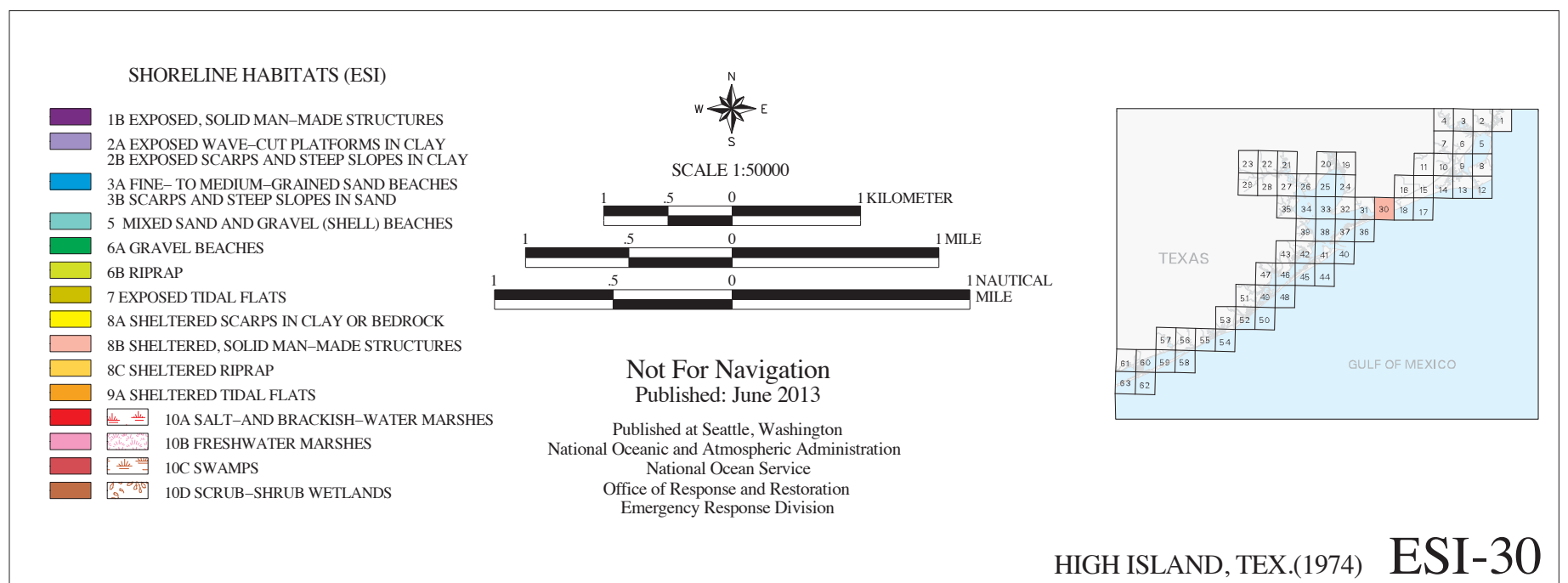
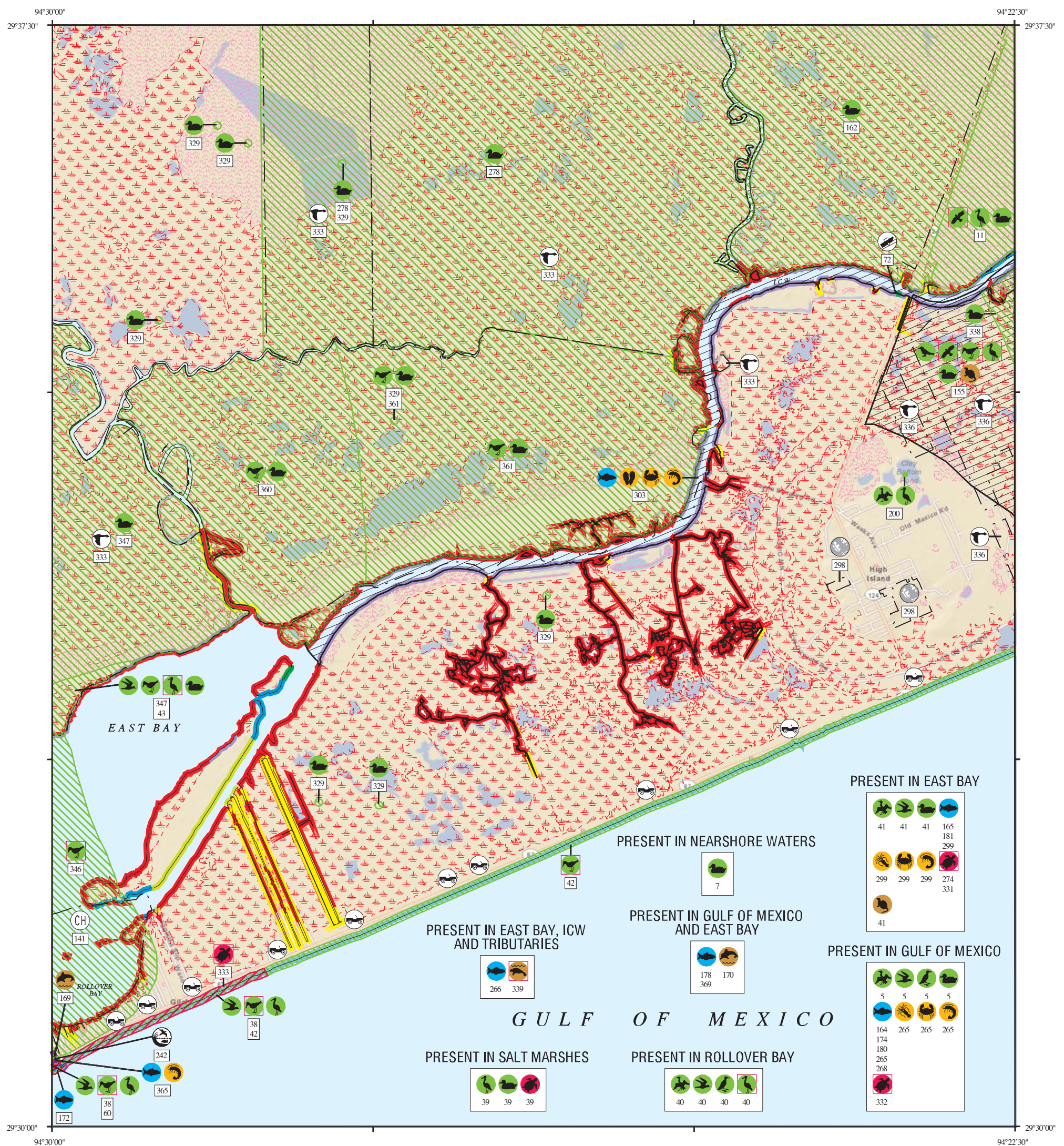


# ENVIRONMENTAL SENSITIVITY INDEX MAP





Upper Texas Coast: ESIMAP 30

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	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	X	-	-	-
	Scoters	RARE	X	X	X	X							X	X	-	-	-
	Shearwaters	UNCOMMON								X	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	X	-	-	-
11	Dabbling ducks		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	-	-	-
	Peregrine falcon	T	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	-	-	-
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	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	-	-	-
	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	-	-
39	Black rail	RARE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Rails	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	-	-	-
	Waterfowl	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
40	American white pelican		X	X	X							X	X	X	-	-	-
	Black skimmer		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Brown pelican		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	-	-	-
	Forster's tern		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	-	-	-
	Magnificent frigatebird						X	X	X	X	X	X	X	X	-	-	-
	Reddish egret	T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Roseate spoonbill		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	-	-	-
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	-	-	-
42	Piping plover	T T POTENTIAL	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
43	American avocet	100S	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	-	-	-
	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	-
	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	100S	X	X	X	X				X	X	X	X	X	-	MAR-APR JUL-NOV	-
	Rails		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Reddish egret	T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy turnstone	PRESENT	X	X	X	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	-	-	-
	Western sandpiper	1000S	X	X	X	X	X	X	X	X	X	X	X	X	-	FEB-MAY JUL-NOV	-
	Whimbrel	HIGH			X	X	X								-	-	-
	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	-
60	Piping plover	T T 16 INDIV	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
155	American bittern		X	X	X	X				X	X	X	X	X	-	-	-
	Black rail		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Black-necked stilt	10S			X	X	X	X	X	X	X				-	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	FEB-SEP	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAR-OCT	-	-
	Dowitchers	100S	X	X	X	X	X			X	X	X	X	X	-	MAR-MAY JUL-NOV	-
	Dunlin	100S	X	X	X	X	X			X	X	X	X	X	-	-	-
	Killdeer	100S	X	X	X	X	X	X	X	X	X	X	X	X	-	DEC-MAR	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-
	Marsh birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Migratory songbirds				X	X									-	-	-
	Peregrine falcon	T	X	X	X	X				X	X	X	X	X	-	-	-
	Shorebirds	1000S	X	X	X	X	X			X	X	X	X	X	-	-	-
	Sora		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	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Western sandpiper	100S	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	-
	Wood stork	T								X	X	X	X	X	-	-	-
	Yellow rail		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 30 (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
----	-----	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----
155	Yellowlegs	10S	X	X	X	X	X		X	X	X	X	X	X	-	MAR-MAY JUL-NOV	-
162	American coot	1000S	X	X	X	X					X	X	X	X	-	-	-
	American wigeon	100S	X	X	X						X	X	X	X	-	-	-
	Blue-winged teal	1000S	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Canada goose	10S	X	X	X						X	X	X		-	-	-
	Fulvous whistling-duck	10S	X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Gadwall	1000S	X	X	X	X					X	X	X	X	-	-	-
	Greater white-fronted goose	100S	X	X	X						X	X	X		-	-	-
	Green-winged teal	10000S	X	X	X	X					X	X	X	X	-	-	-
	Lesser scaup	100S	X	X	X	X					X	X	X		-	-	-
	Mallard	100S	X	X	X						X	X	X		-	-	-
	Mottled duck	100S	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	JUN-AUG
	Northern pintail	10000S	X	X	X						X	X	X	X	-	-	-
	Northern shoveler	1000S	X	X	X	X					X	X	X	X	-	-	-
	Redhead	PRESENT	X	X	X						X	X	X		-	-	-
	Ring-necked duck	100S	X	X	X						X	X	X		-	-	-
	Snow goose	1000S	X	X	X							X	X		-	-	-
	Wood duck	10S	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
200	Anhinga	1-8 PAIRS		X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Black-crowned night-heron	1-16 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-MAY	-
	Cattle egret	18-210 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Great egret	123-387 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-APR	-
	Little blue heron	1-80 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Neotropic cormorant	69-303 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-OCT	-	-
	Roseate spoonbill	83-252 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Snowy egret	52-356 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Tricolored heron	11-170 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	White ibis	1-5 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Yellow-crowned night-heron	5 PAIRS		X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-
278	American coot	1000S	X	X	X	X					X	X	X	X	-	-	-
	American wigeon	100S	X	X	X						X	X	X	X	-	-	-
	Blue-winged teal	10000S	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Bufflehead	PRESENT	X	X	X							X	X		-	-	-
	Canada goose	10S	X	X	X						X	X	X		-	-	-
	Canvasback	10S	X	X	X						X	X	X		-	-	-
	Fulvous whistling-duck	100S	X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Gadwall	1000S	X	X	X	X					X	X	X	X	-	-	-
	Greater white-fronted goose	1000S	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		-	-	-
	Mallard	1000S	X	X	X						X	X	X		-	-	-
	Mottled duck	100S	X	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	-	-	-
	Northern shoveler	10000S	X	X	X	X					X	X	X	X	-	-	-
	Redhead	10S	X	X	X						X	X	X		-	-	-
	Ring-necked duck	1000S	X	X	X						X	X	X		-	-	-
	Ruddy duck	100S	X	X	X						X	X	X		-	-	-
	Snow goose	100000S	X	X	X							X	X		-	-	-
329	Greater white-fronted goose		X	X	X	X					X	X	X		-	-	-
	Snow goose		X	X	X						X	X	X		-	-	-
338	American coot	1000S	X	X	X	X					X	X	X	X	-	-	-
	American wigeon	100S	X	X	X						X	X	X	X	-	-	-
	Blue-winged teal	10000S	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Bufflehead	10S	X	X	X							X	X		-	-	-
	Canada goose	100S	X	X	X						X	X	X		-	-	-
	Fulvous whistling-duck	10S	X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Gadwall	1000S	X	X	X	X					X	X	X	X	-	-	-
	Greater white-fronted goose	100S	X	X	X						X	X	X		-	-	-
	Green-winged teal	10000S	X	X	X	X					X	X	X	X	-	-	-
	Lesser scaup	100S	X	X	X	X					X	X	X		-	-	-
	Mallard	100S	X	X	X						X	X	X		-	-	-
	Mottled duck	100S	X	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	-	-	-
	Northern shoveler	1000S	X	X	X	X					X	X	X	X	-	-	-
	Redhead	10S	X	X	X						X	X	X		-	-	-
	Ruddy duck	10S	X	X	X						X	X	X		-	-	-
	Snow goose	1000S	X	X	X							X	X		-	-	-
346	Piping plover	T T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shorebirds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
347	American coot	1000S	X	X	X	X					X	X	X	X	-	-	-
	American wigeon	1000S	X	X	X						X	X	X	X	-	-	-
	Blue-winged teal	10000S	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Bufflehead	10S	X	X	X							X	X		-	-	-
	Canada goose	100S	X	X	X						X	X	X		-	-	-
	Canvasback	10S	X	X	X						X	X	X		-	-	-
	Fulvous whistling-duck	10S	X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Gadwall	1000S	X	X	X	X					X	X	X	X	-	-	-
	Greater white-fronted goose	1000S	X	X	X						X	X	X		-	-	-
	Green-winged teal	10000S	X	X	X	X					X	X	X	X	-	-	-
	Lesser scaup	100S	X	X	X	X					X	X	X		-	-	-
	Mallard	100S	X	X	X						X	X	X		-	-	-
	Mottled duck	100S	X	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	-	-	-
	Northern shoveler	10000S	X	X	X	X					X	X	X	X	-	-	-
	Redhead	10S	X	X	X						X	X	X		-	-	-
	Ring-necked duck	10S	X	X	X						X	X	X		-	-	-
	Ruddy duck	1000S	X	X	X						X	X	X		-	-	-
	Snow goose	10000S	X	X	X							X	X		-	-	-
360	American coot	1000S	X	X	X	X					X	X	X	X	-	-	-
	American wigeon	100S	X	X	X						X	X	X	X	-	-	-
	Blue-winged teal	1000S	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Canada goose	10S	X	X	X						X	X	X		-	-	-
	Gadwall	1000S	X	X	X	X					X	X	X	X	-	-	-
	Greater white-fronted goose	100S	X	X	X						X	X	X		-	-	-
	Green-winged teal	1000S	X	X	X	X					X	X	X	X	-	-	-
	Lesser scaup	100S	X	X	X	X					X	X	X		-	-	-
	Mallard	10S	X	X	X						X	X	X		-	-	-
	Mottled duck	10S	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	JUN-AUG
	Northern pintail	100S	X	X	X						X	X	X	X	-	-	-
	Northern shoveler	1000S	X	X	X	X					X	X	X	X	-	-	-
	Ruddy duck	100S	X	X	X						X	X	X		-	-	-
	Shorebirds	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Snow goose	1000S	X	X	X							X	X		-	-	-
	Whimbrel	HIGH		X	X	X									-	-	-
361	American coot	1000S	X	X	X	X					X	X	X	X	-	-	-
	American wigeon	1000S	X	X	X						X	X	X	X	-	-	-
	Blue-winged teal	10000S	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Bufflehead	10S	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 30 (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
361	Canada goose	10S	X	X	X								X	X	X	-	-
	Fulvous whistling-duck	10S	X	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	-	-	-
	Green-winged teal	10000S	X	X	X	X					X	X	X	X	-	-	-
	Lesser scaup	1000S	X	X	X	X						X	X	X	-	-	-
	Mallard	100S	X	X	X							X	X	X	-	-	-
	Mottled duck	100S	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	JUN-AUG
	Northern pintail	1000S	X	X	X							X	X	X	-	-	-
	Northern shoveler	10000S	X	X	X	X						X	X	X	-	-	-
	Redhead	10S	X	X	X								X	X	X	-	-
	Ring-necked duck	PRESENT	X	X	X								X	X	X	-	-
	Ruddy duck	10S	X	X	X								X	X	X	-	-
	Shorebirds	HIGH	X	X	X	X		X	X	X	X	X	X	X	-	-	-
	Snow goose	1000S	X	X	X									X	X	-	-
	Whimbrel	HIGH			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
172	Blennies		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Sheepshead		X	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
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	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						-	-	-	-	-
	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	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 butterfish	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						-	-	-	-	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			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
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	X	-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	COMMON		X	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 butterfish	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
	Sheepshead	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JUN-JUN	JAN-DEC
																	DEC-MAR		
	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					-	-	-	JUN-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-OCT	JAN-DEC
	Spotfin mojarra	RARE				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					-	-	-	MAY-OCT	-
303	Alligator gar		X	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	X	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Atlantic spadefish	RARE				X	X	X	X	X	X				-	-	-	MAY-DEC	-
	Bay anchovy	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	MAR-NOV	MAR-NOV	MAR-NOV	FEB-DEC	JAN-DEC
	Bay whiff	RARE	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	X	-	-	-	JAN-DEC	JAN-DEC
	Blue catfish	ABUNDANT	X	X	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	X	X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
	Gafftopsail catfish	COMMON			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	X	-	-	-	-	JAN-DEC
	Gulf menhaden	ABUNDANT	X	X	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	X	X	MAY-AUG	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC
	Red drum	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Sand seatrout	RARE	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	-	-	-	DEC-JAN	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 30 (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
303	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	JUN-DEC	JUN-DEC
	Southern flounder	COMMON	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	-	-	-	FEB-NOV	APR-NOV
	Spotted seatrout	COMMON	X X X X X X X X X X X	-	-	-	AUG-NOV	JAN-DEC
	Striped mullet	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
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 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
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	-	-	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 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
299	Atlantic seabob shrimp	RARE	X X 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	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-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
	Gulf stone crab	RARE	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	-	-	-	APR-OCT	APR-NOV
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	MAY-OCT	MAY-DEC	JAN-DEC
303	Atlantic rangia		X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Atlantic seabob shrimp	RARE	X X X X X X X X X X	-	-	-	-	AUG-NOV
	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Brown shrimp	COMMON	X X X X X X X X X X X	-	-	MAR-APR	MAY-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	MAY-DEC	JAN-DEC
365	Brown shrimp	ABUNDANT	X X X X X X X X X X	-	-	FEB-APR	-	MAR-OCT
	White shrimp	ABUNDANT	X X 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
169	Bottlenose dolphin		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	Interesting	Juveniles	Adults
39	Diamondback terrapin		X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
274	Diamondback terrapin		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	-	-	-	APR-NOV	-
332	Green sea turtle	T T OCCASIONAL	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	-	-	-	MAR-OCT	-
	Kemp's ridley sea turtle	E E COMMON	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	-	-	-	JAN-DEC	-
333	Kemp's ridley sea turtle	E E 0-6 NESTS	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	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
155	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
72	HIGH ISLAND BOAT RAMP		

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
141	PIPING PLOVER CRITICAL HABITAT	USFWS	

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
242	ROLLOVER ISLAND	HOUSTON AUDUBON (RICAHRD GIBBONS)	713/932-1639

NATURE CONSERVANCY:

HUN#	Name	Contact	Phone
298	HIGH ISLAND EASEMENT		

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
333	ANAHUAC NATIONAL WILDLIFE REFUGE		
336	MCFADDIN NATIONAL WILDLIFE REFUGE		