X X X	-	-	-	JUL-NOV	-
	Bay anchovy	ABUNDANT	X X X X X X X X X X X	MAR-NOV	MAR-NOV	MAR-NOV	APR-NOV	JAN-DEC
	Bay whiff	COMMON	X X X X X X X X X X	-	-	-	MAR-SEP	JAN-DEC
	Crevalle jack	COMMON	X X X X X X X X	-	-	-	MAR-NOV	-
	Gafftopsail catfish	COMMON	X X X X X X X X X	APR-MAY	-	-	APR-NOV	MAR-NOV
	Gizzard shad	RARE	X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Gray snapper	COMMON	X X X X X X X X X X X	-	-	-	AUG-OCT	JAN-DEC
	Gulf butterfish	RARE	X X X	-	-	-	-	-
	Gulf killifish	ABUNDANT	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	FEB-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	ABUNDANT	X X X X X X X X X X X	-	-	-	MAR-NOV	JAN-DEC
	Sand seatrout	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	ABUNDANT	X X X X X X X X X X X	-	-	-	NOV-AUG	JAN-DEC
	Silver perch	COMMON	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	FEB-DEC	JAN-DEC
	Silversides	ABUNDANT	X X X X X X X X X X X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Southern kingfish	COMMON	X X X X X	-	-	-	JUL-NOV	-
	Spanish mackerel	COMMON	X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
	Spotfin mojarra	COMMON	X X X X X	-	-	-	-	-
	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	-	-	-	MAY-NOV	-
293	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X X	APR-MAY	APR-MAY	APR-MAY	JAN-DEC	JAN-DEC
	Red drum	COMMON	X X X X X X X X X X X	-	-	SEP-NOV	JAN-DEC	JAN-DEC
	Southern flounder	ABUNDANT	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	-	-	-	MAR-OCT	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
298	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Red drum	COMMON	X X X X X X X X X X X	-	-	SEP-NOV	JAN-DEC	JAN-DEC
	Southern flounder	ABUNDANT	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	-	-	-	FEB-NOV	JAN-DEC
	Spotted seatrout	COMMON	X X X X X X X X X X X	APR-OCT	APR-OCT	APR-OCT	JUL-NOV	JAN-DEC
311	Finetooth shark		X X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
365	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	DEC-APR	DEC-APR	DEC-APR	APR-NOV
	Black drum	COMMON	X X X X X X X X X X X	FEB-JUL	-	MAR-JUL	AUG-JAN	JAN-DEC
	Red drum	COMMON	X X X X X X X X X X X	-	-	SEP-NOV	-	JAN-DEC
	Southern flounder	ABUNDANT	X X X X X X X X	-	-	-	-	OCT-NOV
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	FEB-JUN	FEB-JUN	JAN-DEC
	Spotted seatrout	COMMON	X X X X X X X X X X X	FEB-OCT	FEB-OCT	-	-	JAN-DEC
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
166	Atlantic ghost crab		X X X X X X X X X X X	APR-APR	-	-	-	JAN-DEC
				AUG-AUG				
	Atlantic surfclam		X X X X X X X X X X X	MAR-MAY	-	-	-	JAN-DEC
				SEP-NOV				
	Lettered olive		X X X X X X X X X X X	-	-	-	-	-
	Mole crab		X X X X X X X X X X X	APR-MAY	-	-	-	JAN-DEC
265	Speckled swimming crab	COMMON	X X X X X X X X X X X	-	-	-	-	-
	Atlantic seabob shrimp		X X X X X	-	-	-	-	OCT-JAN
	Blue crab	ABUNDANT	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	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	-	-	MAR-DEC	-	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	MAR-SEP	-	-	-	JAN-DEC
281	Atlantic seabob shrimp	RARE	X X X X	-	-	-	-	JUN-SEP
	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	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	RARE	X X X X X X X X X X X	NOV-MAR	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Lesser blue crab	ABUNDANT	X X X X X X X	-	-	-	APR-NOV	APR-NOV
287	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	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	COMMON	X X X X X X X	-	-	-	APR-OCT	APR-OCT
293	Brown shrimp	ABUNDANT	X X X X X X X X X X X	-	-	FEB-APR	APR-DEC	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	JUN-OCT	JUN-DEC	JAN-DEC
298	Brown shrimp	ABUNDANT	X X X X X X X X X X X	-	-	FEB-APR	MAR-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	JUN-OCT	JUN-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
365	Brown shrimp	ABUNDANT	X X X X X X X X	-	-	FEB-APR	-	MAR-OCT
	White shrimp	ABUNDANT	X X X X X X X	-	-	MAY-NOV	-	-

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
168	Bottlenose dolphin	HIGH	X X X X X X X X X X X	-	JAN-DEC	-	-
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	Internesting	Juveniles	Adults
70	Kemp's ridley sea turtle	E E 7-15 NESTS	X X X X X X X	MAR-JUL	APR-SEP	-	APR-SEP	MAR-JUL
328	Diamondback terrapin		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	-	-	-	MAR-NOV	-
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 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 X	-	-	-	JAN-DEC	-

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

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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 41 (cont.)

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
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12	SCHOLES INTL AT GALVESTON		

BOAT RAMP:

HUN#	Name	Contact	Phone
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61	ERMAN PILSNER SMALL BOAT RAMP		
68	GALVESTON BAIT AND TACKLE		
90	NOAH J. WELCH RAMP		
107	SANSOM AND YARBROUGH		
131	WASHINGTON PARK		

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
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141	PIPING PLOVER CRITICAL HABITAT	USFWS	

HELIPORT:

HUN#	Name	Contact	Phone
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155	DRESSER INDUSTRIES/MAGCOBAR/		
189	MIDSTREAM GALVESTON HELIPAD AREA NR 1		
190	MIDSTREAM GALVESTON HELIPAD AREA NR 2		
204	SAN LUIS RESORT		
206	SHELL PELICAN ISLAND		
213	U OF TEXAS MEDICAL BRANCH EMERGENCY ROOM		
214	U OF TEXAS MEDICAL BRANCH EWING HALL		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
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237	LITTLE PELICAN ISLAND	HOUSTON AUDUBON (RICAHRD GIBBONS)	713/932-1639
247	THERMAL GAME FISH REFUGE	TPWD	

MARINA:

HUN#	Name	Contact	Phone
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265	GALVESTON YACHT BASIN	HARRY JAHN	409/765-3000
280	PARC AT MARINA LANDING	DOYL HATCHEL	409/744-3625
281	PAYCO MARINA	HERSHEL PAYNE	409/744-7428

PARK:

HUN#	Name	Contact	Phone
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301	FORT TRAVIS SEASHORE PARK		
306	SEAWOLF PARK		
308	STEWART BEACH PARK		