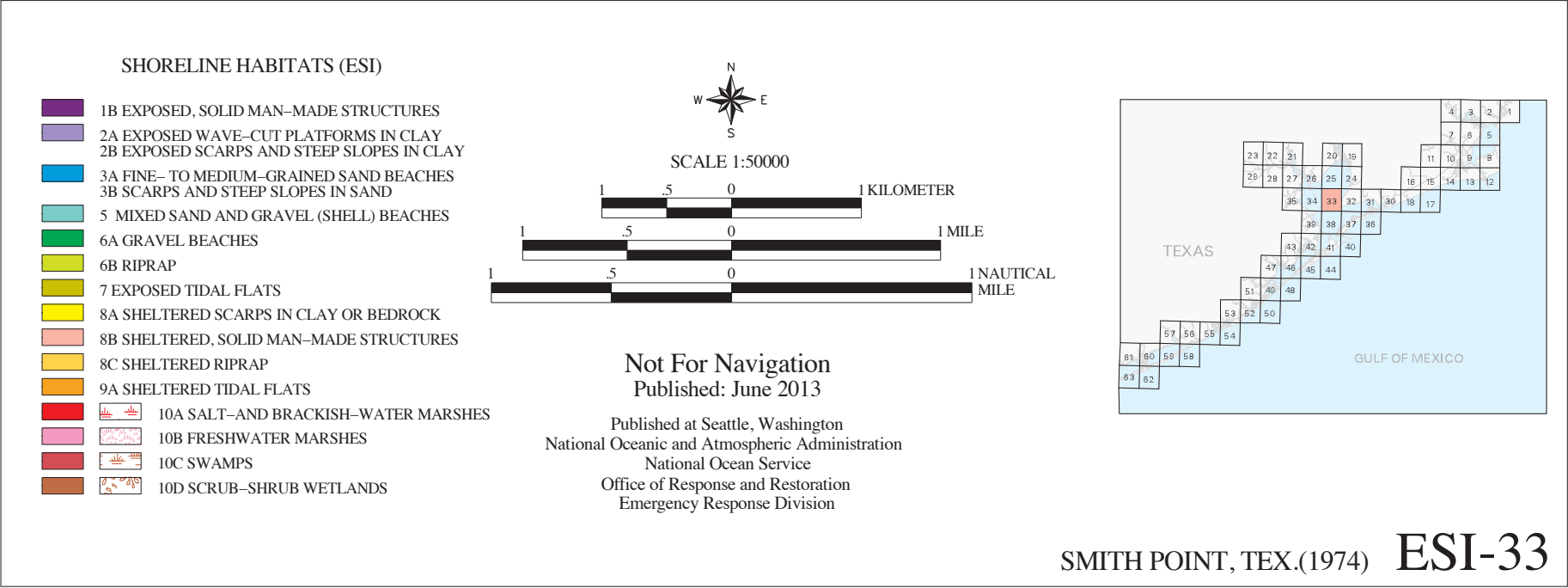
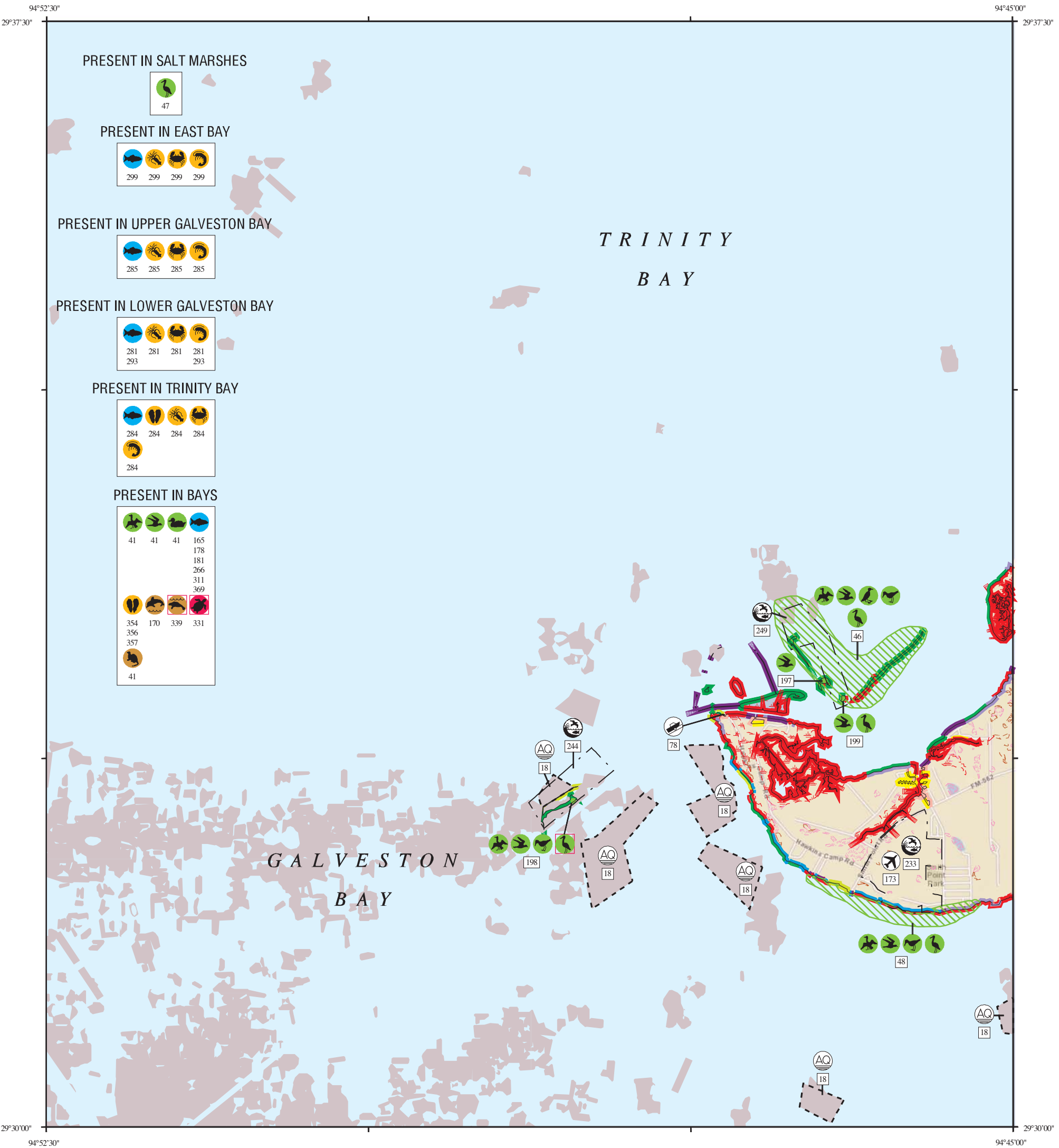


ENVIRONMENTAL SENSITIVITY INDEX MAP



Upper Texas Coast: ESIMAP 33

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
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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	-	-	-
46	American white pelican	HIGH	X	X	X					X	X	X			-	-	-
	Brown pelican	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Cormorants	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Gulls	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Magnificent frigatebird	HIGH				X	X	X	X	X	X	X			-	-	-
	Shorebirds	HIGH	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	-	-	-
47	Black rail		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	-	-	-
	Wading birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
48	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	-	-	-
	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	-	-	-
197	Black skimmer	15 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-
	Forster's tern	35 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
198	American oystercatcher	1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Black skimmer	50-280 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-
	Black-crowned night-heron	10-90 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-MAY	-
	Brown pelican	100-200 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Cattle egret	40-300 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Forster's tern	20-150 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Great blue heron	6-60 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	-
	Great egret	70-130 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-APR	-
	Gull-billed tern	30 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Laughing gull	30-75 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Little blue heron	100 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Neotropic cormorant	40-200 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-OCT	-	-
	Reddish egret	T 1-3 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Roseate spoonbill	15-80 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Royal tern	15-400 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Sandwich tern	125-600 PAIRS		X	X	X	X	X	X	X	X				MAR-AUG	-	-
	Snowy egret	50-250 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Tricolored heron	60-140 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	White ibis	10-50 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	White-faced ibis	T 30 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
199	Laughing gull	300 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Royal tern	800 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Sandwich tern	1100 PAIRS		X	X	X	X	X	X	X	X				MAR-AUG	-	-
	Snowy egret	30 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Tricolored heron	50 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
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165	Atlantic sharpnose shark				X	X	X	X	X	X	X				JUN-JUN	MAY-JUN	JUN-OCT	-	APR-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
181	Blacktip shark			X	X	X	X	X	X	X	X				MAY-JUN	MAY-JUN	MAY-NOV	MAR-NOV	MAY-JUN
266	Tarpon	RARE		X	X	X	X	X	X	X	X				-	-	-	MAR-NOV	-
281	Atlantic bumper	ABUNDANT					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	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	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					APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	RARE	X	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	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	X	-	-	-	JAN-DEC	JAN-DEC
	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	-	-	-	FEB-OCT	JUN-FEB
	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	-	-	-	DEC-MAR	JAN-DEC
	Silver perch	COMMON	X	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	X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Southern kingfish	COMMON		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	X	-	-	-	JAN-DEC	JAN-DEC
	White mullet	ABUNDANT			X	X	X	X	X						-	-	-	MAY-OCT	-
284	Alligator gar	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Atlantic bumper	RARE					X	X							-	-	-	-	AUG-SEP
	Atlantic croaker	HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Bay anchovy	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	MAR-NOV	MAR-NOV	MAR-NOV	FEB-NOV	JAN-DEC
	Bay whiff	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAY-AUG	MAY-AUG
	Black drum	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Blue catfish	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					-	-	-	MAR-NOV	-
	Gafftopsail catfish	COMMON			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									-	-	-	-	-
	Gulf killifish	RARE	X	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	X	-	-	-	JAN-DEC	APR-DEC
	Hardhead catfish	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	MAY-SEP	MAY-SEP	JUN-OCT	JAN-DEC
	Pinfish	COMMON		X	X	X	X	X	X						-	-	-	MAR-SEP	-
	Red drum	COMMON	X	X	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	X	X	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JUN-JUN	JAN-DEC
																		SEP-MAR	
	Silver perch	RARE	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-SEP	MAY-SEP	OCT-OCT	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
	Smallmouth buffalo		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Southern flounder	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	COMMON								X	X	X			-	-	-	AUG-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-NOV	JAN-DEC
	Spotfin mojarra	RARE								X	X				-	-	-	-	-
	Spotted gar	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	APR-MAY	-	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 33 (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
284	Spotted seatrout	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAR-JUL	AUG-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					-	-	-	APR-OCT	-
285	Atlantic bumper	COMMON								X	X	X			-	-	-	-	AUG-OCT
	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			-	-	-	AUG-OCT	-
	Bay anchovy	HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	Bay whiff	RARE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	APR-APR	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	SEP-NOV
	Gafftopsail catfish	COMMON			X	X	X	X	X	X	X	X			APR-MAY	-	-	APR-OCT	MAR-OCT
	Gizzard shad	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Gulf butterfish	RARE	X	X	X	X									-	-	-	-	-
	Gulf killifish	COMMON	X	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	X	-	-	-	JAN-DEC	JAN-DEC
	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	RARE			X	X	X	X							-	-	-	APR-AUG	-
	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	-	-	-	JAN-DEC	JAN-DEC
	Silver perch	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-MAR	JAN-DEC
																		OCT-NOV	
	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	COMMON				X	X	X	X	X	X				-	-	-	MAY-NOV	-
	Spanish mackerel	COMMON					X	X	X	X	X				-	-	-	JUN-OCT	JUN-OCT
	Spot	HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-SEP	JAN-DEC
	Spotted seatrout	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	APR-OCT	APR-OCT	AUG-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						-	-	-	JUN-OCT	-
293	Atlantic croaker	HIGHLY ABUNDANT	X	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	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	X	-	-	SEP-NOV	JAN-DEC	JAN-DEC
	Southern flounder	ABUNDANT	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	-	-	-	MAR-OCT	JAN-DEC
	Spotted seatrout	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	APR-OCT	APR-OCT	AUG-NOV	JAN-DEC
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				-	-	-	MAR-NOV	-
	Gafftopsail catfish	ABUNDANT			X	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	-
311	Finetooth shark					X	X	X	X	X					-	MAY-JUN	MAY-OCT	-	MAY-JUN
369	Spinner shark					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
281	Atlantic seabob shrimp	RARE							X	X	X				-	-	-	-	JUN-SEP
	Blue crab	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	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	RARE	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	ABUNDANT			X	X	X	X	X	X	X				-	-	-	APR-NOV	APR-NOV
284	Atlantic rangia	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	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	RARE				X	X	X	X	X	X				JUN-NOV	JUN-NOV	JUN-NOV	JUN-NOV	JUN-NOV
	Brown shrimp	COMMON			X	X	X	X	X	X	X	X	X	X	-	-	-	FEB-APR	APR-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
	White shrimp	HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAY-OCT	MAY-DEC	JAN-DEC
285	Blue crab	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	MAR-DEC	MAR-DEC	MAR-DEC	JAN-DEC	MAR-DEC
	Brown shrimp	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	FEB-APR	APR-JAN
	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
	Lesser blue crab	COMMON				X	X	X	X	X	X				-	-	-	JUL-OCT	SEP-DEC
	White shrimp	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	JUN-OCT	JUN-DEC	JAN-DEC
293	Brown shrimp	ABUNDANT			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	X	-	-	-	JUN-OCT	JUN-DEC
299	Atlantic seabob shrimp	RARE							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			MAR-DEC	MAR-DEC	MAR-DEC	MAR-DEC	MAR-DEC
	Brown shrimp	ABUNDANT			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				-	-	-	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
354	Eastern oyster	LOW	X	X	X	X	X	X	X	X	X	X	X	X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
356	Eastern oyster	UNCONSOLIDATED	X	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	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					-	-	-	-

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 33 (cont.)

BIOLOGICAL RESOURCES: (cont.)

REPTILE:

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	-

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

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
18	OYSTER LEASES		

BOAT RAMP:

HUN#	Name	Contact	Phone
78	JAMES ROBBINS PARK		

HELIPORT:

HUN#	Name	Contact	Phone
173	HOUSTON OIL & MINERALS SMITH POINT		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
233	CANDY ABSHIER WMA	TPWD	
244	SMITH POINT SPOIL	HOUSTON AUDUBON (RICAHRD GIBBONS)	713/932-1639
249	VINGT-ET-UN ISLANDS	HOUSTON AUDUBON (RICAHRD GIBBONS)	713/932-1639

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