

Upper Texas Coast: ESIMAP 1

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
185	Anhinga	4-8 PAIRS	X X X X X X X X X X	APR-JUN	-	-
	Cattle egret	350-2107 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Double-crested cormorant	216 INDIV	X X X X X X X X	-	-	-
	Great blue heron	1 PAIR	X X X X X X X X X X X X	FEB-JUN	-	-
	Great egret	275-1311 PAIRS	X X X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Little blue heron	11 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Neotropic cormorant	50-153 PAIRS	X X X X X X X X X X X X	FEB-OCT	-	-
	Roseate spoonbill	3-7 PAIRS	X X X X X X X X X X X X	APR-AUG	-	-
	Tricolored heron	9 PAIRS	X X X X X X X X X X X X	APR-AUG	-	-
	White ibis	12 PAIRS	X X X X X X X X X X X X	FEB-JUL	-	-
	White-faced ibis	T 2 PAIRS	X X X X X X X X X X X X	FEB-AUG	-	-

FISH:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
109	Bull shark	RARE	X X X X X X X X X X X X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
266	Tarpon	RARE	X X X X X X X X X X	-	-	-	MAR-NOV	-
283	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 spadefish	RARE	X X X X	-	-	-	JUL-OCT	-
	Bay anchovy	COMMON	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	-	-	-	JUL-AUG	JAN-DEC
	Crevalle jack	COMMON	X X X	-	-	-	JUN-AUG	-
	Gafftopsail catfish	ABUNDANT	X X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	ABUNDANT	X 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 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	APR-DEC
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	JUN-SEP	JAN-DEC
	Pinfish	RARE	X X X X X X X	-	-	-	APR-OCT	APR-OCT
	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-FEB	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	OCT-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
	Spanish mackerel	COMMON	X X	-	-	-	SEP-OCT	SEP-OCT
	Spotfin mojarra	RARE	X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Star drum		X X X X X X X X X X X X	-	-	-	-	-
	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-SEP	-
294	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	-	-	-	JAN-DEC	JAN-DEC
	Red drum	COMMON	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern flounder	COMMON	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	-	-	-	MAR-OCT	MAR-NOV
	Spotted seatrout	COMMON	X X X X X X X X X X X X	APR-OCT	APR-OCT	APR-OCT	OCT-NOV	JAN-DEC

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
283	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	ABUNDANT	X X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Grass shrimp	COMMON	X X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
294	Brown shrimp	ABUNDANT	X X X X X X X X X X X X	-	-	MAR-APR	APR-DEC	-
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X X	-	-	MAY-JUN	APR-DEC	MAR-JAN

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
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
331	Kemp's ridley sea turtle	E E COMMON	X X X X X X X X	-	-	-	APR-NOV	-

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HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
40	BLUE BIRD FISH CAMP		
82	LOITIAS LANDING		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
239	LOWER NECHES WMA	TPWD	
248	TONY HOUSEMAN WMA		

MARINA:

HUN#	Name	Contact	Phone
251	ALLEN & CLEO'S BOAT STORAGE & MARINA		409/886-8533
289	ST. NICK'S MARINA		409/883-4610

Upper Texas Coast: ESIMAP 2

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
19	Marsh birds		X X X X X X X X X X X	-	-	-
	Osprey		X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
20	Dabbling ducks		X X X X X X X X X X	-	-	-
	Osprey		X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X X	-	-	-
37	Black-necked stilt	10S	X X X X X X X X X	-	-	-
	Dowitchers	100S	X 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	-	DEC-MAR	-
	Marsh birds		X X X X X X X X X X X	-	-	-
	Mottled duck		X X X X X X X X X X X	FEB-AUG	-	JUN-AUG
	Shorebirds	100S	X X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl		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	-	FEB-MAY JUL-NOV	-
	Willet	100S	X X X X X X X X X X X	-	APR-APR AUG-AUG	-
	Yellowlegs	10S	X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-

FISH:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
106	Bull shark	COMMON	X X X X X X X X X X X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
109	Bull shark	RARE	X X X X X X X X X X X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
266	Tarpon	RARE	X X X X X X X X X X	-	-	-	MAR-NOV	-
283	Alligator gar	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Atlantic bumper	RARE	X X X	-	-	-	-	AUG-SEP
	Atlantic spadefish	RARE	X X X X	-	-	-	JUL-OCT	-
	Bay anchovy	COMMON	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	-	-	-	JUL-AUG	JAN-DEC
	Crevalle jack	COMMON	X X X	-	-	-	JUN-AUG	-
	Gafftopsail catfish	ABUNDANT	X X X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	ABUNDANT	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	APR-DEC
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	JUN-SEP	JAN-DEC
	Pinfish	RARE	X X X X X X X X	-	-	-	APR-OCT	APR-OCT
	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-FEB	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	OCT-NOV	JAN-DEC
	Silversides	COMMON	X X X X X X X X X X X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Spanish mackerel	COMMON	X X X X X X X X	-	-	-	SEP-OCT	SEP-OCT
	Spotfin mojarra	RARE	X X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Star drum		X X X X X X 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	-	-	-	JUN-SEP	-
294	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	-	-	-	JAN-DEC	JAN-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	-	-	-	MAR-OCT	MAR-NOV
	Spotted seatrout	COMMON	X X X X X X X X X X X	APR-OCT	APR-OCT	APR-OCT	OCT-NOV	JAN-DEC

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
283	Atlantic rangia	ABUNDANT	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Grass shrimp	COMMON	X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
294	Brown shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAR-APR	APR-DEC	-
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	APR-DEC	MAR-JAN

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
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
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
37	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
4	CHESSON		
10	ORANGE COUNTY		

BOAT RAMP:

HUN#	Name	Contact	Phone
45	BRIDGE CITY BAIT		
55	COW BAYOU		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
239	LOWER NECHES WMA	TPWD	

WATER INTAKE:

HUN#	Name	Contact	Phone
325	DUPONT SABINE RIVER WORKS		

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 3

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
36	Ducks		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	-	-	-
37	Black-necked stilt	10S	X X X X X X X X X	-	-	-
	Dowitchers	100S	X 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	-	DEC-MAR	-
	Marsh birds		X X X X X X X X X X X	-	-	-
	Mottled duck		X X X X X X X X X X X	FEB-AUG	-	JUN-AUG
	Shorebirds	100S	X X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl		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	-	FEB-MAY JUL-NOV	-
	Willet	100S	X X X X X X X X X X X	-	APR-APR AUG-AUG	-
	Yellowlegs	10S	X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
182	Swamp sparrow		X X X X X X X X	-	-	-
275	Bald eagle	T 1 NEST	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
109	Bull shark	RARE	X X X X X X X X X X X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
266	Tarpon	RARE	X X X X X X X X X	-	-	-	MAR-NOV	-
279	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
	Black drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	-
	Blue catfish	RARE	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Gafftopsail catfish	COMMON	X X X X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Gulf menhaden	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	SEP-OCT
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	MAR-NOV	JAN-DEC
	Longnose gar	COMMON	X X X X X X X X X X X	-	-	-	-	-
	Red drum	ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Smallmouth buffalo		X X X X X X X X X X X	-	-	-	-	JAN-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 X	-	-	-	JAN-DEC	MAR-NOV
	Spotted gar	ABUNDANT	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	X X X X X X X X X	-	-	APR-OCT	SEP-NOV	APR-OCT
	Striped mullet	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
283	Alligator gar	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Atlantic bumper	RARE	X X X X X	-	-	-	-	AUG-SEP
	Atlantic spadefish	RARE	X X X X X	-	-	-	JUL-OCT	-
	Bay anchovy	COMMON	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	-	-	-	JUL-AUG	JAN-DEC
	Crevalle jack	COMMON	X X X X X	-	-	-	JUN-AUG	-
	Gafftopsail catfish	ABUNDANT	X X X X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	ABUNDANT	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	APR-DEC
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	JUN-SEP	JAN-DEC
	Pinfish	RARE	X X X X X X X X X	-	-	-	APR-OCT	APR-OCT
	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-FEB	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	OCT-NOV	JAN-DEC
	Silversides	COMMON	X X X X X X X X X X X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Spanish mackerel	COMMON	X X X X X X X X	-	-	-	SEP-OCT	SEP-OCT
	Spotfin mojarra	RARE	X X X X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Star drum		X X X X X X 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	-	-	-	JUN-SEP	-
294	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	-	-	-	JAN-DEC	JAN-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	-	-	-	MAR-OCT	MAR-NOV
	Spotted seatrout	COMMON	X X X X X X X X X X X	APR-OCT	APR-OCT	APR-OCT	OCT-NOV	JAN-DEC

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
279	Blue crab	HIGHLY 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	-	-	MAR-APR	APR-DEC	-
	Grass shrimp	COMMON	X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	White shrimp	COMMON	X X X X X X X X X X X	-	-	MAY-JUN	APR-DEC	MAR-JAN
283	Atlantic rangia	ABUNDANT	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Grass shrimp	COMMON	X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
294	Brown shrimp	ABUNDANT	X X X X X X X X X X	-	-	MAR-APR	APR-DEC	-
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	APR-DEC	MAR-JAN

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
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
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
37	Northern river otter		X X X X X X X X X X X
182	Muskrat		X X X X X X X X X X X
	Swamp rabbit		X X X X X X X X X X X

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
239	LOWER NECHES WMA	TPWD	
247	THERMAL GAME FISH REFUGE	TPWD	

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 4

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
37	Black-necked stilt	10S	X X X X X X X X X	-	-	-
	Dowitchers	100S	X 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	-	-	-
	Killdeer	100S	X X X X X X X X X X X	-	DEC-MAR	-
	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
	Shorebirds	100S	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	-	-	-
	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 X	-	APR-APR AUG-AUG	-
	Yellowlegs	10S	X X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
69	Marsh birds		X 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	-	-	-
	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	-	-	-
	Wood stork	T	X X 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
109	Bull shark	RARE	X X X X X X X X X X X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
266	Tarpon	RARE	X X X X X X X X X	-	-	-	MAR-NOV	-
283	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 spadefish	RARE	X X X X	-	-	-	JUL-OCT	-
	Bay anchovy	COMMON	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	-	-	-	JUL-AUG	JAN-DEC
	Crevalle jack	COMMON	X X X	-	-	-	JUN-AUG	-
	Gafftopsail catfish	ABUNDANT	X X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	ABUNDANT	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	APR-DEC
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	JUN-SEP	JAN-DEC
	Pinfish	RARE	X X X X X X	-	-	-	APR-OCT	APR-OCT
	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-FEB	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	OCT-NOV	JAN-DEC
	Silversides	COMMON	X X X X X X X X X X X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Spanish mackerel	COMMON	X X	-	-	-	SEP-OCT	SEP-OCT
	Spotfin mojarra	RARE	X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Star drum		X X X X X X 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	-	-	-	JUN-SEP	-
294	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	-	-	-	JAN-DEC	JAN-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	-	-	-	MAR-OCT	MAR-NOV
	Spotted seatrout	COMMON	X X X X X X X X X X X	APR-OCT	APR-OCT	APR-OCT	OCT-NOV	JAN-DEC

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
283	Atlantic rangia	ABUNDANT	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Grass shrimp	COMMON	X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
294	Brown shrimp	ABUNDANT	X X X X X X X X X X	-	-	MAR-APR	APR-DEC	-
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	APR-DEC	MAR-JAN

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
339	West Indian manatee	E E VERY RARE	X X X	-	-	-	-

TERRESTRIAL MAMMAL:

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

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
31	BAYOU MARINA		
37	BEAUMONT YACHT CLUB		

MARINA:

HUN#	Name	Contact	Phone
257	BEAUMONT YACHT CLUB		409/832-1456

WATER INTAKE:

HUN#	Name	Contact	Phone
312	CITY OF BEAUMONT WATER UTILITY DEP		
319	CITY OF ROSE CITY		
328	LUCITE BEAUMONT SITE		
330	NORTH STAR STEEL TEXAS		

Upper Texas Coast: ESIMAP 5

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
20	Dabbling ducks		X X X X X X X X X	-	-	-
	Osprey		X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X X	-	-	-
107	Mottled duck		X X X X X X X X X X X	FEB-AUG	-	JUN-AUG
	Shorebirds		X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X X	-	-	-
108	American white pelican		X X X X X X X X X	-	-	-
	Bufflehead		X X X X X X X	-	-	-
	Canvasback		X X X X X X X X	-	-	-
	Common goldeneye		X X X X X X X	-	-	-
	Common loon	HIGH	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	-	-	-
	Scaup		X X X X X X X X	-	-	-
	Terns		X X X X X X X X X X X	-	-	-
159	Diving birds		X X X X X X X X X X X	-	-	-
	Diving ducks		X X X X X X X X	-	-	-
251	Cattle egret	11 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Double-crested cormorant	18 INDIV	X X X X X X X X	-	-	-
	Great egret	22-98 PAIRS	X X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Little blue heron	2 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Neotropic cormorant	20 PAIRS	X X X X X X X X X X X	FEB-OCT	-	-
	Roseate spoonbill	1-41 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	Snowy egret	3-67 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	9-11 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	Yellow-crowned night-heron	1 PAIR	X 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
106	Bull shark	COMMON	X X X X X X X X X X X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
109	Bull shark	RARE	X X X X X X X X X X X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
266	Tarpon	RARE	X X X X X X X X	-	-	-	MAR-NOV	-
283	Alligator gar	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Atlantic bumper	RARE	X X X X X X	-	-	-	-	AUG-SEP
	Atlantic spadefish	RARE	X X X X X X X	-	-	-	JUL-OCT	-
	Bay anchovy	COMMON	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	-	-	-	JUL-AUG	JAN-DEC
	Crevalle jack	COMMON	X X X X X X	-	-	-	JUN-AUG	-
	Gafftopsail catfish	ABUNDANT	X X X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	ABUNDANT	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	APR-DEC
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	JUN-SEP	JAN-DEC
	Pinfish	RARE	X X X X X X X	-	-	-	APR-OCT	APR-OCT
	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-FEB	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	OCT-NOV	JAN-DEC
	Silversides	COMMON	X X X X X X X X X X X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Spanish mackerel	COMMON	X X X X X X X X	-	-	-	SEP-OCT	SEP-OCT
	Spotfin mojarra	RARE	X X X X X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Star drum		X X X X X X 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	-	-	-	JUN-SEP	-
294	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	-	-	-	JAN-DEC	JAN-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	-	-	-	MAR-OCT	MAR-NOV
	Spotted seatrout	COMMON	X X X X X X X X X X X	APR-OCT	APR-OCT	APR-OCT	OCT-NOV	JAN-DEC

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
283	Atlantic rangia	ABUNDANT	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Grass shrimp	COMMON	X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
294	Brown shrimp	ABUNDANT	X X X X X X X X X X	-	-	MAR-APR	APR-DEC	-
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	APR-DEC	MAR-JAN

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
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
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
107	Northern river otter		X X X X X X X X X X X
159	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
23	BAILEY'S FISH CAMP		
99	RAINBOW MARINA		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
239	LOWER NECHES WMA	TPWD	
246	SYDNEY ISLAND	HOUSTON AUDUBON (RICHARD GIBBONS)	713/932-1639

Upper Texas Coast: ESIMAP 6

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
37	Black-necked stilt	10S	X X X X X X X X X	-	-	-
	Dowitchers	100S	X 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	-	DEC-MAR	-
	Marsh birds		X X X X X X X X X X X	-	-	-
	Mottled duck		X X X X X X X X X X X	FEB-AUG	-	JUN-AUG
	Shorebirds	100S	X X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl		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	-	FEB-MAY JUL-NOV	-
	Willet	100S	X X X X X X X X X X X X	-	APR-APR AUG-AUG	-
	Yellowlegs	10S	X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
107	Mottled duck		X X X X X X X X X X X X	FEB-AUG	-	JUN-AUG
	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	-	-	-
	Waterfowl		X X X X X X X X X X X X	-	-	-
108	American white pelican		X X X X X X X X X	-	-	-
	Bufflehead		X X X X X X X	-	-	-
	Canvasback		X X X X X X X X	-	-	-
	Common goldeneye		X X X X X X X X	-	-	-
	Common loon	HIGH	X X X X X X X X	-	-	-
	Dabbling ducks		X X X X X X X X X X	-	-	-
	Diving ducks		X X X X X X X X X	-	-	-
	Scaup		X X X X X X X X X	-	-	-
	Terns		X X X X X X X X X X X X	-	-	-
159	Diving birds		X X X X X X X X X X X X	-	-	-
	Diving ducks		X X X X X X X X X	-	-	-
247	Black skimmer	380 PAIRS	X X X X X X X X X X X X	APR-SEP	-	-
	Gull-billed tern	25 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Least tern	30 PAIRS	X X X X X X X X X	APR-SEP	-	-
248	Black skimmer	1 PAIR	X X X X X X X X X X X X	APR-SEP	-	-
	Least tern	8-444 PAIRS	X X X X X X X X X	APR-SEP	-	-
249	Least tern	9-25 PAIRS	X X X X X X X X X	APR-SEP	-	-
250	Black skimmer	1-46 PAIRS	X X X X X X X X X X X X	APR-SEP	-	-
	Least tern	6-100 PAIRS	X 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
106	Bull shark	COMMON	X X X X X X X X X X X X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
109	Bull shark	RARE	X X X X X X X X X X X X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
266	Tarpon	RARE	X X X X X X X X X	-	-	-	MAR-NOV	-
279	Alligator gar	COMMON	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
	Black drum	COMMON	X X X X X X X X X X X X	-	-	-	JAN-DEC	-
	Blue catfish	RARE	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Gafftopsail catfish	COMMON	X X X X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	ABUNDANT	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Gulf menhaden	ABUNDANT	X X X X X X X X X X X X	-	-	-	JAN-DEC	SEP-OCT
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	MAR-NOV	JAN-DEC
	Longnose gar	COMMON	X X X X X X X X X X X X	-	-	-	-	-
	Red drum	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	-	-	-	JAN-DEC	JAN-DEC
	Smallmouth buffalo		X X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Southern flounder	COMMON	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	-	-	-	JAN-DEC	MAR-NOV
	Spotted gar	ABUNDANT	X X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	X X X X X X X X X X	-	-	APR-OCT	SEP-NOV	APR-OCT
	Striped mullet	COMMON	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
283	Alligator gar	COMMON	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Atlantic bumper	RARE	X X X X X X X	-	-	-	-	AUG-SEP
	Atlantic spadefish	RARE	X X X X X X X	-	-	-	JUL-OCT	-
	Bay anchovy	COMMON	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	-	-	-	JUL-AUG	JAN-DEC
	Crevalle jack	COMMON	X X X X X X X	-	-	-	JUN-AUG	-
	Gafftopsail catfish	ABUNDANT	X X X X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	ABUNDANT	X 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 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	APR-DEC
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	JUN-SEP	JAN-DEC
	Pinfish	RARE	X X X X X X X	-	-	-	APR-OCT	APR-OCT
	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-FEB	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	OCT-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
	Spanish mackerel	COMMON	X X X X X X X X	-	-	-	SEP-OCT	SEP-OCT
	Spotfin mojarra	RARE	X X X X X X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Star drum		X X X X X X X X X X X X	-	-	-	-	-
	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 X X	-	-	-	JUN-SEP	-
294	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	-	-	-	JAN-DEC	JAN-DEC
	Red drum	COMMON	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern flounder	COMMON	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	-	-	-	MAR-OCT	MAR-NOV
	Spotted seatrout	COMMON	X X X X X X X X X X X X	APR-OCT	APR-OCT	APR-OCT	OCT-NOV	JAN-DEC

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
279	Blue crab	HIGHLY ABUNDANT	X 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	APR-DEC	-
	Grass shrimp	COMMON	X X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	White shrimp	COMMON	X X X X X X X X X X X X	-	-	MAY-JUN	APR-DEC	MAR-JAN
283	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	ABUNDANT	X X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Grass shrimp	COMMON	X X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
294	Brown shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAR-APR	APR-DEC	-
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X X	-	-	MAY-JUN	APR-DEC	MAR-JAN

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
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 6 (cont.)

BIOLOGICAL RESOURCES: (cont.)

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	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
37	Northern river otter		X X X X X X X X X X
107	Northern river otter		X X X X X X X X X X
159	Northern river otter		X X X X X X X X X X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
96	PORT NECHES PARK		

COAST GUARD:

HUN#	Name	Contact	Phone
139	USCG MSO PORT ARTHUR		409/723-6500

HELIPORT:

HUN#	Name	Contact	Phone
185	MEDICAL CENTER OF SOUTHEAST TEXAS		
192	P P H		
193	PATCO		
207	ST MARY HOSPITAL OF PORT ARTHUR		
210	TEXACO CHEMICAL COMPANY-EAST		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
239	LOWER NECHES WMA	TPWD	
247	THERMAL GAME FISH REFUGE	TPWD	

WATER INTAKE:

HUN#	Name	Contact	Phone
314	CITY OF GROVES		
317	CITY OF PORT ARTHUR		
318	CITY OF PORT NECHES		

Upper Texas Coast: ESIMAP 7

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
154	Common moorhen		X X X X X X X X X X X	MAR-OCT	-	-
	Dabbling ducks		X X X X X X X X X	-	-	-
	Marsh birds		X X X X X X X X X X X	-	-	-
	Purple gallinule		X X X X X X	-	-	-
	Rails		X X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X X	-	-	-
157	Common loon		X X X X X X X X	-	-	-
	Diving birds		X X X X X X X X X X X	-	-	-
	Diving ducks		X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X X	-	-	-
183	Anhinga	1-4 PAIRS	X X X X X X X X X X	APR-JUN	-	-
	Black-crowned night-heron	1 PAIR	X X X X X X X X X X X	APR-AUG	APR-MAY	-
	Cattle egret	156-420 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Great egret	2-113 PAIRS	X X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Little blue heron	10-37 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Neotropic cormorant	1-40 PAIRS	X X X X X X X X X X X	FEB-OCT	-	-
	Roseate spoonbill	2 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	Snowy egret	2-84 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	12-52 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	Yellow-crowned night-heron	1 PAIR	X X X X X X X X X	APR-SEP	-	-
255	Cattle egret	20-500 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
329	Greater white-fronted goose		X X X X X X X	-	-	-
	Snow goose		X X X X 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
266	Tarpon	RARE	X X X X X X X X X	-	-	-	MAR-NOV	-

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
339	West Indian manatee	E E VERY RARE	X X X	-	-	-	-

TERRESTRIAL MAMMAL:

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

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
7	JACK BROOKS RGNL		

BOAT RAMP:

HUN#	Name	Contact	Phone
32	BAYOU RV PARK		
113	SH 73 RAMP		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
235	J.D. MURPHREE WMA	TPWD	

WATER INTAKE:

HUN#	Name	Contact	Phone
316	CITY OF NEDERLAND		
327	JEFFERSON COUNTY WCID 10		

Upper Texas Coast: ESIMAP 8

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
159	Diving birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Diving ducks		X	X	X	X					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
106	Bull shark	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
266	Tarpon	RARE			X	X	X	X	X	X	X	X	X		-	-	-	MAR-NOV	-
283	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 spadefish	RARE						X	X	X	X				-	-	-	JUL-OCT	-
	Bay anchovy	COMMON	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	-	-	-	JUL-AUG	JAN-DEC
	Crevalle jack	COMMON						X	X	X					-	-	-	JUN-AUG	-
	Gafftopsail catfish	ABUNDANT				X	X	X	X	X	X	X			APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	ABUNDANT	X	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	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	APR-DEC
	Hardhead catfish	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	MAY-SEP	MAY-SEP	JUN-SEP	JAN-DEC
	Pinfish	RARE				X	X	X	X	X	X	X			-	-	-	APR-OCT	APR-OCT
	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-FEB	JAN-DEC
	Silver perch	RARE	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-SEP	MAY-SEP	OCT-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
	Spanish mackerel	COMMON								X	X				-	-	-	SEP-OCT	SEP-OCT
	Spotfin mojarra	RARE								X	X				-	-	-	-	-
	Spotted gar	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Star drum		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	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-SEP	-
294	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	-	-	-	JAN-DEC	JAN-DEC
	Red drum	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Southern flounder	COMMON	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			-	-	-	MAR-OCT	MAR-NOV
	Spotted seatrout	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	APR-OCT	APR-OCT	OCT-NOV	JAN-DEC

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
283	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	ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Grass shrimp	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
294	Brown shrimp	ABUNDANT			X	X	X	X	X	X	X	X	X	X	-	-	MAR-APR	APR-DEC	-
	White shrimp	HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAY-JUN	APR-DEC	MAR-JAN

MARINE MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting
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
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
159	Northern river otter		X	X	X	X	X	X	X	X	X	X	X	X

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Upper Texas Coast: ESIMAP 9

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
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	-	-	-
	Black-necked stilt	10S	X X X X X X X X	-	-	-
	Clapper rail		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	MAR-OCT	-	-
	Dowitchers	100S	X 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 X	-	-	-
	Shorebirds	1000S	X X X X X X X X X X X X	-	-	-
	Sora		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	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	OCCASIONAL	X X X X X	-	-
	Yellow rail		X X X X X X X X X X	-	-	-
	Yellowlegs	10S	X X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
156	American white pelican		X X X X X X X	-	-	-
	Diving ducks		X X X X X X X X X	-	-	-
	Ruddy duck		X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X X X	-	-	-
157	Common loon		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 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	-	-	-
158	Canvasback	15000	X X X X X X X	-	-	-
	Cormorants		X X X X X X X X X X X X	-	-	-
159	Diving birds		X X X X X X X X X X X X	-	-	-
	Diving ducks		X X X X X X X X X	-	-	-
160	Black-necked stilt	10S	X X X X X X X X X	-	-	-
	Dowitchers	100S	X X 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 X	-	-	-
	Killdeer	100S	X X X X X X X X X X X X	-	DEC-MAR	-
	Shorebirds	1000S	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	-
	Yellowlegs	10S	X X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
216	Least tern	14 PAIRS	X X X X X X X X X	APR-SEP	-	-
252	Cattle egret	50 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Double-crested cormorant	2-150 INDIV	X X X X X X X X X	-	-	-
	Great blue heron	3 PAIRS	X X X X X X X X X X X X	FEB-JUN	-	-
	Great egret	3-20 PAIRS	X X X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Green heron	8 INDIV	X X X X X X X X X	APR-JUN	-	-
	Little blue heron	2-15 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Snowy egret	1 PAIR	X X X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	2-67 PAIRS	X X X X X X X X X X X X	APR-AUG	-	-
	Yellow-crowned night-heron	5 PAIRS	X X X X X X X X X	APR-SEP	-	-
253	Anhinga	1 PAIR	X X X X X X X X X	APR-JUN	-	-
	Black-crowned night-heron	3-11 PAIRS	X X X X X X X X X X X X	APR-AUG	APR-MAY	-
	Cattle egret	44-61 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Great egret	68-157 PAIRS	X X X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Little blue heron	6-10 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Neotropic cormorant	21-210 PAIRS	X X X X X X X X X X X X	FEB-OCT	-	-
	Roseate spoonbill	12-53 PAIRS	X X X X X X X X X X X X	APR-AUG	-	-
	Snowy egret	26-153 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	7-43 PAIRS	X X X X X X X X X X X X	APR-AUG	-	-
	White ibis	1-18 PAIRS	X X X X X X X X X X X X	FEB-JUL	-	-
	White-faced ibis	T	8-12 PAIRS	X X X X X X X X X X X X	FEB-AUG	-
254	Least tern	42-197 PAIRS	X X X X X X X X X	APR-SEP	-	-
329	Greater white-fronted goose		X X X X X X X	-	-	-
	Snow goose		X X X X 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
106	Bull shark	COMMON	X X X X X X X X X X X X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
266	Tarpon	RARE	X X X X X X X X X X	-	-	-	MAR-NOV	-
280	Alligator gar	ABUNDANT	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	-	-	-	MAY-AUG	-
	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
	Blue catfish	RARE	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	COMMON	X X X	-	-	-	JUN-AUG	-
	Gizzard shad	ABUNDANT	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
	Pinfish	COMMON	X X X X X X X X X X X X	-	-	-	MAR-NOV	MAY-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
	Silver perch	RARE	X X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	SEP-SEP	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
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	-	FEB-NOV	APR-NOV
	Spotted gar	COMMON	X X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	X 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 X	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	X X X X	-	-	-	JUN-SEP	-
283	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 spadefish	RARE	X X X X	-	-	-	JUL-OCT	-
	Bay anchovy	COMMON	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	-	-	-	JUL-AUG	JAN-DEC
	Crevalle jack	COMMON	X X X	-	-	-	JUN-AUG	-
	Gafftopsail catfish	ABUNDANT	X X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT

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 9 (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
283	Gizzard shad	ABUNDANT	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	APR-DEC
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	JUN-SEP	JAN-DEC
	Pinfish	RARE	X X X X X X	-	-	-	APR-OCT	APR-OCT
	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-FEB	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	OCT-NOV	JAN-DEC
	Silversides	COMMON	X X X X X X X X X X X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Spanish mackerel	COMMON	X X X X X X	-	-	-	SEP-OCT	SEP-OCT
	Spotfin mojarra	RARE	X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Star drum		X X X X X X 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	-	-	-	JUN-SEP	-
294	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	-	-	-	JAN-DEC	JAN-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	-	-	-	MAR-OCT	MAR-NOV
	Spotted seatrout	COMMON	X X X X X X X X X X X	APR-OCT	APR-OCT	APR-OCT	OCT-NOV	JAN-DEC
303	Alligator gar		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
	Atlantic spadefish	RARE	X X X X X X X X X	-	-	-	MAY-DEC	-
	Bay anchovy	COMMON	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	-	-	-	APR-SEP	JAN-DEC
	Black drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Bull shark	COMMON	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 X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	RARE	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	-	-	-	JAN-DEC	APR-OCT
	Hardhead catfish	ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Sand seatrout	RARE	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-JAN	JAN-DEC
	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	-	-	-	-	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

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
280	Atlantic rangia	HIGHLY ABUNDANT	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Brown shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAR-APR	MAR-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
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	MAY-DEC	JAN-DEC
283	Atlantic rangia	ABUNDANT	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Grass shrimp	COMMON	X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
294	Brown shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAR-APR	APR-DEC	-
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	APR-DEC	MAR-JAN
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	-	-	-	-	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	-	-	MAR-APR	MAY-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	MAY-DEC	JAN-DEC
350	Eastern oyster	REEF	X X X X X X X X X X X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
351	Eastern oyster	UNCONSOLIDATED	X X X X X X X X X X X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
359	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 X	-	-	FEB-APR	-	MAR-OCT
	White shrimp	ABUNDANT	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
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	Interneesting	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
155	Northern river otter		X X X X X X X X X X X
157	Northern river otter		X X X X X X X X X X X
159	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
76	HWY 87		
87	MIRACLE BEACH		
95	PLEASURE ISLAND		
130	WALTER HUMPHREY		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
235	J.D. MURPHREE WMA	TPWD	

MARINA:

HUN#	Name	Contact	Phone
282	PLEASURE ISLAND MARINA	BOB LEBLANC	409/982-4675

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 10

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
1	Anhinga		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	-	-	-
	Egrets		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Hérons		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	-	-	-
	Migratory songbirds				X	X									-	-	-
	Roseate spoonbill		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	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	White-faced ibis	T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
2	Waterfowl		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
154	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAR-OCT	-	-
	Dabbling ducks		X	X	X	X				X	X	X	X		-	-	-
	Marsh birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Purple gallinule				X	X	X	X	X						-	-	-
	Rails		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	-	-	-
155	American bittern		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	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	X	-	MAR-MAY JUL-NOV	-
	Dunlin	100S	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	-	-	-
	Shorebirds	1000S	X	X	X	X		X	X	X	X	X	X		-	-	-
	Sora		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		-	-	-
	Yellowlegs	10S	X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-MAY JUL-NOV	-
157	Common loon		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			-	-	-
	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	-	-	-
329	Greater white-fronted goose		X	X	X					X	X	X			-	-	-
	Snow goose		X	X	X					X	X	X			-	-	-
335	Mottled duck	3-7 NESTS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	JUN-AUG
336	American coot	10000S	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	PRESENT	X	X	X					X	X				-	-	-
	Canada goose	100S	X	X	X					X	X	X			-	-	-
	Canvasback	100S	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	10000S	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	10000S	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			-	-	-
	Ring-necked duck	10000S	X	X	X					X	X	X			-	-	-
	Ruddy duck	100S	X	X	X					X	X	X			-	-	-
	Snow goose	10000S	X	X	X					X	X				-	-	-
	Wood duck	10S	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
337	American coot	10000S	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	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	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	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	1000S	X	X	X					X	X	X			-	-	-
	Snow goose	10000S	X	X	X					X	X				-	-	-
	Wood duck	10S	X	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
266	Tarpon	RARE		X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
280	Alligator gar	ABUNDANT	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									-	-	-	MAY-AUG	-
	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
	Blue catfish	RARE	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	COMMON				X	X	X							-	-	-	JUN-AUG	-
	Gizzard shad	ABUNDANT	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
	Pinfish	COMMON		X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	MAY-DEC

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Upper Texas Coast: ESIMAP 10 (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
280	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	DEC-JAN	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	SEP-SEP	JAN-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 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	-	-	-	FEB-NOV	APR-NOV
	Spotted gar	COMMON	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	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
	White mullet	COMMON	X X X X X X X	-	-	-	JUN-SEP	-
303	Alligator gar		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
	Atlantic spadefish	RARE	X X X X X X X	-	-	-	MAY-DEC	-
	Bay anchovy	COMMON	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	-	-	-	APR-SEP	JAN-DEC
	Black drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Bull shark	COMMON	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 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 menhaden	ABUNDANT	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	MAY-AUG	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC
	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	DEC-JAN	JAN-DEC
	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 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

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
280	Atlantic rangia	HIGHLY ABUNDANT	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Brown shrimp	ABUNDANT	X X X X X X X X X X	-	-	MAR-APR	MAR-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
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	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	-	-	-	-	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	-	-	MAR-APR	MAY-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	MAY-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
339	West Indian manatee	E E VERY RARE	X X X	-	-	-	-

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D
155	Northern river otter		X X X X X X X X X X X
157	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
235	J.D. MURPHREE WMA	TPWD	

WATER INTAKE:

HUN#	Name	Contact	Phone
332	VEOLIA PORT ARTHUR FACILITY		

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
336	MCFADDIN NATIONAL WILDLIFE REFUGE		

Upper Texas Coast: ESIMAP 11

BIOLOGICAL RESOURCES:

BIRD:																			
RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting		
1	Anhinga		-	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	-	-	-		
	Egrets		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-		
	Hérons		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	-	-	-		
	Migratory songbirds				X	X									-	-	-		
	Roseate spoonbill		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	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-		
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-		
	White-faced ibis	T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-		
2	Waterfowl		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-		
3	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	-	-	-		
	Migratory songbirds				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	-	-	-		
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	-	-	-		
187	Anhinga	40 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-		
	Black-crowned night-heron	8 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-MAY	-		
	Cattle egret	500 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-		
	Great egret	175 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-APR	-		
	Little blue heron	200 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-		
	Roseate spoonbill	50 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-		
	Snowy egret	2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-		
	Tricolored heron	10 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-		
	Yellow-crowned night-heron	10 PAIRS		X	X	X	X	X	X	X	X	X			APR-SEP	-	-		
329	Greater white-fronted goose		X	X	X	X						X	X	X	-	-	-		
	Snow goose		X	X	X							X	X	X	-	-	-		
336	American coot	10000S	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	PRESENT	X	X	X							X	X		-	-	-		
	Canada goose	100S	X	X	X							X	X	X	-	-	-		
	Canvasback	100S	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	10000S	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	10000S	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	-	-	-		
	Ring-necked duck	10000S	X	X	X							X	X	X	-	-	-		
	Ruddy duck	100S	X	X	X							X	X	X	-	-	-		
	Snow goose	10000S	X	X	X							X	X		-	-	-		
	Wood duck	10S	X	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
266	Tarpon	RARE			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
MARINE MAMMAL:																			
RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting	
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 12 (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
283	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-FEB	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	OCT-NOV	JAN-DEC
	Silversides	COMMON	X X X X X X X X X X X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Spanish mackerel	COMMON	X X X X X X X X X X	-	-	-	SEP-OCT	SEP-OCT
	Spotfin mojarra	RARE	X X X X X X X X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Star drum		X X X X X X 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 X X	-	-	-	JUN-SEP	-
365	Spotted seatrout	COMMON	X X X X X X X X X X X	FEB-OCT	FEB-OCT	-	-	JAN-DEC
	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
370	Spinner shark		X X 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
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	-	-	-	-	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
283	Atlantic rangia	ABUNDANT	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Grass shrimp	COMMON	X X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
365	Brown shrimp	ABUNDANT	X X X X X X X X X	-	-	FEB-APR	-	MAR-OCT
	White shrimp	ABUNDANT	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
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
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	-	-	-	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	-
372	Diamondback terrapin		X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC

TERRESTRIAL MAMMAL:

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

HUMAN USE RESOURCES:

COAST GUARD:

HUN#	Name	Contact	Phone
136	SABINE STATION/ANT		979/482-1267

HELIPORT:

HUN#	Name	Contact	Phone
147	ARCO SABINE		
187	MFS SABINE PASS		
209	TENNECO SHOREBASE		

PARK:

HUN#	Name	Contact	Phone
303	SABINE PASS BATTLEGROUND SP/SHS	TPWD	

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
338	TEXAS POINT NATIONAL WILDLIFE REFUGE		

Upper Texas Coast: ESIMAP 13

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			-	-	-
	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	-	-	-
6	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	-	-	-
	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	-	-	-
	Terns		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
7	Redhead	0-300 BIRDS	X	X	X							X	X	X	-	-	-
8	Migratory songbirds					X	X								-	-	-
9	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	-	-	-
	Plovers		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy turnstone		X	X	X	X		X	X	X	X	X	X	X	-	-	-
	Sanderling		X	X	X	X	X			X	X	X	X	X	-	APR-MAY AUG-AUG	-
	Shorebirds		X	X	X	X	X		X	X	X	X	X	X	-	-	-
	Snowy plover		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	-
10	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	FEB-SEP	-	-
	Ducks		X	X	X	X				X	X	X	X		-	-	-
	Peregrine falcon	T	X	X	X	X				X	X	X	X	X	-	-	-
	Seaside sparrow		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
155	American bittern		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	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	X	-	MAR-MAY JUL-NOV	-
	Dunlin	100S	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	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		-	-	-
	Yellowlegs	10S	X	X	X	X	X		X	X	X	X	X	X	-	MAR-MAY JUL-NOV	-
329	Greater white-fronted goose		X	X	X	X					X	X	X		-	-	-
	Snow goose		X	X	X						X	X	X		-	-	-
371	Piping plover	T T POTENTIAL	X	X	X	X	X		X	X	X	X	X	X	-	-	-
372	American bittern		X	X	X	X	X			X	X	X	X		-	-	-
	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	-	-
	Bufflehead	10S	X	X	X						X	X			-	-	-
	Canvasback	10S	X	X	X						X	X	X		-	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	FEB-SEP	-	-
	Dabbling ducks		X	X	X	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		-	-	-
	Green-winged teal	1000S	X	X	X	X				X	X	X	X		-	-	-
	Lesser scaup	10000S	X	X	X	X				X	X	X			-	-	-
	Mallard	10S	X	X	X					X	X	X			-	-	-
	Marsh birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Merlin		X	X	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	100S	X	X	X					X	X	X	X		-	-	-
	Northern shoveler	1000S	X	X	X	X				X	X	X	X		-	-	-
	Peregrine falcon	T	X	X	X	X				X	X	X	X	X	-	-	-
	Redhead	100S	X	X	X					X	X	X			-	-	-
	Ruddy duck	100S	X	X	X					X	X	X			-	-	-
	Seaside sparrow		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
	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	-	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
106	Bull shark	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
164	Atlantic sharpnose shark					X	X	X	X	X	X	X			-	-	-	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
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
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

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 13 (cont.)

BIOLOGICAL RESOURCES: (cont.)

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	-	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
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 X	-	-	-	JAN-DEC	-
372	Diamondback terrapin		X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D
155	Northern river otter		X X X X X X X X X X X
372	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
28	BATTLEGROUND PARK		
104	SABINE PASS		

HELIPORT:

HUN#	Name	Contact	Phone
144	AIR LOGISTICS SABINE		
158	ERA HELICOPTERS SABINE BASE		
160	EVERGREEN HELICOPTERS		
169	HHI-SABINE		
194	PETROLEUM HELICOPTERS INC		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
235	J.D. MURPHREE WMA	TPWD	

MARINA:

HUN#	Name	Contact	Phone
285	SABINE PASS PORT AUTHORITY	DEBBIE JENNINGS	409/971-2411

PARK:

HUN#	Name	Contact	Phone
303	SABINE PASS BATTLEGROUND SP/SHS	TPWD	
305	SEA RIM SP	TPWD	

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
338	TEXAS POINT NATIONAL WILDLIFE REFUGE		

Upper Texas Coast: ESIMAP 14

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			-	-	-
	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	-	-	-
7	Redhead	0-300 BIRDS	X	X	X								X	X	-	-	-
9	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	-	-	-
	Plovers		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy turnstone		X	X	X	X	X			X	X	X	X	X	-	-	-
	Sanderling		X	X	X	X	X			X	X	X	X	X	-	APR-MAY AUG-AUG	-
	Shorebirds		X	X	X	X	X			X	X	X	X	X	-	-	-
	Snowy plover		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	-
10	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	FEB-SEP	-	-
	Ducks		X	X	X	X					X	X	X	X	-	-	-
	Peregrine falcon	T	X	X	X	X				X	X	X	X	X	-	-	-
	Seaside sparrow		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-
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	-	-	-
129	Piping plover	T T 31 INDIV	X	X	X	X	X			X	X	X	X	X	-	-	-
155	American bittern		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	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	-	-	-
	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 OCCASIONAL								X	X	X	X	X	-	-	-
	Yellow rail		X	X	X	X					X	X	X	X	-	-	-
	Yellowlegs	10S	X	X	X	X	X			X	X	X	X	X	-	MAR-MAY JUL-NOV	-
157	Common loon		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	-	-	-
	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	-	-	-
329	Greater white-fronted goose		X	X	X	X						X	X	X	-	-	-
	Snow goose		X	X	X							X	X	X	-	-	-
336	American coot	10000S	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	PRESENT	X	X	X							X	X		-	-	-
	Canada goose	100S	X	X	X							X	X	X	-	-	-
	Canvasback	100S	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	10000S	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	10000S	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	-	-	-
	Ring-necked duck	10000S	X	X	X							X	X	X	-	-	-
	Ruddy duck	100S	X	X	X							X	X	X	-	-	-
	Snow goose	10000S	X	X	X							X	X		-	-	-
	Wood duck	10S	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
337	American coot	10000S	X	X	X	X					X	X	X	X	-	-	-
	American wigeon	1000S	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	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	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	X	-	-	-
	Redhead	10S	X	X	X							X	X	X	-	-	-
	Ring-necked duck	1000S	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 14 (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
337	Ruddy duck	1000S	X X X - - - - X X X	-	-	-
	Snow goose	10000S	X X X - - - - X X	-	-	-
	Wood duck	10S	X 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	-
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
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 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 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 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 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 X	SEP-FEB	-	-	OCT-DEC	SEP-FEB
	Southern kingfish		- - - X X X X X X	-	-	-	-	JUN-OCT
	Spanish mackerel	ABUNDANT	- - - 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 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	-	-	-	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
280	Alligator gar	ABUNDANT	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	-	-	-	MAY-AUG	-
	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
	Blue catfish	RARE	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	COMMON	- - - X X X X	-	-	-	JUN-AUG	-
	Gizzard shad	ABUNDANT	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
	Pinfish	COMMON	- - - X X X X X X X X	-	-	-	MAR-NOV	MAY-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
	Silver perch	RARE	X X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	SEP-SEP	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
	Spot	HIGHLY ABUNDANT	- - - X X X X X X X X	-	-	-	FEB-NOV	APR-NOV
	Spotted gar	COMMON	X X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	X 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 X	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	- - - X X X X	-	-	-	JUN-SEP	-
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 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 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
	Silver perch	RARE	X 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 X	-	-	-	JAN-DEC	JAN-DEC
	Spot	HIGHLY ABUNDANT	- - - 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 X	-	-	-	AUG-NOV	JAN-DEC
	Striped mullet	COMMON	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
370	Spinner shark		- - - X 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 X X	APR-APR	-	-	-	JAN-DEC
	Atlantic surfclam		X X X X X X X X X X X X	AUG-AUG	-	-	-	JAN-DEC
	Lettered olive		X X X X X X X X X X X X	MAR-MAY	-	-	-	JAN-DEC
	Mole crab		X X X X X X X X X X X X	SEP-NOV	-	-	-	-
	Speckled swimming crab	COMMON	X X X X X X X X X X X X	APR-MAY	-	-	-	JAN-DEC
265	Atlantic seabob shrimp		X X X X X X X X X X X X	-	-	-	-	-
	Blue crab	ABUNDANT	X X X X X X X X X X X X	-	-	-	-	OCT-JAN
	Brief squid		X X X X X X X X X X X X	-	-	JAN-DEC	-	-
	Brown shrimp		X X X X X X X X X X X X	MAR-DEC	MAR-DEC	MAR-DEC	JAN-DEC	JAN-DEC
	Lesser blue crab		- X X X X X X X X	-	-	-	-	MAR-OCT
	White shrimp	ABUNDANT	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
280	Atlantic rangia	HIGHLY ABUNDANT	X X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	ABUNDANT	X X X X X X X X X X X X	MAR-NOV	-	MAR-NOV	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 14 (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
280	Brown shrimp	ABUNDANT	X X X X X X X X X X	-	-	MAR-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
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X X	-	-	MAY-JUN	MAY-DEC	JAN-DEC
303	Atlantic rangia		X 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 X	MAR-NOV	-	MAR-NOV	JAN-DEC	JAN-DEC
	Brown shrimp	COMMON	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 X	-	-	MAY-JUN	MAY-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	Internesting	Juveniles	Adults
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
155	Northern river otter		X X X X X X X X X X X X
157	Northern river otter		X X X X X X X X X X X X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
111	SEA RIM STATE PARK		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
235	J.D. MURPHREE WMA	TPWD	

PARK:

HUN#	Name	Contact	Phone
305	SEA RIM SP	TPWD	

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
336	MCFADDIN NATIONAL WILDLIFE REFUGE		

Upper Texas Coast: ESIMAP 15

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
2	Waterfowl		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
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	-	-	-
	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	-	-	-
	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		-	-	-
	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	-	-	-
7	Redhead	0-300 BIRDS	X	X	X								X	X	-	-	-
9	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	-	-	-
	Plovers		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy turnstone		X	X	X	X	X			X	X	X	X	X	-	-	-
	Sanderling		X	X	X	X	X			X	X	X	X	X	-	APR-MAY AUG-AUG	-
	Shorebirds		X	X	X	X	X			X	X	X	X	X	-	-	-
	Snowy plover		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	-
11	Dabbling ducks		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	-	-	-
	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	-	-	-
42	Piping plover	T T POTENTIAL	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
129	Piping plover	T T 31 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	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	-	-	-
	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 OCCASIONAL						X	X	X	X	X			-	-	-
	Yellow rail		X	X	X	X					X	X	X	X	-	-	-
	Yellowlegs	10S	X	X	X	X	X			X	X	X	X	X	-	MAR-MAY JUL-NOV	-
184	Black-crowned night-heron	3 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-MAY	-
	Cattle egret	141-187 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Great egret	17-64 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-APR	-
	Little blue heron	1-2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Neotropic cormorant	1-51 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-OCT	-	-
	Roseate spoonbill	1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Snowy egret	36 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Tricolored heron	4-21 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	White-faced ibis	T 2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
329	Greater white-fronted goose		X	X	X	X					X	X	X		-	-	-
	Snow goose		X	X	X							X	X	X	-	-	-
336	American coot	10000S	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	PRESENT	X	X	X								X	X	-	-	-
	Canada goose	100S	X	X	X								X	X	-	-	-
	Canvasback	100S	X	X	X								X	X	-	-	-
	Fulvous whistling-duck	100S	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	1000S	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	-	-	-
	Mallard	1000S	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	10S	X	X	X								X	X	-	-	-
	Ring-necked duck	10000S	X	X	X								X	X	-	-	-
	Ruddy duck	100S	X	X	X								X	X	-	-	-
	Snow goose	10000S	X	X	X								X	X	-	-	-
	Wood duck	10S	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
337	American coot	10000S	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	-	-	-
	Canvasback	100S	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	-	-	-
	Green-winged teal	10000S	X	X	X	X					X	X	X	X	-	-	-
	Lesser scaup	1000S	X	X	X	X							X	X	-	-	-
	Mallard	100S	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	-	-	-
	Northern shoveler	10000S	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 15 (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
337	Redhead	10S	X X X	X X X	-	-
	Ring-necked duck	1000S	X X X	X X X	-	-
	Ruddy duck	1000S	X X X	X X X	-	-
	Snow goose	10000S	X X X	X X	-	-
	Wood duck	10S	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	-
178	Bull shark	ABUNDANT	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	AUG-APR	-	-	APR-NOV	JAN-DEC
	Atlantic spadefish		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	-	-	-	-	-
	Banded drum		X X X X X	-	-	-	-	-
	Bay anchovy		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	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	-	-	MAR-NOV	-	JAN-DEC
	Florida pompano		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	-	-	APR-NOV	JAN-DEC	JAN-DEC
	Gray triggerfish	ABUNDANT	X X X X X X X X X X	-	-	-	-	JAN-DEC
	Greater amberjack		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	-	-	-	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	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	-	-	-	-	-
	Pinfish		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	AUG-OCT	-	-	-	JAN-DEC
	Red snapper		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	MAR-SEP	MAR-SEP	MAR-SEP	-	SEP-FEB
	Sheepshead		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	-	-	-	-	-
	Southern flounder		X X	X X X X	SEP-FEB	-	-	OCT-DEC
	Southern kingfish		X X X X X	-	-	-	-	JUN-OCT
	Spanish mackerel	ABUNDANT	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	-	-	-	-	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
269	Striped mullet	HIGHLY ABUNDANT	X X X X X X X	-	-	-	-	MAY-NOV
303	Alligator gar		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
	Atlantic spadefish	RARE	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	FEB-DEC	JAN-DEC
	Bay whiff	RARE	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	-	-	-	JAN-DEC	JAN-DEC
	Blue catfish	ABUNDANT	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 X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	RARE	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	-	-	-	JAN-DEC	APR-OCT
	Hardhead catfish	ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Sand seatrout	RARE	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	-	-	-	DEC-JAN	JAN-DEC
	Silver perch	RARE	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	-	-	-	JAN-DEC	JAN-DEC
	Spot	HIGHLY ABUNDANT	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	-	-	-	AUG-NOV	JAN-DEC
	Striped mullet	COMMON	X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
370	Spinner shark		X 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
265	Speckled swimming crab	COMMON	X X X X X X X X X X	-	-	-	-	-
	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
303	Atlantic rangia		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	-	-	-	-	AUG-NOV
	Blue crab	ABUNDANT	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	-	-	MAR-APR	MAY-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X	-	-	MAY-JUN	MAY-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	Internesting	Juveniles	Adults
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	-	-	-	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
155	Northern river otter		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 15 (cont.)

HUMAN USE RESOURCES:

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
336	MCFADDIN NATIONAL WILDLIFE REFUGE		

Upper Texas Coast: ESIMAP 16

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
11	Dabbling ducks		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	-	-
	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	-	-	-
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 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 X	-	MAR-MAY JUL-NOV
	Dunlin	100S	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 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	OCCASIONAL	X X X X X	-	-
	Yellow rail		X X X X	X X X X	-	-
	Yellowlegs	10S	X X X X X	X X X X X X	-	MAR-MAY JUL-NOV
329	Greater white-fronted goose		X X X X	X X X	-	-
	Snow goose		X X X	X X X	-	-
337	American coot	10000S	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	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	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 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	1000S	X X X	X X X	-	-
	Snow goose	10000S	X X X	X X	-	-
	Wood duck	10S	X X X X X X X X X X X X	FEB-JUL	-	-
373	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	-	-
	Canada goose	10S	X X X	X X X	-	-
	Canvasback	PRESENT	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	100S	X X X	X X X X	-	-
	Northern shoveler	10000S	X X X X	X X X X	-	-
	Redhead	PRESENT	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	-	-
	Snow goose	10000S	X X X	X X	-	-
	Wood duck	PRESENT	X 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
266	Tarpon	RARE	X X X X X X X X X X	-	-	-	MAR-NOV	-
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 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 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
	Silver perch	RARE	X 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 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 X	-	-	-	AUG-NOV	JAN-DEC
	Striped mullet	COMMON	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
303	Atlantic rangia		X 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	-	-	-	-	AUG-NOV
	Blue crab	ABUNDANT	X 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	-	-	MAR-APR	MAY-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X X	-	-	MAY-JUN	MAY-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 16 (cont.)

BIOLOGICAL RESOURCES: (cont.)

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
339	West Indian manatee	E E VERY RARE	X X X	-	-	-	-

TERRESTRIAL MAMMAL:

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

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
54	COUNTY RAMP		

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
336	MCFADDIN NATIONAL WILDLIFE REFUGE		

Upper Texas Coast: ESIMAP 17

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			-	-	-
	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	-	-	-
7	Redhead	0-300 BIRDS	X	X	X							X	X	X	-	-	-
9	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	-	-	-
	Plovers		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy turnstone		X	X	X	X	X			X	X	X	X	X	-	-	-
	Sanderling		X	X	X	X	X			X	X	X	X	X	-	APR-MAY AUG-AUG	-
	Shorebirds		X	X	X	X	X			X	X	X	X	X	-	-	-
	Snowy plover		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	-
42	Piping plover	T T POTENTIAL	X	X	X	X	X			X	X	X	X	X	-	-	-
155	American bittern		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	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	-	-	-
	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	-	-	-
	Yellowlegs	10S	X	X	X	X	X			X	X	X	X	X	-	MAR-MAY JUL-NOV	-
337	American coot	10000S	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	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	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	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	1000S	X	X	X						X	X	X		-	-	-
	Snow goose	10000S	X	X	X							X	X		-	-	-
	Wood duck	10S	X	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	-
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	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	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	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	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	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	-	-	-	-	-

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 17 (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
265	Southern flounder		X X		SEP-FEB	-		SEP-FEB
	Southern kingfish			X X X X	-			JUN-OCT
	Spanish mackerel	ABUNDANT	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	DEC-APR	-			DEC-SEP
	Spotted seatrout		X X		-			SEP-FEB
	Star drum	COMMON	X X X X X X X X X X		-			JAN-DEC
268	Striped mullet	ABUNDANT	X X	X X X X	OCT-DEC			SEP-FEB
369	Spinner shark			X X X X X	MAY-JUN	MAY-JUN	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
265	Atlantic seabob shrimp		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

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		

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
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	-	-		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
155	Northern river otter		X X X X X X X X X X

=====

HUMAN USE RESOURCES:

HELIPORT:

HUN#	Name	Contact	Phone
146	ARCO HIGH ISLAND		

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
336	MCFADDIN NATIONAL WILDLIFE REFUGE		

Upper Texas Coast: ESIMAP 18

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	-	-	-
7	Redhead	0-300 BIRDS	X	X	X								X	X	X	-	-
9	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	-	-	-
	Plovers		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy turnstone		X	X	X	X	X			X	X	X	X	X	-	-	-
	Sanderling		X	X	X	X	X			X	X	X	X	X	-	APR-MAY AUG-AUG	-
	Shorebirds		X	X	X	X	X			X	X	X	X	X	-	-	-
	Snowy plover		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	-
11	Dabbling ducks		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	-	-	-
	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	-	-	-
42	Piping plover	T T POTENTIAL	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	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	-	-	-
	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	-	-	-
	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 APR-APR AUG-AUG	-
	Willet	100S	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Wood stork	T OCCASIONAL								X	X	X	X	X	-	-	-
	Yellow rail		X	X	X	X					X	X	X	X	-	-	-
	Yellowlegs	10S	X	X	X	X	X			X	X	X	X	X	-	MAR-MAY JUL-NOV	-
329	Greater white-fronted goose		X	X	X	X						X	X	X	-	-	-
	Snow goose		X	X	X							X	X	X	-	-	-
337	American coot	10000S	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	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	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	X	-	-	-
	Redhead	10S	X	X	X							X	X	X	-	-	-
	Ring-necked duck	1000S	X	X	X							X	X	X	-	-	-
	Ruddy duck	1000S	X	X	X							X	X	X	-	-	-
	Snow goose	10000S	X	X	X								X	X	-	-	-
	Wood duck	10S	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
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	-	-	-
	Northern shoveler	1000S	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	-	-	-
373	American coot	1000S	X	X	X	X					X	X	X	X	-	-	-
	American wigeon	1000S	X	X	X							X	X	X	-	-	-
	Blue-winged teal	10000S	X	X	X	X				X	X	X	X	X	-	-	-
	Canada goose	10S	X	X	X							X	X	X	-	-	-
	Canvasback	PRESENT	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	-	-	-

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 18 (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
373	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	FEB-AUG	-	JUN-AUG
	Northern pintail	100S	X X X - - - - - X X X X	-	-	-
	Northern shoveler	10000S	X X X X - - - - X X X X	-	-	-
	Redhead	PRESENT	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	-	-	-
	Snow goose	10000S	X X X - - - - - X X	-	-	-
	Snow duck	PRESENT	X 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	-
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	-	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
265	Atlantic bumper		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	-	-	-	-	-
	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	-	-	-	-	-
	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	-	-	-	-	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	MAY-SEP	MAY-SEP	-	MAR-NOV	MAR-NOV
	Spot		X 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	-	-	-	MAR-NOV	-
268	Striped mullet	ABUNDANT	X X - - - - X X X X	OCT-DEC	-	-	-	SEP-FEB
303	Alligator gar		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
	Atlantic spadefish	RARE	- - - - X X X X X X X	-	-	-	MAY-DEC	-
	Bay anchovy	COMMON	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	-	-	-	APR-SEP	JAN-DEC
	Black drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Bull shark	COMMON	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	-	-	-	-	JAN-DEC
	Gulf menhaden	ABUNDANT	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	MAY-AUG	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC
	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	DEC-JAN	JAN-DEC
	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
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
265	Atlantic seabob shrimp		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	-	-	-	-	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
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	-	-	-	-	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	-	-	MAR-APR	MAY-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	MAY-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	-	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
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	-	-	-	MAR-OCT	-
	Kemp's ridley sea turtle	E E COMMON	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	-

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 18 (cont.)

BIOLOGICAL RESOURCES: (cont.)

TERRESTRIAL MAMMAL:

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

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HUMAN USE RESOURCES:

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
336	MCFADDIN NATIONAL WILDLIFE REFUGE		

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 19 (cont.)

BIOLOGICAL RESOURCES: (cont.)

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
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
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:

AIRPORT:

HUN#	Name	Contact	Phone
3	CHAMBERS COUNTY		

BOAT RAMP:

HUN#	Name	Contact	Phone
22	ACOE WALLISVILLE LAKE PROJECT		
64	FORT ANAHUAC PARK		
80	LAKE ANAHUAC BOAT RAMP		
134	WHITES PARK		

HELIPORT:

HUN#	Name	Contact	Phone
153	CIG 816		

WATER INTAKE:

HUN#	Name	Contact	Phone
311	CITY OF ANAHUAC		
331	TBCD WEST TREATMENT PLANT		

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
333	ANAHUAC NATIONAL WILDLIFE REFUGE		

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 20 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
284	Atlantic rangia	ABUNDANT	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	MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC
	Brief squid	RARE	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	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	MAY-OCT	MAY-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
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
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 X

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
11	RWJ AIRPARK		
14	SLACK		

BOAT RAMP:

HUN#	Name	Contact	Phone
70	GOV HOLE BOAT RAMP		
75	HUGO POINT		
128	WALLISVILLE LAKE PROJECT		
129	WALLISVILLE PROJECT		

Upper Texas Coast: ESIMAP 21

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
16	Bald eagle	T	X X X X X X X X X X X	OCT-JUL	-	-
21	Osprey		X X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
22	Pelicans		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	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
34	Grebes		X X X X X X X X X X	-	-	-
	Gulls		X X X X X X X X X X X	-	-	-
	Loons		X X X X X X X X X	-	-	-
	Marsh birds		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	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X 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
266	Tarpon	RARE	X X X X X X X X X	-	-	-	MAR-NOV	-
270	Blue catfish		X X X X X X X X X X X	APR-MAY	-	-	-	JAN-DEC
	Longnose gar		X X X X X X X X X X X	-	-	-	-	-
	Rainwater killifish		X X X X X X X X X X X	FEB-JUN	-	-	-	-
	Sailfin molly		X X X X X X X X X X X	-	-	-	-	-
	Smallmouth buffalo		X X X X X X X X X X X	-	-	-	-	JAN-DEC
271	Blue catfish		X X X X X X X X X X X	APR-MAY	-	-	-	JAN-DEC
	Rainwater killifish		X X X X X X X X X X X	FEB-JUN	-	-	-	-
	Sailfin molly		X X X X X X X X X X X	-	-	-	-	-
	Smallmouth buffalo		X X X X X X X X X X X	-	-	-	-	JAN-DEC
286	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	JAN-NOV	JAN-DEC
	Bay whiff	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Blue catfish	COMMON	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 X X	-	-	-	MAR-NOV	SEP-NOV
	Gafftopsail catfish	COMMON	X X X X X X X X X	APR-MAY	-	-	APR-NOV	APR-NOV
	Gizzard shad	COMMON	X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Gulf killifish	RARE	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	JUL-SEP	JAN-DEC
	Pinfish	COMMON	X X X X X	-	-	-	APR-AUG	-
	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	JUL-SEP	JAN-DEC
							NOV-APR	
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	NOV-NOV	JAN-DEC
	Silversides	COMMON	X X X X X X X X X X X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Smallmouth buffalo	HIGHLY ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	RARE	X X X X X	-	-	-	AUG-OCT	-
	Spanish mackerel	RARE	X X X X	-	-	-	SEP-NOV	SEP-NOV
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	FEB-NOV	JAN-DEC
	Spotfin mojarra	RARE	X X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	X X X X X X	-	-	-	JUN-NOV	-

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
286	Atlantic rangia	ABUNDANT	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	MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC
	Brown shrimp	ABUNDANT	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
	Lesser blue crab	COMMON	X X X X X X X	-	-	-	APR-OCT	-
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	APR-OCT	APR-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
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	Interneesting	Juveniles	Adults
331	Kemp's ridley sea turtle	E E COMMON	X X X X X X X X	-	-	-	APR-NOV	-

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HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
24	BANANA BEND PARK		
34	BAYTOWN NATURE CENTER		
101	RIVER TERRACE PARK		
102	RIVERSIDE INN MARINA		
108	SASSY LADY TUGBOAT ANNIE'S		

HELIPORT:

HUN#	Name	Contact	Phone
179	LPC		
198	RED BARN		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
243	SAN JACINTO BATTLEGROUND SHS	TPWD	

PARK:

HUN#	Name	Contact	Phone
304	SAN JACINTO MONUMENT SP	TPWD	

WATER INTAKE:

HUN#	Name	Contact	Phone
309	BAYTOWN AREA WATER AUTHORITY		
310	CHEVRON PHILLIPS PASADENA PLASTICS		
315	CITY OF HOUSTON		

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 22

BIOLOGICAL RESOURCES:

FISH:																			
RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
266	Tarpon	RARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MAR-NOV	-
271	Blue catfish		X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	-	JAN-DEC
	Rainwater killifish		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	-	-	-
	Sailfin molly		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Smallmouth buffalo		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	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
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
331	Kemp's ridley sea turtle	E E COMMON						X	X	X	X	X	X	X	-	-	-	APR-NOV	-

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
17	HALBERT FISH FARM	JACK D HALBERT	713/458-8705

BOAT RAMP:

HUN#	Name	Contact	Phone
114	SHELDON RESERVOIR ACCESS		

PARK:

HUN#	Name	Contact	Phone
307	SHELDON LAKE SP	TPWD	

Upper Texas Coast: ESIMAP 23

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
35	Gulls		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	-	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
266	Tarpon	RARE			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
271	Blue catfish		X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	-	JAN-DEC
	Rainwater killifish		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	-	-	-
	Sailfin molly		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Smallmouth buffalo		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	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
339	West Indian manatee	E E VERY RARE						X	X	X					-	-	-	-

HUMAN USE RESOURCES:

HELIPORT:

HUN#	Name	Contact	Phone
149	BROWN & ROOT-CLINTON		
154	DAILEY INC		
156	DRV DOWNTOWN HOUSTON AQUARIUM		
157	EMERGENCY-1 HOUSTON CENTER		
162	FIRST CITY FINANCIAL CENTER		
164	GELLHORN PAD		
166	GULF TOWER		
180	LYNDON B JOHNSON GENERAL HOSPITAL		
191	NE POLICE STATION NR 2		
196	POLICE HEADQUARTERS		
211	TEXAS COMMERCE BANK BUILDING		

Upper Texas Coast: ESIMAP 24

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
14	American avocet	100S	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	-	-	-
	Black skimmer	100S	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	-	MAR-MAY JUL-NOV	-
	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	-	DEC-MAR	-
	Long-billed curlew	PRESENT	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 X X	-	MAR-APR JUL-NOV	-
	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	-	-	-
	Shorebirds	1000S	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	-
	Yellowlegs	100S	X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
23	Great blue heron		X X X X X X X X X X X	-	-	-
	Great egret		X X X X X X X X X X X	-	-	-
	Little blue heron		X X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
24	American oystercatcher		X X X X X X X X X X X	-	-	-
	Brown pelican		X X X X X X X X X X X	-	-	-
	Shorebirds		X X X X X X X X X X X	-	-	-
25	Marsh birds		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	-	-	-
	Cormorants		X X X X X X X X X X X	-	-	-
	Diving birds		X X X X X X X X X X X	-	-	-
	Diving ducks		X X X X 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	-	-	-
	Loons		X X X X X X X X X	-	-	-
	Pelicans		X X X X X X X X X X X	-	-	-
	Terns		X X X X X X X X X X X	-	-	-
329	Greater white-fronted goose		X X X X X X X X X	-	-	-
	Snow goose		X X X X X X 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
165	Atlantic sharpnose shark		X 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	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
181	Blacktip shark		X 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 X	-	-	-	MAR-NOV	-
284	Alligator gar	COMMON	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	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Bay anchovy	ABUNDANT	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	-	-	-	MAY-AUG	MAY-AUG
	Black drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	COMMON	X X X X X X X X X X	-	-	-	MAR-NOV	-
	Gafftopsail catfish	COMMON	X 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 butterflyfish	RARE	X X	-	-	-	-	-
	Gulf killifish	RARE	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	APR-DEC
	Hardhead catfish	ABUNDANT	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 X X	-	-	-	MAR-SEP	-
	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	JUN-JUN SEP-MAR	JAN-DEC
	Silver perch	RARE	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	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Smallmouth buffalo		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	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	COMMON	X X X X X 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	-	-	-	MAR-NOV	JAN-DEC
	Spotfin mojarra	RARE	X X	-	-	-	-	-
	Spotted gar	COMMON	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	X X X X X X X X	-	-	-	APR-OCT	-
369	Spinner shark		X 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
284	Atlantic rangia	ABUNDANT	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	MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC
	Brief squid	RARE	X X 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	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	-	-	MAY-OCT	MAY-DEC	JAN-DEC
357	Eastern oyster	REEF	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
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
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 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 24 (cont.)

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
6	EAGLE AIR		

BOAT RAMP:

HUN#	Name	Contact	Phone
58	DOUBLE BAYOU PARK		
79	JOB BEASON PARK		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
238	LONE OAK SPOIL & SHELL	HOUSTON AUDUBON (RICAHRD GIBBONS)	713/932-1639

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 25

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
41	Black skimmer		X X X X X X X X X X X	-	-	-
	Cormorants		X X X X X X X X X X X	-	-	-
	Diving birds		X X X X X X X X X X X	-	-	-
	Diving ducks		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	-	-	-
	Loons		X X X X X X X X X	-	-	-
	Pelicans		X X X X X X X X X X X	-	-	-
	Terns		X X X X X X X X 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
165	Atlantic sharpnose shark		X 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	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
181	Blacktip shark		X 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	-
284	Alligator gar	COMMON	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	-	-	JAN-JUN	JAN-DEC	JAN-DEC
	Bay anchovy	ABUNDANT	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	-	-	-	MAY-AUG	MAY-AUG
	Black drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	COMMON	X X X X X X X X X	-	-	-	MAR-NOV	-
	Gafftopsail catfish	COMMON	X 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 butterflyfish	RARE	X X	-	-	-	-	-
	Gulf killifish	RARE	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	APR-DEC
	Hardhead catfish	ABUNDANT	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 X	-	-	-	MAR-SEP	-
	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	JUN-JUN SEP-MAR	JAN-DEC
	Silver perch	RARE	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	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Smallmouth buffalo		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	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	COMMON	X 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	-	-	-	MAR-NOV	JAN-DEC
	Spotfin mojarra	RARE	X X	-	-	-	-	-
	Spotted gar	COMMON	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	X X X X X X X	-	-	-	APR-OCT	-
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
284	Atlantic rangia	ABUNDANT	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	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	-	-	FEB-APR	APR-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
	White shrimp	HIGHLY ABUNDANT	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	MAR-DEC	MAR-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

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
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	Interneesting	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 X

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Upper Texas Coast: ESIMAP 26

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
26	Gulls		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	-	-	-
	Waterfowl		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
27	Shorebirds	HIGH	X	X	X	X		X	X	X	X	X	X	X	-	-	-
28	Cormorants		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	-	-	-
	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	-	-	-
29	Cormorants		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	-	-	-
	Migratory songbirds				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	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	-	-	-
30	Cormorants		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Grebes	HIGH	X	X	X	X	X		X	X	X	X			-	-	-
	Gulls		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Loons	HIGH	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	-	-	-
	Waterfowl	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
31	Wading birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
32	Shorebirds		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				-	-	-
	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	-	-	-
195	American white pelican	210 INDIV	X	X	X					X	X	X			-	-	-
	Black skimmer	25-65 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-
	Brown pelican	148 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Caspian tern	24 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Forster's tern	7-1526 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Great blue heron	4-8 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	-
	Great egret	6 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-APR	-
	Gull-billed tern	8-66 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Laughing gull	27-51 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Least tern	15-114 PAIRS		X	X	X	X	X	X	X					APR-SEP	-	-
	Roseate spoonbill	13-15 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Royal tern	24 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Sandwich tern	4 PAIRS		X	X	X	X	X	X	X	X				MAR-AUG	-	-
	Yellow-crowned night-heron	3 PAIRS		X	X	X	X	X	X	X	X				APR-SEP	-	-
275	Bald eagle	T 1 NEST	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
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	X			MAY-JUN	MAY-JUN	MAY-NOV	MAR-NOV	MAY-JUN
266	Tarpon	RARE		X	X	X	X	X	X	X	X				-	-	-	MAR-NOV	-
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	X	X			-	-	-	MAR-NOV	-
	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	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	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
	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	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					-	-	-	MAR-NOV	SEP-NOV
	Gafftopsail catfish	COMMON		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 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	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

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 26 (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
285	Southern flounder	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	COMMON	X X X 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	-	-	-	MAR-SEP	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
	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	-	-	-	JUN-OCT	-
286	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	JAN-NOV	JAN-DEC
	Bay whiff	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Blue catfish	COMMON	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 X	-	-	-	MAR-NOV	SEP-NOV
	Gafftopsail catfish	COMMON	X X X X X X X	APR-MAY	-	-	APR-NOV	APR-NOV
	Gizzard shad	COMMON	X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Gulf killifish	RARE	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	JUL-SEP	JAN-DEC
	Pinfish	COMMON	X X X X X	-	-	-	APR-AUG	-
	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	JUL-SEP	JAN-DEC
						NOV-APR		
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	NOV-NOV	JAN-DEC
	Silversides	COMMON	X X X X X X X X X X X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Smallmouth buffalo	HIGHLY ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	RARE	X X X X X	-	-	-	AUG-OCT	-
	Spanish mackerel	RARE	X X X	-	-	-	SEP-NOV	SEP-NOV
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	FEB-NOV	JAN-DEC
	Spotfin mojarra	RARE	X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	X X X X X X	-	-	-	JUN-NOV	-
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
284	Atlantic rangia	ABUNDANT	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	MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC
	Brief squid	RARE	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 X	-	-	FEB-APR	APR-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
	White shrimp	HIGHLY ABUNDANT	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	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-JAN	-
	Grass shrimp	ABUNDANT	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	-	-	JUN-OCT	JUN-DEC	JAN-DEC
286	Atlantic rangia	ABUNDANT	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	MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC
	Brown shrimp	ABUNDANT	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
	Lesser blue crab	COMMON	X X X X X X	-	-	-	APR-OCT	-
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	APR-OCT	APR-DEC	JAN-DEC
354	Eastern oyster	LOW	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	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

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
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	Interneesting	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 X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
103	ROSELAND PARK		
121	THOMPSON FISH CAMP		
126	VH MCBRIDE BOAT RAMP		

HELIPORT:

HUN#	Name	Contact	Phone
148	BAYCOAST MEDICAL CENTER		
203	SAN JACINTO METHODIST HOSPITAL		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
231	ATKINSON ISLAND WMA	TPWD	

MARINA:

HUN#	Name	Contact	Phone
255	BAYLAND PARK MARINA		281/422-8900
256	BAYTOWN MARINA		

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 27

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
22	Pelicans		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		-	-	-
	Wading birds		X	X	X	X	X	X	X	X	X	X	X		-	-	-
30	Cormorants		X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Grebes	HIGH	X	X	X	X	X		X	X	X	X		-	-	-	-
	Gulls		X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Loons	HIGH	X	X	X	X			X	X	X			-	-	-	-
	Pelicans		X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Terns		X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Waterfowl	HIGH	X	X	X	X	X	X	X	X	X	X	X		-	-	-
32	Shorebirds		X	X	X	X		X	X	X	X	X		-	-	-	-
33	Cormorants		X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Wading birds		X	X	X	X	X	X	X	X	X	X	X		-	-	-
34	Grebes		X	X	X	X	X		X	X	X	X		-	-	-	-
	Gulls		X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Loons		X	X	X	X			X	X	X			-	-	-	-
	Marsh birds		X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Shorebirds		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		-	-	-
	Waterfowl		X	X	X	X	X	X	X	X	X	X	X		-	-	-
35	Gulls		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		-	-	-
190	Black-crowned night-heron	15 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-AUG	APR-MAY	-
	Cattle egret	25-75 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-JUL	-	-
	Double-crested cormorant	8 INDIV	X	X	X	X			X	X	X			-	-	-	-
	Forster's tern	15 PAIRS	X	X	X	X	X	X	X	X	X	X	X		MAR-AUG	-	-
	Great blue heron	7-25 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-JUN	-	-
	Great egret	1-24 PAIRS	X	X	X	X	X	X	X	X	X	X	X		MAR-JUL	MAR-APR	-
	Neotropic cormorant	13-140 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-OCT	-	-
	Roseate spoonbill	5-8 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-AUG	-	-
	Snowy egret	6-60 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-JUL	-	-
191	Black skimmer	5-180 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-SEP	-	-
	Forster's tern	31-875 PAIRS	X	X	X	X	X	X	X	X	X	X	X		MAR-AUG	-	-
	Gull-billed tern	10-122 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-JUL	-	-
	Laughing gull	135 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-AUG	-	-
	Least tern	18-157 PAIRS		X	X	X	X	X	X	X	X			APR-SEP	-	-	-
192	American white pelican	4 INDIV	X	X	X					X	X	X		-	-	-	-
	Anhinga	1 PAIR		X	X	X	X	X	X	X	X	X		APR-JUN	-	-	-
	Black-crowned night-heron	1-40 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-AUG	APR-MAY	-
	Cattle egret	18 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-JUL	-	-
	Great blue heron	2-9 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-JUN	-	-
	Great egret	2-4 PAIRS	X	X	X	X	X	X	X	X	X	X	X		MAR-JUL	MAR-APR	-
	Least tern	6 PAIRS		X	X	X	X	X	X	X				APR-SEP	-	-	-
	Little blue heron	2-5 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-JUL	-	-
	Neotropic cormorant	5 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-OCT	-	-
	Roseate spoonbill	2 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-AUG	-	-
	Snowy egret	1-3 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-JUL	-	-
	Tricolored heron	2 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-AUG	-	-
	White ibis	7 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-JUL	-	-
193	Black skimmer	230-427 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-SEP	-	-
	Black-bellied whistling-duck	8 PAIRS	X	X	X	X	X	X	X	X	X	X	X		MAY-AUG	-	-
	Black-crowned night-heron	5-12 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-AUG	APR-MAY	-
	Brown pelican	7-215 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-AUG	-	-
	Cattle egret	10-1050 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-JUL	-	-
	Forster's tern	75-84 PAIRS	X	X	X	X	X	X	X	X	X	X	X		MAR-AUG	-	-
	Great blue heron	1-3 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-JUN	-	-
	Great egret	30-50 PAIRS	X	X	X	X	X	X	X	X	X	X	X		MAR-JUL	MAR-APR	-
	Gull-billed tern	18-29 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-JUL	-	-
	Laughing gull	391-10800 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-AUG	-	-
	Least tern	6-315 PAIRS		X	X	X	X	X	X	X				APR-SEP	-	-	-
	Little blue heron	8-10 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-JUL	-	-
	Neotropic cormorant	158 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-OCT	-	-
	Roseate spoonbill	4-21 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-AUG	-	-
	Royal tern	420-840 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-AUG	-	-
	Sandwich tern	378-560 PAIRS		X	X	X	X	X	X	X	X	X		MAR-AUG	-	-	-
	Snowy egret	15-200 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-JUL	-	-
	Tricolored heron	2-25 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-AUG	-	-
	White ibis	147-295 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-JUL	-	-
194	American white pelican	6-14 INDIV	X	X	X					X	X	X		-	-	-	-
	Black skimmer	6 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-SEP	-	-
	Black-crowned night-heron	2-7 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-AUG	APR-MAY	-
	Brown pelican	3 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-AUG	-	-
	Cattle egret	1-5 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-JUL	-	-
	Double-crested cormorant	68 INDIV	X	X	X	X			X	X	X			-	-	-	-
	Forster's tern	11 PAIRS	X	X	X	X	X	X	X	X	X	X	X		MAR-AUG	-	-
	Great blue heron	1-5 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-JUN	-	-
	Great egret	4-29 PAIRS	X	X	X	X	X	X	X	X	X	X	X		MAR-JUL	MAR-APR	-
	Laughing gull	1-35 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-AUG	-	-
	Least tern	3 PAIRS		X	X	X	X	X	X	X				APR-SEP	-	-	-
	Little blue heron	4 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-JUL	-	-
	Neotropic cormorant	7-13 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-OCT	-	-
	Roseate spoonbill	13 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-AUG	-	-
	Royal tern	16 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-AUG	-	-
	Snowy egret	41 PAIRS	X	X	X	X	X	X	X	X	X	X	X		APR-JUL	-	-
	Tricolored heron	1 PAIR	X	X	X	X	X	X	X	X	X	X	X		APR-AUG	-	-
	White ibis	5 PAIRS	X	X	X	X	X	X	X	X	X	X	X		FEB-JUL	-	-
	Yellow-crowned night-heron	1 PAIR	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
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		-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
181	Blacktip shark				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				-	-	-	MAR-NOV	-
271	Blue catfish		X	X	X	X	X	X	X	X	X	X	X		APR-MAY	-	-	-	JAN-DEC
	Rainwater killifish		X	X	X	X	X	X	X	X	X	X	X		FEB-JUN	-	-	-	-
	Sailfin molly		X	X	X	X	X	X	X	X	X	X	X		-	-	-	-	-
	Smallmouth buffalo		X	X	X	X	X	X	X	X	X	X	X		-	-	-	-	JAN-DEC
285	Atlantic bumper	COMMON							X	X	X				-	-	-	-	AUG-OCT
	Atlantic croaker	HIGHLY ABUNDANT	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		MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	Bay whiff	RARE	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		-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	COMMON			X	X	X	X	X	X	X	X			-	-	-	MAR-NOV	SEP-NOV

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 27 (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
285	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	-	-	-	-	JAN-DEC
	Gulf butterfish	RARE	X X X X X	-	-	-	-	-
	Gulf killifish	COMMON	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	-	-	-	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	-	-	-	APR-AUG	-
	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Silver perch	COMMON	X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-MAR OCT-NOV	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	ABUNDANT	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	-	-	-	MAR-SEP	JAN-DEC
	Spotted seatrout	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	X X X X X	-	-	-	JUN-OCT	-
286	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	-	-	-	APR-SEP	JAN-DEC
	Black drum	COMMON	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	-	-	-	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	APR-MAY	-	-	APR-NOV	APR-NOV
	Gizzard shad	COMMON	X X X X X X X X X X	-	-	-	-	JAN-DEC
	Gulf killifish	RARE	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	-	-	-	JAN-DEC	JAN-DEC
	Hardhead catfish	ABUNDANT	X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	JUL-SEP	JAN-DEC
	Pinfish	COMMON	X X X X X	-	-	-	APR-AUG	-
	Red drum	COMMON	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	-	-	-	JUL-SEP NOV-APR	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	NOV-NOV	JAN-DEC
	Silversides	COMMON	X X X X X X X X X X	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Smallmouth buffalo	HIGHLY ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	RARE	X X X X X	-	-	-	AUG-OCT	-
	Spanish mackerel	RARE	X X X	-	-	-	SEP-NOV	SEP-NOV
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	-	FEB-NOV	JAN-DEC
	Spotfin mojarra	RARE	X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	X X X X X	-	-	-	JUN-NOV	-
297	Alligator gar		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
	Atlantic spadefish	RARE	X X X X	-	-	-	JUN-SEP	-
	Bay anchovy	HIGHLY ABUNDANT	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	-	-	-	MAY-JUL	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	RARE	X X X X X X X	-	-	-	MAR-NOV	-
	Gafftopsail catfish	COMMON	X X X X X X X X X X	APR-MAY	-	-	APR-NOV	JAN-DEC
	Gizzard shad	COMMON	X X X X X X X X X X	-	-	-	-	JAN-DEC
	Gulf killifish	RARE	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	-	-	-	JAN-DEC	JAN-DEC
	Hardhead catfish	ABUNDANT	X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	JUL-OCT	JAN-DEC
	Pinfish	COMMON	X X X X X X	-	-	-	MAR-SEP	JUL-SEP
	Red drum	COMMON	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	-	-	-	NOV-JUN	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-JUN OCT-DEC	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	ABUNDANT	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	-	-	-	MAR-OCT	JAN-DEC
	Spotted gar		X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	X X X X X X X X X X	APR-OCT	APR-OCT	APR-OCT	JUN-DEC	JAN-DEC
	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	-	-	-	APR-SEP	-

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
285	Blue crab	ABUNDANT	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 X X X	-	-	FEB-APR	APR-JAN	-
	Grass shrimp	ABUNDANT	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	-	-	JUN-OCT	JUN-DEC	JAN-DEC
286	Atlantic rangia	ABUNDANT	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	MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC
	Brown shrimp	ABUNDANT	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	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Lesser blue crab	COMMON	X X X X X	-	-	-	APR-OCT	-
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	APR-OCT	APR-DEC	JAN-DEC
297	Blue crab	HIGHLY ABUNDANT	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	MAY-JUN	MAY-JUN	MAY-JUN	MAY-JUN	MAY-JUN
	Brown shrimp	ABUNDANT	X X X X X X X X X X	-	-	FEB-APR	JAN-DEC	-
	Grass shrimp	ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	JUN-OCT	JAN-DEC	NOV-SEP
356	Eastern oyster	UNCONSOLIDATED	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	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
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
331	Kemp's ridley sea turtle	E E COMMON	X X X X X X X X	-	-	-	APR-NOV	-

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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 27 (cont.)

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
9	LA PORTE MUNI		

BOAT RAMP:

HUN#	Name	Contact	Phone
118	SYLVAN BEACH BOAT RAMP		

HELIPORT:

HUN#	Name	Contact	Phone
177	LA PORTE PLANT		
199	RENTAL TOOLS		
202	SAN JACINTO COLLEGE CENTRAL CAMPUS		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
243	SAN JACINTO BATTLEGROUND SHS	TPWD	

PARK:

HUN#	Name	Contact	Phone
304	SAN JACINTO MONUMENT SP	TPWD	

WATER INTAKE:

HUN#	Name	Contact	Phone
329	LYONDELLBASELL BAYPORT POLYMERS		

Upper Texas Coast: ESIMAP 28

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
35	Gulls		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	-	-	-

FISH:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
266	Tarpon	RARE	X X X X X X X X X	-	-	-	MAR-NOV	-
271	Blue catfish		X X X X X X X X X X X	APR-MAY	-	-	-	JAN-DEC
	Rainwater killifish		X X X X X X X X X X X	FEB-JUN	-	-	-	-
	Sailfin molly		X X X X X X X X X X X	-	-	-	-	-
	Smallmouth buffalo		X X X X X X X X X X X	-	-	-	-	JAN-DEC

HABITAT:

RAR#	Species	S F Conc.	J F M A M J J A S O N D
342	Texas prairie dawn	E E	X X X X X X

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
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
331	Kemp's ridley sea turtle	E E COMMON	X X X X X X X X X	-	-	-	APR-NOV	-
341	Houston toad	E E	X X X X X X X X X X X	FEB-JUN	FEB-JUN	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

HELIPORT:

HUN#	Name	Contact	Phone
142	3321 WESTSIDE		
159	ETHYL CORP		
170	HL&P SOUTH HOUSTON HELISTOP		
186	MEMORIAL HOSPITAL		
195	POLICE		
205	SHELL DEER PARK REFINERY		

Upper Texas Coast: ESIMAP 29

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
35	Gulls		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	-	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
266	Tarpon	RARE			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
271	Blue catfish		X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	-	JAN-DEC
	Rainwater killifish		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	-	-	-
	Sailfin molly		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Smallmouth buffalo		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	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
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
341	Houston toad	E E	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	FEB-JUN	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
15	WILLIAM P HOBBY		

COAST GUARD:

HUN#	Name	Contact	Phone
137	SECTOR HOUSTON/GALVESTON		832/256-2966

HELIPORT:

HUN#	Name	Contact	Phone
151	CHRISTUS ST JOSEPH HOSPITAL		
174	HOUSTON POLICE COMMAND STATION		
178	LEWIS ELECTRIC APPARATUS REPAIR INC		
183	MARINE CONSULTANTS INC		
197	POLICE HELICOPTER PATROL		
201	ROWAN		
215	USCG PORT SAFETY STATION		

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	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	X	-	-	-
	Loons			X	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			-	-	-
	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	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	-	-	-
	Peregrine falcon	T		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	-	-	-
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	X	-	-	-
	Ruddy turnstone			X	X	X	X	X		X	X	X	X	X	X	-	-	-
	Sanderling		100S	X	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	-	-	-
	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	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	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	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	X	-	MAR-MAY JUL-NOV	-
	Dunlin		1000S	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		100S	X	X	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	PRESENT	X	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	X	-	-	-
	Shorebirds		1000S	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	-	-	-
	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	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			-	-	-
	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	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	X	-	MAR-MAY JUL-NOV	-
	Dunlin		100S	X	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	X	-	-	-
	Shorebirds		1000S	X	X	X	X	X		X	X	X	X	X	X	-	-	-
	Sora			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		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	OCCASIONAL						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
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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.)

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 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		

Upper Texas Coast: ESIMAP 31

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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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	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	-	-	-
7	Redhead	0-300 BIRDS	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		-	-	-
	Ruddy turnstone		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	-
	Shorebirds	100S	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	-	-	-
	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	-	-	-
43	American avocet	100S	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	-	-	-
	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	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	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	X	X	-	-	-
	Shorebirds	1000S	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	-	-	-
	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	X	-	MAR-MAY JUL-NOV	-
44	Dabbling ducks		X	X	X	X				X	X	X	X		-	-	-
	Shorebirds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
60	Piping plover	T T 16 INDIV	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
161	American coot	100S	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	-	-
	Bufflehead	10S	X	X	X						X	X			-	-	-
	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	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	100S	X	X	X	X				X	X	X	X		-	-	-
	Redhead	PRESENT	X	X	X					X	X	X			-	-	-
	Ruddy duck	100S	X	X	X					X	X	X			-	-	-
	Snow goose	1000S	X	X	X					X	X				-	-	-
163	American oystercatcher	1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
201	American oystercatcher	1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Black-crowned night-heron	5-40 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-MAY	-
	Brown pelican	35-100 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Cattle egret	10-15 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Forster's tern	50-200 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Great blue heron	6-15 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	-
	Great egret	250-400 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-APR	-
	Gull-billed tern	300 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Laughing gull	40-900 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Neotropic cormorant	15-60 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-OCT	-	-

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 31 (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	Bay anchovy	COMMON	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	-	-	-	APR-SEP	JAN-DEC
	Black drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Bull shark	COMMON	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 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 menhaden	ABUNDANT	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	MAY-AUG	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC
	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	DEC-JAN	JAN-DEC
	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
304	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	MAR-DEC
	Atlantic spadefish	COMMON	X X X X X X X X X X	-	-	-	MAR-DEC	-
	Bay anchovy	ABUNDANT	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	-	-	-	-	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Gafftopsail catfish	COMMON	X 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 butterfish	RARE	X X X X X X X X X X	-	-	-	-	-
	Gulf menhaden	ABUNDANT	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	MAY-AUG	MAY-SEP	MAY-SEP	MAY-OCT	JAN-DEC
	Pinfish	COMMON	X X X 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	-	-	SEP-NOV	JAN-DEC	JAN-DEC
	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	-	-	-	JUN-JUN	JAN-DEC
							DEC-MAR	
	Silver perch	RARE	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	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-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 X	-	-	-	JAN-DEC	NOV-JUN
	Spotted seatrout	COMMON	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	-	-	-	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	-	-	-	-	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	-	-	-	-	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	-	-	-	-	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	-	-	-	-	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	MAR-DEC	MAR-DEC	MAR-DEC	MAR-DEC	MAR-DEC
	Brown shrimp	ABUNDANT	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	-	-	-	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	-	-	-	-	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	-	-	MAR-APR	MAY-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAY-JUN	MAY-DEC	JAN-DEC
304	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
	Brown shrimp	ABUNDANT	X X X X X X X X X X	-	-	FEB-APR	APR-NOV	-
	Gulf stone crab	RARE	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Lesser blue crab	ABUNDANT	X X X X X X X X X	-	-	-	SEP-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAY-OCT	MAY-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 X	-	-	FEB-APR	-	MAR-OCT
	White shrimp	ABUNDANT	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	Internesting	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	-	-	-	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	-	-	-	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	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

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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 31 (cont.)

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
59	DR. LLOYD K. LAUDERDALE RAMP		
92	OYSTER BAYOU RAMP		
133	WEST LINE DITCH		

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

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
333	ANAHUAC NATIONAL WILDLIFE REFUGE		

Upper Texas Coast: ESIMAP 32

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
23	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Little blue heron		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	-	-	-
43	American avocet	100S	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	-	-	-
	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	X	-	MAR-MAY JUL-NOV	-
	Dunlin	1000S	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	X	X	-	MAR-APR JUL-NOV	-
	Rails		X	X	X	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	-	-	-
	Ruddy turnstone	PRESENT	X	X	X	X		X	X	X	X	X	X	X	-	-	-
	Shorebirds	1000S	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	-	-	-
	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	X	-	MAR-MAY JUL-NOV	-
45	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	-	-	-
340	American coot	100S	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		-	-	-
	Bufflehead	10S	X	X	X						X	X			-	-	-
	Canada goose	10S	X	X	X					X	X	X			-	-	-
	Canvasback	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	10000S	X	X	X	X				X	X	X	X		-	-	-
	Gulls		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Lesser scaup	1000S	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	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				-	-	-
	Wading birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Wood duck	10S	X	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
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	X		MAY-JUN	MAY-JUN	MAY-NOV	MAR-NOV	MAY-JUN
266	Tarpon	RARE			X	X	X	X	X	X	X	X			-	-	-	MAR-NOV	-
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	X			-	-	-	MAR-NOV	-
	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	X	-	-	-	-	JAN-DEC
	Gulf butterfish	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	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		-	-	-	-	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		-	-	-	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
	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	-
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	X			APR-MAY	-	-	MAR-NOV	MAR-NOV

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 32 (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
299	Gizzard shad	COMMON	X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Gulf butterfish	RARE	X X X X X X X 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	MAR-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
	Pinfish	COMMON	X X X 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	-	-	SEP-NOV	JAN-DEC	JAN-DEC
	Sand seatrout	ABUNDANT	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	-	-	-	JUN-JUN	JAN-DEC
							DEC-MAR	
	Silver perch	RARE	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	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Southern flounder	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	RARE	X X X X X X X X X X	-	-	-	JUN-NOV	-
	Spanish mackerel	COMMON	X X X X X X X X X X	-	-	-	SEP-OCT	SEP-OCT
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	MAR-OCT	JAN-DEC
	Spotfin mojarra	RARE	X X X X X X X X X X	-	-	-	-	-
	Spotted seatrout	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	X X X X X X X X X X	-	-	-	MAY-OCT	-
311	Finetooth shark		X X X X X X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
369	Spinner shark		X X X X 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
284	Atlantic rangia	ABUNDANT	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	MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC
	Brief squid	RARE	X X X X 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 X	-	-	FEB-APR	APR-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
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	MAY-OCT	MAY-DEC	JAN-DEC
299	Atlantic seabob shrimp	RARE	X 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
354	Eastern oyster	LOW	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	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

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	-	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
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 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 X

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
18	OYSTER LEASES		

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

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 34 (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
285	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	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	MAY-SEP	MAY-SEP	MAY-SEP	MAR-MAR OCT-NOV	JAN-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 flounder	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	COMMON	X 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	-	-	-	MAR-SEP	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
	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	-	-	-	JUN-OCT	-
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
311	Finetooth shark		X X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
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
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 X	-	-	-	APR-NOV	APR-NOV
284	Atlantic rangia	ABUNDANT	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	MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC
	Brief squid	RARE	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	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	-	-	MAY-OCT	MAY-DEC	JAN-DEC
285	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	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-JAN	-
	Grass shrimp	ABUNDANT	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	-	-	-	JUL-OCT	SEP-DEC
	White shrimp	ABUNDANT	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 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
354	Eastern oyster	LOW	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	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

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	-	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
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 X

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
18	OYSTER LEASES		

BOAT RAMP:

HUN#	Name	Contact	Phone
33	BAYSHORE BOAT RAMP		
69	GALVESTON COUNTY PARK RAMP		

Upper Texas Coast: ESIMAP 35

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
2	Waterfowl		X X X X X X X X X X X	-	-	-
30	Cormorants		X X X X X X X X X X X	-	-	-
	Grebes	HIGH	X X X X X X X X X X	-	-	-
	Gulls		X X X X X X X X X X X	-	-	-
	Loons	HIGH	X X X X X X X X X	-	-	-
	Pelicans		X X X X X X X X X X X	-	-	-
	Terns		X X X X X X X X X X X	-	-	-
	Waterfowl	HIGH	X X X X X X X X X X X	-	-	-
31	Wading birds		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	-	-	-
	Cormorants		X X X X X X X X X X X	-	-	-
	Diving birds		X X X X X X X X X X X	-	-	-
	Diving ducks		X X X 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	-	-	-
	Loons		X X X X X X X X X	-	-	-
	Pelicans		X X X X X X X X X X X	-	-	-
	Terns		X X X X X X X X X X X	-	-	-
51	Marsh birds		X X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X X	-	-	-
52	Marsh birds		X X X X X X X X X X X	-	-	-
	Osprey		X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X X	-	-	-
53	Gulls		X X X X X X X X X X X	-	-	-
	Pelicans		X X X X X X X X X X X	-	-	-
	Terns		X X X X X X X X X X X	-	-	-
54	Marsh birds		X X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X X	-	-	-
206	Green heron	50 INDIV	X X X X X X X X X X	APR-JUN	-	-
343	Attwater's greater prairie chicken	E E	X X X X X X X X X X X	MAR-MAY	-	-

FISH:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
165	Atlantic sharpnose shark		X 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	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
181	Blacktip shark		X 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 X	-	-	-	MAR-NOV	-
285	Atlantic bumper	COMMON	X X X	-	-	-	-	AUG-OCT
	Atlantic croaker	HIGHLY ABUNDANT	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	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	Bay whiff	RARE	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	-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	COMMON	X 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	MAR-OCT
	Gizzard shad	COMMON	X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Gulf butterfish	RARE	X 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	RARE	X X X X X	-	-	-	APR-AUG	-
	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	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	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	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Southern flounder	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	COMMON	X 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	-	-	-	MAR-SEP	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
	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	-	-	-	JUN-OCT	-
297	Alligator gar		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
	Atlantic spadefish	RARE	X X X X	-	-	-	JUN-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	-	-	-	MAY-JUL	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Crevalle jack	RARE	X X X X X X X X X	-	-	-	MAR-NOV	-
	Gafftopsail catfish	COMMON	X X X X X X X X X X X	APR-MAY	-	-	APR-NOV	JAN-DEC
	Gizzard shad	COMMON	X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Gulf killifish	RARE	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	JUL-OCT	JAN-DEC
	Pinfish	COMMON	X X X X X X X	-	-	-	MAR-SEP	JUL-SEP
	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	NOV-JUN	JAN-DEC
	Silver perch	RARE	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 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 gar		X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	X X X X X X X X X X X	APR-OCT	APR-OCT	APR-OCT	JUN-DEC	JAN-DEC
	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	-	-	-	APR-SEP	-
311	Finetooth shark		X X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
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
285	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	COMMON	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-JAN	-
	Grass shrimp	ABUNDANT	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 X X X	-	-	-	JUL-OCT	SEP-DEC
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	JUN-OCT	JUN-DEC	JAN-DEC
297	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	RARE	X X	MAY-JUN	MAY-JUN	MAY-JUN	MAY-JUN	MAY-JUN
	Brown shrimp	ABUNDANT	X X X X X X X X X X X	-	-	FEB-APR	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

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 35 (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
297	Gulf stone crab	RARE	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JUN-OCT	JAN-DEC	NOV-SEP
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

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
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
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 X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
29	BAY AREA PARK		
38	BEN BLACKLEDGE		
48	CECIL'S RED LANTERN		
52	CLEAR LAKE PARK BOAT RAMP		
53	CLEAR LAKE SHORES PUBLIC RAMP		
112	SEABROOK BOAT RAMP		
124	TPW RAMP UNDER 270 BRIDGE		
135	Walter Hall County Park		

HELIPORT:

HUN#	Name	Contact	Phone
152	CHRISTUS ST. JOHN HOSPITAL		
161	FINA BAYPORT		
175	JOHNSON SPACE CENTER		
176	KEMAH WATERFRONT		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
229	ARMAND BAYOU COASTAL PRESERVE	TGLO-TPWD	
230	ARMAND BAYOU NATURE CENTER		

MARINA:

HUN#	Name	Contact	Phone
252	ANCHORAGE APARTMENTS & MARINA	GAIL HAMMOND	281/334-2527
253	BAL HARBOUR ASSOCIATION	FRANK DOWNES	281/333-5168
258	BLUE DOLPHIN YACHTING CENTER	AL DIPPEL	281/474-4450
262	CAPT. WICKS LANDING	CAPT. WICK	281/334-1563
263	CLEAR LAKE MARINE CENTER		281/326-4426
266	HOUSTON YACHT CLUB	JOE CARR	281/471-1255
268	KEMAH BOARDWALK MARINA		281/334-2284
270	LAKESIDE YACHTING CENTER	DR. JAMES HEBERT	281/326-5547
271	LAKEWOOD YACHT CLUB	JOAN CORDES	281/474-2511
272	LEGEND POINT MARINA	MIKE ROBERTSON	281/334-3811
273	MARINA DEL SOL	TREY CAUDELL	281/334-3909
274	MARKER 1 MARINA		832/864-4000
278	NASSAU BAY HILTON MARINA	MIKE BUTLER	281/333-9300
279	NASSAU BAY YACHT CLUB	BOB FORD	281/333-5809
283	PORTOFINO HARBOR	TOM RICHARDS	281/334-6007
287	SEABROOK SHIPYARD	BOB CONNERS	281/474-2586
288	SOUTH SHORE HARBOUR MARINA	BILL MCKEE	281/334-0515
291	THE WHARF AT CLEAR LAKE	J.R. MCCONNELL	877/375-4606
293	WATERFORD HARBOR YACHT CLUB	J. WILLIAM "BILL" TAYLOR	281/334-4400
294	WATERGATE YACHTING CENTER	ROBERT & HARRY BASCHER	281/334-1511

WATER INTAKE:

HUN#	Name	Contact	Phone
320	DIANAL AMERICA INC		
321	DIXIE CHEMICAL CO PLANT B		
322	DIXIE CHEMICAL COMPANY PLANT A		

Upper Texas Coast: ESIMAP 36

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			-	-	-
	Masked booby	UNCOMMON			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	-	-	-
7	Redhead	0-300 BIRDS	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		-	-	-
	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	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	-	-
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	-	-	-
44	Dabbling ducks		X	X	X	X				X	X	X	X		-	-	-
	Shorebirds		X	X	X	X	X	X	X	X	X	X	X		-	-	-
60	Piping plover	T T 16 INDIV	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
344	Piping plover	T T	X	X	X	X	X	X	X	X	X	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
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			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		-	-	-	-	-
	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		-	-	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	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					-	-	-	-	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	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
269	Striped mullet	HIGHLY ABUNDANT				X	X	X	X	X	X				-	-	-	-	MAY-NOV
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		-	-	-	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					APR-MAY	-	-	MAR-NOV	MAR-NOV
	Gizzard shad	COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Gulf butterflyfish	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

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 36 (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
299	Sheepshead	COMMON	X X X X X X X X X X X X	-	-	-	JUN-JUN DEC-MAR	JAN-DEC
	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 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 X	-	-	-	MAY-OCT	-
304	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	MAR-DEC
	Atlantic spadefish	COMMON	X X X X X X X X X X	-	-	-	MAR-DEC	-
	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	-	-	-	-	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Gafftopsail catfish	COMMON	X 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 X	-	-	-	-	JAN-DEC
	Gulf butterflyfish	RARE	X X X X X X X X	-	-	-	-	-
	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 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	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 DEC-MAR	JAN-DEC
	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	COMMON	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	-	-	-	JAN-DEC	NOV-JUN
	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
311	Finetooth shark		X X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
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 X	APR-APR AUG-AUG	-	-	-	JAN-DEC
	Atlantic surfclam		X X 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 X X	-	-	-	-	-
	Mole crab		X X 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 X X	-	-	-	-	-
265	Atlantic seabob shrimp		X X X X 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
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 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 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 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
304	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
	Brown shrimp	ABUNDANT	X X X X X X X X X X X X	-	-	FEB-APR	APR-NOV	-
	Gulf stone crab	RARE	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Lesser blue crab	ABUNDANT	X X X X X X X X	-	-	-	SEP-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X X	-	-	MAY-OCT	MAY-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	-	-	-	-

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Internesting	Juveniles	Adults
274	Diamondback terrapin		X 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	-	-	-	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	-	-	-	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 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	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 X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
41	BOAT RAMP	A.B & PAT CHARPIOT	409/684-3067
116	STINGAREE MARINA		

MARINA:

HUN#	Name	Contact	Phone
290	STINGAREE MARINA		409/684-9530

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Upper Texas Coast: ESIMAP 37

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	-	-	-
	Bufflehead	UNCOMMON	X 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	-	-	-
	Diving birds		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 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	-	-	-
	Lesser scaup	COMMON	X 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 X	-	-	-
	Masked booby	UNCOMMON	X X X X X X X X	-	-	-
	Northern gannet	COMMON	X X X X X X X X	-	-	-
	Scoters	RARE	X X X X X X X X	-	-	-
	Shearwaters	UNCOMMON	X X X X X X X X	-	-	-
	Storm-petrels	RARE	X X X X X X X X	-	-	-
	Terns	COMMON-ABUNDANT	X X X X X X X X X X	-	-	-
7	Redhead	0-300 BIRDS	X X X X X X X X	-	-	-
38	Black-bellied plover		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 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 X	APR-JUL	-	-
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 X X X	-	-	-
	Grebes		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	-	-	-
	Loons		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	-	-	-
56	Piping plover	T T HIGH	X X X X X X X X X X X X	-	-	-
	Shorebirds	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	-	-	-
57	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	-	-	-
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 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	-	-	-
59	Piping plover	T T 3 INDIV	X X X X X X X X X X X X	-	-	-
60	Piping plover	T T 16 INDIV	X 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 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 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 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 X X X X	-	-	-
	Dowitchers	1000S	X 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 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 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 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 X X X X	-	-	-
	Marbled godwit	100S	X X 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	-	-	-
	Northern harrier		X X X X X X X X X X	-	-	-
	Peregrine falcon	T	X 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 X X	-	-	-
	Raptors		X X X X X X X X X X X X	-	-	-
	Red knot		X 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	-	-	-
	Ruddy turnstone	PRESENT	X X X X X X X X X X X X	-	-	-
	Sanderling	100S	X X 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 X	MAR-SEP	-	-
	Shorebirds	10000S	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	-	-	-
	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	-
	Wilson's plover		X X X X X X X X X X	-	-	-
	Yellowlegs	100S	X X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
204	Least tern	14-91 PAIRS	X X X X X X X X X X	APR-SEP	-	-
344	Piping plover	T T	X X X X X X X X X 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 X	-	-	-	APR-OCT	-
165	Atlantic sharpnose shark		X X X X X X X X	JUN-JUN	MAY-JUN	JUN-OCT	-	APR-OCT
174	Bonnethead shark		X X X X X X X X	-	SEP-NOV	-	FEB-MAR NOV-DEC	-
	Tarpon	RARE	X X X X X X X X	-	-	-	-	JUN-OCT
175	Bonnethead shark		X X X X X X X X	-	SEP-NOV	-	APR-NOV	-

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Upper Texas Coast: ESIMAP 37 (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
304	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	JUN-JUN DEC-MAR	JAN-DEC
	Silver perch	RARE	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	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-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 X	-	-	-	JAN-DEC	NOV-JUN
	Spotted seatrout	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
311	Finetooth shark		X X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
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 AUG-AUG	-	-	-	JAN-DEC
	Atlantic surfclam		X 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 X	-	-	-	-	-
	Mole crab		X 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 X	-	-	-	-	-
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
281	Atlantic seabob shrimp	RARE	X X 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 X X X	-	-	-	APR-NOV	APR-NOV
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
299	Atlantic seabob shrimp	RARE	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	-	-	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	-	-	-	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
304	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
	Brown shrimp	ABUNDANT	X X X X X X X X X X X	-	-	FEB-APR	APR-NOV	-
	Gulf stone crab	RARE	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Lesser blue crab	ABUNDANT	X X X X X X X X X X	-	-	-	SEP-NOV	-
	White shrimp	ABUNDANT	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	MAR-DEC	MAR-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

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	-	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
57	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	-	-	-	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	-	-	-	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	-
333	Kemp's ridley sea turtle	E E 0-6 NESTS	X 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

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
13	SEAFOOD WAREHOUSE PARK		

AQUACULTURE:

HUN#	Name	Contact	Phone
18	OYSTER LEASES		

BOAT RAMP:

HUN#	Name	Contact	Phone
42	BOLIVAR YACHT BASIN		

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
141	PIPING PLOVER CRITICAL HABITAT	USFWS	

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
232	BOLIVAR FLATS	HOUSTON AUDUBON (RICAHRD GIBBONS)	713/932-1639

MARINA:

HUN#	Name	Contact	Phone
259	BOLIVAR YACHT BASIN	ADRIAN VAN LUZEN	409/687-7777

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 38 (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
299	Southern kingfish	RARE	X 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	-	-	-	MAR-OCT	JAN-DEC
	Spotfin mojarra	RARE	X X X	-	-	-	-	-
	Spotted seatrout	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	X X X X X X	-	-	-	MAY-OCT	-
311	Finetooth shark		X X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
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
281	Atlantic seabob shrimp	RARE	X X X X	-	-	-	-	JUN-SEP
	Blue crab	ABUNDANT	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	MAR-DEC	MAR-DEC	MAR-DEC	JAN-DEC	JAN-DEC
	Grass shrimp	ABUNDANT	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	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
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	-	-	JUN-OCT	JUN-DEC	JAN-DEC
299	Atlantic seabob shrimp	RARE	X X	-	-	-	-	SEP-OCT
	Blue crab	HIGHLY ABUNDANT	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	MAR-DEC	MAR-DEC
	Brown shrimp	ABUNDANT	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	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gulf stone crab	RARE	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	-	-	MAY-OCT	MAY-DEC	JAN-DEC
356	Eastern oyster	UNCONSOLIDATED	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	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	Internesting	Juveniles	Adults
57	Diamondback terrapin		X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
68	Diamondback terrapin		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	-	-	-	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
109	SCHAPER PUBLIC RAMP		
120	TEXAS CITY DIKE PUBLIC RAMP		

HELIPORT:

HUN#	Name	Contact	Phone
171	HOUSTON OIL & MINERALS PORT BOLIVAR		
172	HOUSTON OIL & MINERALS PORT BOLIVAR NR 2		

Upper Texas Coast: ESIMAP 39 (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
311	Finetooth shark		X X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
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
281	Atlantic seabob shrimp	RARE	X X X X	-	-	-	-	JUN-SEP
	Blue crab	ABUNDANT	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	MAR-DEC	MAR-DEC	MAR-DEC	JAN-DEC	JAN-DEC
	Grass shrimp	ABUNDANT	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	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
285	Blue crab	ABUNDANT	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	MAR-DEC	MAR-DEC
	Brown shrimp	ABUNDANT	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	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Lesser blue crab	COMMON	X X X X X	-	-	-	JUL-OCT	SEP-DEC
	White shrimp	ABUNDANT	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	-	-	JUN-OCT	JUN-DEC	JAN-DEC
354	Eastern oyster	LOW	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	MAR-DEC	MAR-DEC	-	-	JAN-DEC
357	Eastern oyster	REEF	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	Internesting	Juveniles	Adults
68	Diamondback terrapin		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	-	-	-	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:

AIRPORT:

HUN#	Name	Contact	Phone
2	AUSTINIA		

AQUACULTURE:

HUN#	Name	Contact	Phone
18	OYSTER LEASES		

BOAT RAMP:

HUN#	Name	Contact	Phone
56	DICKINSON BAYOU RAMP		
57	DOLLAR POINT PUBLIC RAMP		
60	EAGLE POINT MARINA		
89	MOSES LAKE MARINA RAMP		
119	TACKLE TIME RAMP		
122	THREE STARS MARINA RAMP		
123	TOP WATER GRILL RAMP		

HELIPORT:

HUN#	Name	Contact	Phone
182	MAINLAND RGNL HEALTH CARE SYSTEM		
208	TDCJ/SOUTHERN RGNL MEDICAL FACILITY		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
247	THERMAL GAME FISH REFUGE	TPWD	

MARINA:

HUN#	Name	Contact	Phone
264	EAGLE POINT FISHING CAMP	JOHNNY VALENTINO	281/339-1131
277	MOSES LAKE MARINA		281/823-2550
284	RAY'S BAIT CAMP		409/945-0989
286	SAN LEON MARINA	GEORGE RIKER	281/339-1515
292	TOPWATER RESTAURANT AND MARINA	WALTER JAKUBAS	281/339-1323

NATURE CONSERVANCY:

HUN#	Name	Contact	Phone
297	DOLLAR BAY EASEMENT		
300	TEXAS CITY PRAIRIE PRESERVE		

WATER INTAKE:

HUN#	Name	Contact	Phone
326	GULF COAST WATER AUTHORITY TX CITY		

Upper Texas Coast: ESIMAP 40

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	-	-	-
	Bufflehead	UNCOMMON	X X X X X	-	-	-
	Canvasback	UNCOMMON	X X X X X	-	-	-
	Cormorants	COMMON	X X X X X X X X X X	-	-	-
	Diving birds		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	-	-	-
	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	-	-	-
	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	-	-	-
7	Redhead	0-300 BIRDS	X X X X X X X	-	-	-
41	Black skimmer		X X X X X X X X X X	-	-	-
	Cormorants		X X X X X X X X X X	-	-	-
	Diving birds		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 X	-	-	-
	Gulls		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	-	-	-
	Terns		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	-	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	-	-	-
	Wilson's plover		X X X X X X	-	-	-
71	American avocet		X X X X X X X X X X	-	MAR-APR JUL-NOV	-
	Black skimmer		X X X X X X X X X X X	-	-	-
	Brown pelican		X X X X X X X X X X X	-	-	-
	Dunlin		X X X X X X X X X	-	-	-
	Gulls		X X X X X X X X X X X	-	-	-
	Magnificent frigatebird		X X X X X X	-	-	-
	Reddish egret	T	X X X X X X X X X X X	-	-	-
	Shorebirds	HIGH	X X X X X X X X X X	-	-	-
	Short-billed dowitcher		X X X X X X X X X X X	-	MAR-MAY JUL-OCT	-
	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		X X X X X X X X X X X	-	FEB-MAY JUL-NOV	-
	Willet		X X X X X X X X X X X	-	APR-APR AUG-AUG	-
72	American white pelican		X X X X X X X	-	-	-
	Black skimmer		X X X X X X X X X X X	-	-	-
	Brown pelican		X X X X X X X X X X X	-	-	-
	Cormorants		X X X X X X X X X X X	-	-	-
	Gulls		X X X X X X X X X X X	-	-	-
	Northern harrier		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	-	-	-
	Reddish egret	T	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	-	-	-
	Wading birds		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 X X	-	-	-
74	Grebes		X X X X X X X X X X	-	-	-
	Loons		X X X X X X X	-	-	-
	Marsh birds		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	-	-	-
	Waterfowl		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	-	-	-
81	Piping plover	T T 4 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	-	-	-
	American white pelican		X X X X X X X X X X	-	-	-
	Black skimmer	100S	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	-	MAR-MAY JUL-NOV	-
	Black-necked stilt		X X X X X X X X X X	-	-	-
	Brown pelican		X X X X X X X X X X X	-	-	-
	Clapper rail		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	-	-	-
	Diving birds		X X X X X X X X X X X	-	-	-
	Diving ducks		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	-	-	-
	Forster's tern		X X X X X 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	-	-	-
	Killdeer	10S	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	-	FEB-APR JUN-NOV	-
	Loons		X X 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	-	-	-
	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 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	-	-

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 40 (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	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 X	-	-	-
	Yellowlegs	100S	X X X X X X X X X X X	-	MAR-MAY	-
					JUL-NOV	
220	Least tern	9-115 PAIRS	X 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 X X	-	-	-	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 X X X	-	SEP-NOV	-	FEB-MAR	-
							NOV-DEC	
	Tarpon	RARE	X X X X X X X	-	-	-	-	JUN-OCT
175	Bonnethead shark		X 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 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 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 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 X	-	-	-	-	MAY-OCT
	Cobia		X 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 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 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 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 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 X X	SEP-FEB	-	-	OCT-DEC	SEP-FEB
	Southern kingfish		X X 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 X	DEC-APR	-	-	-	DEC-SEP
	Spotted seatrout		X X 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 X	-	-	-	MAR-NOV	-
268	Striped mullet	ABUNDANT	X X X X X X X X X X	OCT-DEC	-	-	-	SEP-FEB
269	Striped mullet	HIGHLY ABUNDANT	X X X X X X X X	-	-	-	-	MAY-NOV
281	Atlantic bumper	ABUNDANT	X X X X X X X X	-	-	-	-	JUN-OCT
	Atlantic spadefish	RARE	X X X X X 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 X X	-	-	-	MAR-NOV	SEP-NOV
	Gafftopsail catfish	COMMON	X X 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 butterfish	RARE	X X 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
	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 X	-	-	-	APR-NOV	APR-NOV
	Spotfin mojarra	RARE	X X 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	ABUNDANT	X X X X X X X X	-	-	-	MAY-OCT	-
311	Finetooth shark		X X 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 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 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
	Atlantic surfclam		X X X X X X X X X X X	AUG-AUG	-	-	-	JAN-DEC
				MAR-MAY				
	Lettered olive		X X X X X X X X X X X	SEP-NOV	-	-	-	-
	Mole crab		X X X X X X X X X X X	-	-	-	-	JAN-DEC
	Speckled swimming crab	COMMON	X X X X X X X X X X X	APR-MAY	-	-	-	-
265	Atlantic seabob shrimp		X 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	-	-	-	-	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 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

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 40 (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
281	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 X	-	-	-	APR-NOV	APR-NOV
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	Interesting	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
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	-
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	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

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
141	PIPING PLOVER CRITICAL HABITAT	USFWS	

HELIPORT:

HUN#	Name	Contact	Phone
163	GALVESTONIAN		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
232	BOLIVAR FLATS	HOUSTON AUDUBON (RICAHRD GIBBONS)	713/932-1639

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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	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	-	-	-
	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	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	-	-	-
	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	X	-	-	-
	Shorebirds		X	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	X	-	-	-
171	American avocet	1000S	X	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	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	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	-	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 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 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 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 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 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 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 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 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 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 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 X	-	-	-	-	MAY-NOV
281	Atlantic bumper	ABUNDANT	X 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 X	-	-	-	MAR-NOV	SEP-NOV
	Gafftopsail catfish	COMMON	X 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 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 butterflyfish	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		

Upper Texas Coast: ESIMAP 42

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
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	-	-	-
63	Grebes	HIGH	X	X	X	X	X			X	X	X	X		-	-	-
	Loons	HIGH	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	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	-	-	-
83	Laughing gull		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	-	-	-
84	American oystercatcher		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	-	-	-
	Laughing gull		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	-	-	-
	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	-	-	-
85	Rails		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
86	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	-	-	-
	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	-	-	-
87	Black skimmer		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Grebes		X	X	X	X	X			X	X	X	X		-	-	-
	Loons		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	-	-	-
	Waterfowl		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
88	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	-	-	-
	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	X	-	MAR-MAY JUL-NOV	-
	Dunlin	1000S	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	100S	X	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	-	-	-
	Pelicans		X	X	X	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	-	-	-
	Ruddy turnstone	PRESENT	X	X	X	X		X	X	X	X	X	X		-	-	-
	Shorebirds	10000S	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	-	-	-
	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	-
91	Black skimmer		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	-	-	-
	Laughing gull		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	-	-	-
	Plovers		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shorebirds		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	-	-	-
163	American oystercatcher	1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
205	Black skimmer	131 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-
207	Least tern	14-39 PAIRS		X	X	X	X	X	X	X					APR-SEP	-	-
208	American oystercatcher	2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Black skimmer	2-101 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-
	Brown pelican	12 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Forster's tern	37-117 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Gull-billed tern	9 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Laughing gull	45 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Least tern	47 PAIRS		X	X	X	X	X	X	X					APR-SEP	-	-
	Roseate spoonbill	1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Royal tern	1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Tricolored heron	14 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
209	American oystercatcher	1-10 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Black skimmer	16-110 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-
	Brown pelican	65-1049 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Caspian tern	25 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Cattle egret	1-8 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Double-crested cormorant	2 INDIV	X	X	X	X				X	X	X			-	-	-
	Forster's tern	20 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Great blue heron	2-7 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	-
	Great egret	1-3 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-APR	-
	Laughing gull	157-1350 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-AUG	-	-
	Little blue heron	1-2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Neotropic cormorant	87 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-OCT	-	-
	Reddish egret	T 1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Snowy egret	1-15 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Tricolored heron	4-69 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	White ibis	8-280 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-

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 42 (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
209	Yellow-crowned night-heron	4 PAIRS	X X X X X X X X	APR-SEP	-	-
210	American oystercatcher	2-6 PAIRS	X X X X X X X X X X	FEB-JUL	-	-
	American white pelican	60 INDIV	X X X X X X	-	-	-
	Black skimmer	4-81 PAIRS	X X X X X X X X X X	APR-SEP	-	-
	Brown pelican	4-7 PAIRS	X X X X X X X X X X	APR-AUG	-	-
	Forster's tern	28 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Great blue heron	1 PAIR	X X X X X X X X X X	FEB-JUN	-	-
	Great egret	2 PAIRS	X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Laughing gull	20-351 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Neotropic cormorant	4 PAIRS	X X X X X X X X X X	FEB-OCT	-	-
	Royal tern	70-3133 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Sandwich tern	1-1750 PAIRS	X X X X X X X X	MAR-AUG	-	-
	Snowy egret	2 PAIRS	X X X X X X X X X X	APR-JUL	-	-
211	American oystercatcher	2-8 PAIRS	X X X X X X X X X X	FEB-JUL	-	-
	Black skimmer	4 PAIRS	X X X X X X X X X X	APR-SEP	-	-
	Black-crowned night-heron	1-12 PAIRS	X X X X X X X X X X	APR-AUG	APR-MAY	-
	Brown pelican	350-2615 PAIRS	X X X X X X X X X X	APR-AUG	-	-
	Caspian tern	26-107 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Cattle egret	2-78 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Double-crested cormorant	724 INDIV	X X X X X X X X	-	-	-
	Forster's tern	3-17 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Great blue heron	9-67 PAIRS	X X X X X X X X X X	FEB-JUN	-	-
	Great egret	42-236 PAIRS	X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Laughing gull	2092-6956 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Little blue heron	3-11 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Neotropic cormorant	55-641 PAIRS	X X X X X X X X X X	FEB-OCT	-	-
	Reddish egret	T 4-35 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Reddish egret (white morph)	T 1 PAIR	X X X X X X X X X X	MAR-AUG	-	-
	Roseate spoonbill	10-129 PAIRS	X X X X X X X X X X	APR-AUG	-	-
	Royal tern	11-2000 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Snowy egret	12-143 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	16-1230 PAIRS	X X X X X X X X X X	APR-AUG	-	-
	White ibis	14-23600 PAIRS	X X X X X X X X X X	FEB-JUL	-	-
	White-faced ibis	T 16-84 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
212	Yellow-crowned night-heron	1-7 PAIRS	X X X X X X X X	APR-SEP	-	-
	American oystercatcher	6-9 PAIRS	X X X X X X X X X X	FEB-JUL	-	-
	Black skimmer	1-4 PAIRS	X X X X X X X X X X	APR-SEP	-	-
	Caspian tern	2-153 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Forster's tern	4-16 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Great blue heron	1-6 PAIRS	X X X X X X X X X X	FEB-JUN	-	-
	Great egret	1-27 PAIRS	X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Green heron	4 INDIV	X X X X X X X X	APR-JUN	-	-
	Laughing gull	801-2700 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Little blue heron	2-3 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Neotropic cormorant	6 PAIRS	X X X X X X X X X X	FEB-OCT	-	-
	Reddish egret	T 6 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Roseate spoonbill	2-1200 PAIRS	X X X X X X X X X X	APR-AUG	-	-
	Royal tern	60-5625 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Sandwich tern	172 PAIRS	X X X X X X X	MAR-AUG	-	-
	Snowy egret	2-46 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	6-101 PAIRS	X X X X X X X X X X	APR-AUG	-	-
	White ibis	10-4000 PAIRS	X X X X X X X X X X	FEB-JUL	-	-
	White-faced ibis	T 27-167 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
213	Yellow-crowned night-heron	4 PAIRS	X X X X X X X X	APR-SEP	-	-
	Black skimmer	2-85 PAIRS	X X X X X X X X X X	APR-SEP	-	-
	Caspian tern	3 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Forster's tern	6-140 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Gull-billed tern	1-56 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Laughing gull	9-54 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
219	American oystercatcher	1-2 PAIRS	X X X X X X X X X X	FEB-JUL	-	-
	Black skimmer	1-152 PAIRS	X X X X X X X X X X	APR-SEP	-	-
	Brown pelican	10 PAIRS	X X X X X X X X X X	APR-AUG	-	-
	Forster's tern	3-250 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Gull-billed tern	1 PAIR	X X X X X X X X X X	APR-JUL	-	-
	Laughing gull	6-7 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Tricolored heron	1 PAIR	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
164	Atlantic sharpnose shark		X X X X X X X	-	-	-	APR-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	-	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 X	-	-	-	-	JUN-OCT
	Atlantic spadefish	RARE	X X	-	-	-	AUG-SEP	-
	Bay anchovy	HIGHLY ABUNDANT	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	-	-	-	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	-	-	-	-	JAN-DEC
	Gulf butterfish	RARE	X X X X X	-	-	-	-	-
	Gulf killifish	COMMON	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	-	-	-	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	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	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	MAY-SEP	MAY-SEP	MAY-SEP	MAR-JUN	JAN-DEC
							OCT-DEC	
	Silversides	COMMON	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	-	-	-	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	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	APR-MAY	-	-	APR-NOV	MAR-NOV
	Gizzard shad	RARE	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	-	-	-	AUG-OCT	JAN-DEC
	Gulf butterfish	RARE	X X X	-	-	-	-	-
	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	FEB-DEC
	Hardhead catfish	ABUNDANT	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 42 (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
287	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	-
288	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	HIGHLY ABUNDANT	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-SEP	JAN-DEC
	Black drum	COMMON	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	APR-MAY	-	-	APR-NOV	APR-NOV
	Gizzard shad	COMMON	X 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 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	APR-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
	Pinfish	ABUNDANT	X X X X X X X X X	-	-	-	MAR-NOV	MAR-NOV
	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	ABUNDANT	X X X X X X X X X X X	-	-	-	NOV-AUG	JAN-DEC
	Silversides	HIGHLY ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	FEB-NOV	JAN-DEC
	Spotfin mojarra	COMMON	X X X X X X X	-	-	-	-	-
	Spotted seatrout	COMMON	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	-	-	-	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
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
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
288	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC
	Brown shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	FEB-APR	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
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JUN-OCT	JUN-JAN	JAN-DEC
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	-	-	FEB-APR	MAR-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	JUN-OCT	JUN-DEC	JAN-DEC
352	Eastern oyster	REEF	X X X X X X X X X X X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
354	Eastern oyster	LOW	X X X X X X X X X X X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
355	Eastern oyster	HIGH	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	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

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	-	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	Interneesting	Juveniles	Adults
85	Diamondback terrapin		X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
89	Diamondback terrapin	HIGH	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	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	-

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

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
21	8-MILE ROAD BAIT CAMP RAMP		
62	FAT BOY'S RAMP		
83	LOUIS BAIT CAMP		
115	SPORTSMAN ROAD RAMP		

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 42 (cont.)

HUMAN USE RESOURCES: (cont.)

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
241	NORTH DEER ISLAND	HOUSTON AUDUBON (RICAHRD GIBBONS)	713/932-1639

NATURE CONSERVANCY:

HUN#	Name	Contact	Phone
299	PIERCE MARSH EASEMENT		

Upper Texas Coast: ESIMAP 43

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
41	Black skimmer		X X X X X X X X X X X	-	-	-
	Cormorants		X X X X X X X X X X X	-	-	-
	Diving birds		X X X X X X X X X X X	-	-	-
	Diving ducks		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	-	-	-
	Loons		X X X X X X X X X	-	-	-
	Pelicans		X X X X X X X X X X X	-	-	-
	Terns		X X X X X X X X X X X	-	-	-
88	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	-	-	-
	Black skimmer	100S	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	-	MAR-MAY JUL-NOV	-
	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	-	-	-
	Gulls		X X X X X X X X X X X	-	-	-
	Killdeer	10S	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	-	FEB-APR JUN-NOV	-
	Marbled godwit	100S	X 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	-	-	-
	Pelicans		X X X X 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	-	-	-
	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	-	-	-
	Waterfowl		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	-
	Yellowlegs	100S	X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
312	Sandhill crane	PRESENT	X X X X X X X X X	-	-	-
313	Greater white-fronted goose	10S	X X X X X X X X X X	-	-	-
	Ross's goose	100S	X X X X X X X X X X	-	-	-
	Snow goose	100S	X X X X X X X X X X	-	-	-
314	Greater white-fronted goose	100S	X X X X X X X X X X	-	-	-
	Ross's goose	100S	X X X X X X X X X X	-	-	-
	Snow goose	100S	X X X X X X X X X X	-	-	-
316	Ross's goose	100S	X X X X X X X X X X	-	-	-
	Snow goose	100S	X X X X X X X X X X	-	-	-
319	Greater white-fronted goose	100S	X X X X X X X X X X	-	-	-
	Ross's goose	1000S	X X X X X X X X X X	-	-	-
	Snow goose	1000S	X X X X X X X X X X	-	-	-
322	Ross's goose	10S	X X X X X X X X X X	-	-	-
	Snow goose	10S	X X X X X X X X X X	-	-	-
327	Greater white-fronted goose	10S	X X X X X X X X X X	-	-	-
	Ross's goose	1000S	X X X X X X X X X X	-	-	-
	Snow goose	1000S	X X X X X X X 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 X	-	-	-	APR-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
181	Blacktip shark		X 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 X	-	-	-	MAR-NOV	-
287	Atlantic bumper	COMMON	X X X X X X X X X	-	-	-	-	SEP-SEP
	Atlantic spadefish	RARE	X X X X 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 X	-	-	-	MAR-SEP	JAN-DEC
	Crevalle jack	COMMON	X X X X X X X X X X	-	-	-	MAR-NOV	-
	Gafftopsail catfish	COMMON	X 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 X X X X 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 X X X X X	-	-	-	JUL-NOV	-
	Spanish mackerel	COMMON	X X X X X X X X X X	-	-	-	MAY-NOV	MAY-NOV
	Spotfin mojarra	COMMON	X X X X X 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 X X X X	-	-	-	MAY-NOV	-
288	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	HIGHLY ABUNDANT	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-SEP	JAN-DEC
	Black drum	COMMON	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 X X	-	-	-	MAR-NOV	SEP-NOV
	Gafftopsail catfish	COMMON	X X X X X X X X X X	APR-MAY	-	-	APR-NOV	APR-NOV
	Gizzard shad	COMMON	X 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 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	APR-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
	Pinfish	ABUNDANT	X X X X X X X X X X	-	-	-	MAR-NOV	MAR-NOV
	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	ABUNDANT	X X X X X X X X X X X	-	-	-	NOV-AUG	JAN-DEC
	Silversides	HIGHLY ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	FEB-NOV	JAN-DEC
	Spotfin mojarra	COMMON	X X X X X X X X X X	-	-	-	-	-
	Spotted seatrout	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	X X X X X X X X X X	-	-	-	MAY-NOV	-
290	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

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 43 (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
290	Atlantic spadefish	RARE	X X X X X X X X X	-	-	-	APR-NOV	-
	Bay anchovy	ABUNDANT	X X X X X X X X X X X	MAR-NOV	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC
	Bay whiff	COMMON	X X X X X X X X X X X	-	-	-	APR-DEC	JAN-DEC
	Black drum	COMMON	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 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	-	-	-	-	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	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	APR-DEC
	Hardhead catfish	COMMON	X X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	APR-NOV	JAN-DEC
	Pinfish	COMMON	X X X X X X X X X X X	-	-	-	FEB-OCT	APR-DEC
	Red drum	ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	JUN-JUN DEC-MAR	JAN-DEC
	Silver perch	COMMON	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-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 flounder	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	RARE	X X X	-	-	-	AUG-OCT	-
	Spanish mackerel	RARE	X X	-	-	-	SEP-OCT	SEP-OCT
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	FEB-NOV	JAN-DEC
	Spotfin mojarra	COMMON	X X X X X	-	-	-	-	-
	Spotted gar	COMMON	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	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
	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 X X	-	-	-	MAR-NOV	-
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	-	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
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
288	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC
	Brown shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	FEB-APR	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
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JUN-OCT	JUN-JAN	JAN-DEC
290	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	COMMON	X X X X X X X X X X X	MAR-DEC	MAR-DEC	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp	HIGHLY 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	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	-	-	-	APR-MAY OCT-OCT	-
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JUN-OCT	JUN-DEC	MAR-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

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	-	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
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 X	-	-	-	MAR-NOV	-
331	Kemp's ridley sea turtle	E E COMMON	X 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 X

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
5	CREASY		
8	JOHNNIE VOLK FIELD		

BOAT RAMP:

HUN#	Name	Contact	Phone
73	HITCHCOCK BOAT RAMP		

HELIPORT:

HUN#	Name	Contact	Phone
168	HHI HITCHCOCK		
200	REPUBLIC HELICOPTERS		

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 44

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	-	-	-
	Bufflehead	UNCOMMON	X 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	-	-	-
	Diving birds		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 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	-	-	-
	Lesser scaup	COMMON	X 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 X	-	-	-
	Masked booby	UNCOMMON	X X X X X X X X	-	-	-
	Northern gannet	COMMON	X X X X X X X X	-	-	-
	Scoters	RARE	X X X X X X X X	-	-	-
	Shearwaters	UNCOMMON	X X X X X X X X	-	-	-
	Storm-petrels	RARE	X X X X X X	-	-	-
	Terns	COMMON-ABUNDANT	X 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 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 X	-	-	-
73	Redhead	100-7000 BIRDS	X X X X X 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 X	-	-	-	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 X X	-	SEP-NOV	-	FEB-MAR NOV-DEC	-
	Tarpon	RARE	X X X 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 X X	-	-	-	MAR-DEC	MAR-DEC
265	Atlantic bumper		X 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 X	-	-	-	-	MAY-OCT
	Cobia		X X X X 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 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 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 X X 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 X X X X	SEP-FEB	-	-	OCT-DEC	SEP-FEB
	Southern kingfish		X X X X X X X X	-	-	-	-	JUN-OCT
	Spanish mackerel	ABUNDANT	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 X	DEC-APR	-	-	-	DEC-SEP
	Spotted seatrout		X X X X 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
268	Striped mullet	ABUNDANT	X X X X X X X X X X	OCT-DEC	-	-	-	SEP-FEB
269	Striped mullet	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	-	-	MAY-NOV
311	Finetooth shark		X X X X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
369	Spinner shark		X X 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 X	APR-APR AUG-AUG	-	-	-	JAN-DEC
	Atlantic surfclam		X X 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 X X	-	-	-	-	-
	Mole crab		X X 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 X X	-	-	-	-	-
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 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 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

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	-	-

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Interesting	Juveniles	Adults
70	Kemp's ridley sea turtle	E E 7-15 NESTS	X X X X X X X X	MAR-JUL	APR-SEP	-	APR-SEP	MAR-JUL
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	-	-	-	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	-

HUMAN USE RESOURCES:

HELIPORT:

HUN#	Name	Contact	Phone
212	TOURIST RIDE SERVICES		

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 45

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	-	-	-
	Bufflehead	UNCOMMON	X 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	-	-	-
	Diving birds		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 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	-	-	-
	Lesser scaup	COMMON	X 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 X	-	-	-
	Masked booby	UNCOMMON	X X X X X X X X	-	-	-
	Northern gannet	COMMON	X X X X X X X X	-	-	-
	Scoters	RARE	X X X X X X X X	-	-	-
	Shearwaters	UNCOMMON	X X X X X X X X	-	-	-
	Storm-petrels	RARE	X X X X X X X X	-	-	-
	Terns	COMMON-ABUNDANT	X X X X X X X X X X	-	-	-
41	Black skimmer		X X X X X X X X X X	-	-	-
	Cormorants		X X X X X X X X X X	-	-	-
	Diving birds		X X X X X X X X X X	-	-	-
	Diving ducks		X X 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	-	-	-
	Loons		X X X X X X X X	-	-	-
	Pelicans		X X X X X X X X X X	-	-	-
	Terns		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	-	MAR-MAY	-
	Sanderling	100S	X X X X X X X X X X	-	JUL-NOV	-
	Shorebirds	100S	X X X X X X X X X X	-	APR-MAY	-
	Wilson's plover		X X X X X X X X	-	AUG-AUG	-
73	Redhead	100-7000 BIRDS	X X X X X X X X	-	-	-
91	Black skimmer		X X X X X X X X X X	-	-	-
	Forster's tern		X X X X X X X X X X	-	-	-
	Gulls		X X X X X X X X X X	-	-	-
	Laughing gull		X X X X X X X X X X	-	-	-
	Marsh birds		X X X X X X X X X X	-	-	-
	Mottled duck		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	-	-	-
	Plovers		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	-	-	-
	Wading birds		X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X	-	-	-
92	Sandhill crane		X X X X X X X X	-	-	-
100	Piping plover	T T 41 INDIV	X X X X X X X X X X	-	-	-
229	Black skimmer	81 PAIRS	X X X X X X X X X X	APR-SEP	-	-
	Forster's tern	42-60 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Laughing gull	6-24 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
230	Forster's tern	7-98 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Laughing gull	2-43 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
231	Black skimmer	267 PAIRS	X X X X X X X X X X	APR-SEP	-	-
	Caspian tern	2-31 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Forster's tern	4-60 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Gull-billed tern	21 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Laughing gull	3-495 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Least tern	10 PAIRS	X X X X X X X X	APR-SEP	-	-
	Royal tern	122 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Snowy egret	1 PAIR	X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	7-9 PAIRS	X X X X X X X X X X	APR-AUG	-	-
232	Black skimmer	29 PAIRS	X X X X X X X X X X	APR-SEP	-	-
	Caspian tern	14 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Forster's tern	1-73 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Gull-billed tern	7 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Laughing gull	61-370 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Royal tern	82 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Sandwich tern	14 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Tricolored heron	10 PAIRS	X X X X X X X X X X	APR-AUG	-	-
233	Black skimmer	20 PAIRS	X X X X X X X X X X	APR-SEP	-	-
	Forster's tern	4-59 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Great blue heron	2 PAIRS	X X X X X X X X X X	FEB-JUN	-	-
	Laughing gull	27-98 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Least tern	20 PAIRS	X X X X X X X X	APR-SEP	-	-
234	Forster's tern	7-59 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Laughing gull	5-109 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Tricolored heron	6 PAIRS	X X X X X X X X X X	APR-AUG	-	-
235	Caspian tern	60 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Forster's tern	4-42 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Laughing gull	13-1257 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Royal tern	84-420 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
236	Black skimmer	5-134 PAIRS	X X X X X X X X X X	APR-SEP	-	-
	Forster's tern	11-140 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Gull-billed tern	8-17 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Royal tern	9 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Sandwich tern	75 PAIRS	X X X X X X X X	MAR-AUG	-	-
237	Black skimmer	22-151 PAIRS	X X X X X X X X X X	APR-SEP	-	-
	Forster's tern	3-67 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Gull-billed tern	2-6 PAIRS	X X X X X X X X X X	APR-JUL	-	-
	Laughing gull	18 PAIRS	X X X X X X X X X X	FEB-AUG	-	-
	Least tern	118 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	-
174	Bonnethead shark		X X X X X X X	-	SEP-NOV	-	FEB-MAR	-
	Tarpon	RARE	X X X X X X	-	-	-	NOV-DEC	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	-	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	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	AUG-APR	-	-	APR-NOV	JAN-DEC
	Atlantic spadefish		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	-	-	-	-	-

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 45 (cont.)

BIOLOGICAL RESOURCES: (cont.)

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	X

=====

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
77	JAMACIA BEACH BOAT RAMP		
132	WATERMANS		

PARK:

HUN#	Name	Contact	Phone
302	GALVESTON ISLAND SP	TPWD	

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 46

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	-	-	-
	Bufflehead	UNCOMMON	X 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	-	-	-
	Diving birds		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 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	-	-	-
	Lesser scaup	COMMON	X 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 X	-	-	-
	Masked booby	UNCOMMON	X X X X X X X X	-	-	-
	Northern gannet	COMMON	X X X X X X X X	-	-	-
	Scoters	RARE	X X X X X X X	-	-	-
	Shearwaters	UNCOMMON	X X X X X X	-	-	-
	Storm-petrels	RARE	X X X X X X	-	-	-
	Terns	COMMON-ABUNDANT	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	-	-	-
	Cormorants		X X X X X X X X X X X	-	-	-
	Diving birds		X X X X X X X X X X X	-	-	-
	Diving ducks		X X 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	-	-	-
	Loons		X X X X X X X X	-	-	-
	Pelicans		X X X X X X X X X X X	-	-	-
	Terns		X X X X X X X X X X X	-	-	-
59	Piping plover	T T 3 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	-	MAR-MAY JUL-NOV	-
	Sanderling	100S	X 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	-	-	-
	Wilson's plover		X X X X X X X	-	-	-
73	Redhead	100-7000 BIRDS	X X X X X X X	-	-	-
88	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	-	-	-
	Black skimmer	100S	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	-	MAR-MAY JUL-NOV	-
	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	-	-	-
	Gulls		X X X X X X X X X X X	-	-	-
	Killdeer	10S	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	-	FEB-APR JUN-NOV	-
	Marbled godwit	100S	X 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	-	-	-
	Pelicans		X X X X 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	-	-	-
	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	-	-	-
	Waterfowl		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	-
	Yellowlegs	100S	X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
91	Black skimmer		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	-	-	-
	Gulls		X X X X X X X X X X X	-	-	-
	Laughing gull		X X X X X X X X X X X	-	-	-
	Marsh birds		X X X X X X X X X X X	-	-	-
	Mottled duck		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	-	-	-
	Plovers		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	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X X	-	-	-
94	American white pelican		X X X X X X X X X X X	-	-	-
	Brown pelican		X X X X X X X X X X X	-	-	-
	Dabbling ducks		X X X X X X X X X X	-	-	-
	Gulls		X X X X X X X X X X X	-	-	-
	Marsh birds		X X X X X X X X X X X	-	-	-
	Raptors		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	-	-	-
	Waterfowl		X X X X X X X X X X X	-	-	-
95	American avocet	100S	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	-	-	-
	Black skimmer	100S	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	-	MAR-MAY JUL-NOV	-
	Dowitchers	100S	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	PRESENT	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	-	FEB-APR JUN-NOV	-
	Marbled godwit	10S	X X X X X X X X X X X	-	MAR-APR JUL-NOV	-
	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	-	-	-
	Shorebirds	1000S	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	10S	X X X X X X X X X X X	-	APR-APR AUG-AUG	-
	Yellowlegs	10S	X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
100	Piping plover	T T 41 INDIV	X X X X X X X X X X X	-	-	-
223	Black skimmer	37-94 PAIRS	X X X X X X X X X X X	APR-SEP	-	-
	Black-crowned night-heron	1 PAIR	X X X X X X X X X X X	APR-AUG	APR-MAY	-

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 46 (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
223	Brown pelican	45-150 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	Caspian tern	72-1020 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Cattle egret	5-22 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Great blue heron	1-6 PAIRS	X X X X X X X X X X X	FEB-JUN	-	-
	Great egret	54-166 PAIRS	X X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Gull-billed tern	45-210 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Laughing gull	396-1980 PAIRS	X X X X X X X X X X X	FEB-AUG	-	-
	Reddish egret	T 6 PAIRS	X X X X X X X X X X X	MAR-AUG	-	-
	Roseate spoonbill	6-20 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	Royal tern	400-1890 PAIRS	X X X X X X X X X X X	FEB-AUG	-	-
	Sandwich tern	42-70 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Snowy egret	32-92 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	40-280 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	White ibis	5 PAIRS	X X X X X X X X X X X	FEB-JUL	-	-
224	Forster's tern	11-46 PAIRS	X X X X X X X X X X X	MAR-AUG	-	-
	Laughing gull	1-24 PAIRS	X X X X X X X X X X X	FEB-AUG	-	-
	Least tern	4-51 PAIRS	X X X X X X X X	APR-SEP	-	-
225	Black skimmer	1 PAIR	X X X X X X X X X X X	APR-SEP	-	-
	Forster's tern	24-51 PAIRS	X X X X X X X X X X X	MAR-AUG	-	-
	Laughing gull	1-45 PAIRS	X X X X X X X X X X X	FEB-AUG	-	-
	Least tern	116 PAIRS	X X X X X X X	APR-SEP	-	-
226	Black skimmer	12 PAIRS	X X X X X X X X X X X	APR-SEP	-	-
	Forster's tern	32-77 PAIRS	X X X X X X X X X X X	MAR-AUG	-	-
	Laughing gull	1-40 PAIRS	X X X X X X X X X X X	FEB-AUG	-	-
	Tricolored heron	4 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
227	Least tern	4 PAIRS	X X X X X X X X	APR-SEP	-	-
228	Black skimmer	4-185 PAIRS	X X X X X X X X X X X	APR-SEP	-	-
	Forster's tern	14-95 PAIRS	X X X X X X X X X X X	MAR-AUG	-	-
	Gull-billed tern	4-5 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Laughing gull	13-225 PAIRS	X X X X X X X X X X X	FEB-AUG	-	-
	Royal tern	2 PAIRS	X X X X X X X X X X X	FEB-AUG	-	-
	Tricolored heron	1-8 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
240	Black skimmer	11-300 PAIRS	X X X X X X X X X X X	APR-SEP	-	-
	Caspian tern	26 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Forster's tern	24-75 PAIRS	X X X X X X X X X X X	MAR-AUG	-	-
	Gull-billed tern	5-60 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Laughing gull	12-600 PAIRS	X X X X X X X X X X X	FEB-AUG	-	-
	Least tern	17-84 PAIRS	X X X X X X X	APR-SEP	-	-
	Little blue heron	3 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	6 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
313	Greater white-fronted goose	10S	X X X X	X X X	-	-
	Ross's goose	100S	X X X	X X X	-	-
	Snow goose	100S	X X X	X X X	-	-
314	Greater white-fronted goose	100S	X X X X	X X X	-	-
	Ross's goose	100S	X X X	X X X	-	-
	Snow goose	100S	X X X	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	-
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	-	SEP-NOV	-	APR-NOV	-
178	Bull shark	ABUNDANT	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	MAY-JUN	MAY-JUN	MAY-NOV	MAR-NOV	MAY-JUN
265	Atlantic bumper		X X X X X X	-	-	-	-	MAY-NOV
	Atlantic croaker	HIGHLY ABUNDANT	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	-	-	-	APR-NOV	JAN-DEC
	Atlantic tripletail		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		X X	X	-	-	-	DEC-FEB
	Silver seatrout	HIGHLY ABUNDANT	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	-	-	-	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
287	Atlantic bumper	COMMON	X	-	-	-	-	SEP-SEP
	Atlantic spadefish	RARE	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 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 butterflyfish	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

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 46 (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
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
94	Diamondback terrapin		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	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	-	-	-	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	-	-	-	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

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
30	BAY HARBOR RAMP		
35	BAYVIEW MARINA RAMP		
110	SEA LSLE RAMP		

MANAGEMENT AREA:

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

MARINA:

HUN#	Name	Contact	Phone
295	WEST BAY MARINA	DAVID WILSON	409/497-4148

Upper Texas Coast: ESIMAP 47 (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
291	Spotted seatrout	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	White mullet	COMMON	X X X X X X X	-	-	-	APR-NOV	-
292	Atlantic bumper	RARE	X X X X X X X	-	-	-	-	SEP-OCT
	Atlantic croaker	HIGHLY ABUNDANT	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 X	-	-	-	JUL-NOV	-
	Bay anchovy	ABUNDANT	X X X X X X X X X X	MAR-NOV	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC
	Bay whiff	COMMON	X X X X X X X X X X	-	-	-	JAN-OCT	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X	APR-MAY	APR-MAY	APR-MAY	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	APR-MAY	-	-	APR-OCT	APR-OCT
	Gizzard shad	RARE	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	-	-	-	AUG-OCT	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-NOV
	Hardhead catfish	ABUNDANT	X X X X X X X X X X	MAY-AUG	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC
	Pinfish	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	-	FEB-NOV	FEB-DEC
	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	ABUNDANT	X X X X X X X X X X	-	-	-	NOV-SEP	JAN-DEC
	Silver perch	COMMON	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	MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC	JAN-DEC
	Southern flounder	ABUNDANT	X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	RARE	X X X X X X	-	-	-	JUL-OCT	-
	Spanish mackerel	RARE	X X X X X X	-	-	-	MAY-OCT	MAY-OCT
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	-	FEB-OCT	JAN-DEC
	Spotfin mojarra	COMMON	X X X X X X X X X X	-	-	-	-	-
	Spotted seatrout	COMMON	X X X X X X X X X X	APR-OCT	APR-OCT	APR-OCT	JUN-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	-	-	-	APR-OCT	-
298	Atlantic croaker	HIGHLY ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Red drum	COMMON	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	-	-	-	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	APR-OCT	APR-OCT	APR-OCT	JUL-NOV	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 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
311	Finetooth shark		X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
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
287	Blue crab	ABUNDANT	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	MAR-DEC	MAR-DEC	MAR-DEC	JAN-DEC	JAN-DEC
	Grass shrimp	ABUNDANT	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	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
290	Blue crab	ABUNDANT	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	JAN-DEC
	Brown shrimp	HIGHLY 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	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gulf stone crab	RARE	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-MAY	-
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	-	OCT-OCT	-
291	Blue crab	ABUNDANT	X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-NOV	JUN-DEC	MAR-DEC
	Brown shrimp	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	FEB-APR	JAN-DEC	JAN-DEC
	Grass shrimp	ABUNDANT	X X X X X X X X X X	JAN-DEC	JAN-DEC	JAN-DEC	APR-JAN	-
	Gulf stone crab	RARE	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	-	-	-	JAN-DEC	JAN-DEC
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	-	APR-OCT	APR-OCT
292	Blue crab	ABUNDANT	X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-NOV	JUN-OCT	JAN-DEC
	Brief squid	COMMON	X X X X X X X X X X	MAR-DEC	MAR-DEC	MAR-DEC	JUN-JAN	JAN-DEC
	Brown shrimp	ABUNDANT	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	-	-	FEB-APR	JAN-DEC	-
	Gulf stone crab	COMMON	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 X X X X	NOV-MAR	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	White shrimp	ABUNDANT	X X X X X X X X X	-	-	-	APR-OCT	-
298	Brown shrimp	ABUNDANT	X X X X X X X X X X	-	-	JUN-OCT	JUN-DEC	APR-DEC
	White shrimp	ABUNDANT	X X X X X X X X X X	-	-	FEB-APR	JUN-DEC	JAN-DEC
305	Blue crab	HIGHLY ABUNDANT	X X X X X X X X X X	MAY-NOV	MAY-NOV	MAY-DEC	JUN-OCT	JAN-DEC
	Brown shrimp	ABUNDANT	X X X X X X X X X X	-	-	FEB-APR	JAN-DEC	JAN-DEC
	Gulf stone crab	COMMON	X X X X X X X X X X	NOV-MAR	MAR-NOV	MAR-DEC	APR-DEC	-
	White shrimp	ABUNDANT	X X X X X X X X	-	-	JAN-DEC	JAN-DEC	JAN-DEC
			X X X X X X X X	-	-	JUN-OCT	JUN-DEC	MAY-JUN

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
93	Bottlenose dolphin	HIGH	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	-	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
94	Diamondback terrapin		X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
103	Gulf salt marsh snake		X X X X X X X X X X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
104	Gulf salt marsh snake		X X X X X X X X X X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
328	Diamondback terrapin		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	-	-	-	MAR-NOV	-
330	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
331	Kemp's ridley sea turtle	E E COMMON	X X X X X X X X	-	-	-	APR-NOV	-

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 47 (cont.)

BIOLOGICAL RESOURCES: (cont.)

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
103	Northern river otter		X X X X X X X X X X
104	Northern river otter		X X X X X X X X X X

HUMAN USE RESOURCES:

AQUACULTURE:

HUN#	Name	Contact	Phone
16	D AND C FISHFARM INC		713/729-1105

BOAT RAMP:

HUN#	Name	Contact	Phone
51	CHOCOLATE BAYOU RAMP AT FM 2004		
74	HORSESHOE BEND RAMP		
84	LUTES MARINA RAMP AND LIFT		

HELIPORT:

HUN#	Name	Contact	Phone
145	AMOCO		

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
335	BRAZORIA NATIONAL WILDLIFE REFUGE		

Upper Texas Coast: ESIMAP 48

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	-	-	-
	Bufflehead	UNCOMMON	X X X X X X X	-	-	-
	Canvasback	UNCOMMON	X X X X X X X	-	-	-
	Cormorants	COMMON	X X X X X X X X X X	-	-	-
	Diving birds		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 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	-	-	-
	Lesser scaup	COMMON	X 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 X	-	-	-
	Masked booby	UNCOMMON	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 X	-	-	-
	Shearwaters	UNCOMMON	X X X X X X X	-	-	-
	Storm-petrels	RARE	X X X X X X	-	-	-
	Terns	COMMON-ABUNDANT	X X X X X X X X X X	-	-	-
41	Black skimmer		X X X X X X X X X X	-	-	-
	Cormorants		X X X X X X X X X X	-	-	-
	Diving birds		X X X X X X X X X X	-	-	-
	Diving ducks		X X 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	-	-	-
	Loons		X X X X X X X X	-	-	-
	Pelicans		X X X X X X X X X X	-	-	-
	Terns		X X X X X X X X X X	-	-	-
59	Piping plover	T T 3 INDIV	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	-	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	-	-	-
	Wilson's plover		X X X X X X X	-	-	-
73	Redhead	100-7000 BIRDS	X X X X X X X X	-	-	-
97	Least tern		X X X X X X X X	-	-	-
	Roseate spoonbill		X X X X X X X X X X	-	-	-
	Snowy plover		X X X X X X X X X X	-	-	-
98	Brown pelican		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	FEB-AUG	-	-
	Wading birds		X X X X X X X X X X	-	-	-
	Wilson's plover		X X X X X X X	APR-JUL	-	-
99	Piping plover	T T 70 INDIV	X X X X X X X X X X	-	-	-
100	Piping plover	T T 41 INDIV	X X X X X X X X X X	-	-	-
104	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	-	-	-
	American white pelican		X X X X X X X X	-	-	-
	Black skimmer	100S	X X X X X X X X X X	-	-	-
	Black-bellied plover	100S	X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
	Dabbling ducks		X X X X X X X X X	-	-	-
	Diving birds		X X X X X X X X X X	-	-	-
	Diving ducks		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	-	-	-
	Killdeer	10S	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	-	FEB-APR	-
	Marbled godwit	100S	X X X X X X X X X X	-	JUN-NOV MAR-APR JUL-NOV	-
	Marsh birds		X X X X X X X X X X	-	-	-
	Raptors		X X X X X X X X X X	-	-	-
	Reddish egret	T PRESENT	X X X X X X X X X X	-	-	-
	Redhead		X X X X X X X	-	-	-
	Ruddy turnstone	PRESENT	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	-	-	-
	Wading birds		X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X	-	-	-
	Western sandpiper	1000S	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	-	APR-APR AUG-AUG	-
	Yellowlegs	100S	X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
105	Piping plover	T T 54 INDIV	X X X X X X X X X X	-	-	-
246	Black skimmer	55-192 PAIRS	X X X X X X X X X X	APR-SEP	-	-
	Forster's tern	18 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Laughing gull	140-800 PAIRS	X X X X X X X X X X	FEB-AUG	-	-

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	-
172	Blennies		X X X X X X X X X X	-	-	-	-	-
	Sheepshead		X X X X X X X X X X	FEB-APR	-	-	-	JAN-DEC
174	Bonnethead shark		X 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	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
180	Blacktip shark		X X X X X X X X	-	-	-	MAR-DEC	MAR-DEC
181	Blacktip shark		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	AUG-APR	-	-	APR-NOV	JAN-DEC
	Atlantic spadefish		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	-	-	-	-	-
	Banded drum		X X X X X X	-	-	-	-	-
	Bay anchovy		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	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	-	-	MAR-NOV	-	JAN-DEC
	Florida pompano		X X X X X X X X X X	-	-	MAY-AUG	MAY-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 48 (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
265	Gafftopsail catfish							
	Gray snapper							
	Gray triggerfish	ABUNDANT				APR-NOV	JAN-DEC	JAN-DEC
	Greater amberjack						JAN-DEC	JAN-DEC
	Gulf butterflyfish	HIGHLY ABUNDANT					JAN-DEC	JAN-DEC
	Gulf menhaden				JUL-OCT			MAR-OCT
	Hardhead catfish				MAY-SEP			JAN-DEC
	King mackerel							MAY-OCT
	Lane snapper							
	Pinfish				AUG-APR			JAN-DEC
	Red drum				AUG-OCT			JAN-DEC
	Red snapper							
	Sand seatrout	ABUNDANT			MAR-SEP	MAR-SEP	MAR-SEP	SEP-FEB
	Sheepshead					JAN-MAY		JAN-DEC
	Silver perch	HIGHLY ABUNDANT						DEC-FEB
	Silver seatrout							
	Southern flounder				SEP-FEB		OCT-DEC	SEP-FEB
	Southern kingfish							JUN-OCT
	Spanish mackerel	ABUNDANT			MAY-SEP	MAY-SEP	MAR-NOV	MAR-NOV
	Spot				DEC-APR			DEC-SEP
	Spotted seatrout							SEP-FEB
	Star drum	COMMON						JAN-DEC
266	Tarpon	RARE					MAR-NOV	
268	Striped mullet	ABUNDANT			OCT-DEC			SEP-FEB
269	Striped mullet	HIGHLY ABUNDANT						MAY-NOV
287	Atlantic bumper	COMMON						SEP-SEP
	Atlantic spadefish	RARE					JUL-NOV	
	Bay anchovy	ABUNDANT			MAR-NOV	MAR-NOV	MAR-NOV	APR-NOV
	Bay whiff	COMMON					MAR-SEP	JAN-DEC
	Crevalle jack	COMMON					MAR-NOV	
	Gafftopsail catfish	COMMON			APR-MAY		APR-NOV	MAR-NOV
	Gizzard shad	RARE						JAN-DEC
	Gray snapper	COMMON					AUG-OCT	JAN-DEC
	Gulf butterflyfish	RARE						
	Gulf killifish	ABUNDANT			MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC
	Gulf menhaden	ABUNDANT					JAN-DEC	FEB-DEC
	Hardhead catfish	ABUNDANT			MAY-AUG	MAY-SEP	MAY-SEP	MAY-OCT
	Pinfish	ABUNDANT					MAR-NOV	JAN-DEC
	Sand seatrout	COMMON					JAN-DEC	JAN-DEC
	Sheepshead	ABUNDANT					NOV-AUG	JAN-DEC
	Silver perch	COMMON			MAY-SEP	MAY-SEP	MAY-SEP	FEB-DEC
	Silversides	ABUNDANT			MAR-AUG	MAR-AUG	MAR-AUG	JAN-DEC
	Southern kingfish	COMMON					JUL-NOV	
	Spanish mackerel	COMMON					MAY-NOV	MAY-NOV
	Spotfin mojarra	COMMON						
	Striped mullet	COMMON					JAN-DEC	JAN-DEC
	White mullet	COMMON					MAY-NOV	
298	Atlantic croaker	HIGHLY ABUNDANT					JAN-JUN	JAN-DEC
	Black drum	COMMON					JAN-DEC	JAN-DEC
	Red drum	COMMON					SEP-NOV	JAN-DEC
	Southern flounder	ABUNDANT					JAN-DEC	JAN-DEC
	Spot	HIGHLY ABUNDANT					FEB-NOV	JAN-DEC
	Spotted seatrout	COMMON			APR-OCT	APR-OCT	APR-OCT	JUL-NOV
311	Finetooth shark					MAY-JUN	MAY-OCT	
365	Atlantic croaker	HIGHLY ABUNDANT				DEC-APR	DEC-APR	DEC-APR
	Black drum	COMMON			FEB-JUL		MAR-JUL	AUG-JAN
	Red drum	COMMON					SEP-NOV	
	Southern flounder	ABUNDANT						OCT-NOV
	Spot	HIGHLY ABUNDANT					FEB-JUN	FEB-JUN
	Spotted seatrout	COMMON			FEB-OCT	FEB-OCT		JAN-DEC
369	Spinner shark				MAY-JUN	MAY-JUN	MAY-JUL	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			APR-APR	-	-	-	JAN-DEC
	Atlantic surfclam			AUG-AUG				
				MAR-MAY	-	-	-	JAN-DEC
				SEP-NOV				
	Lettered olive				-	-	-	-
	Mole crab			APR-MAY	-	-	-	JAN-DEC
	Speckled swimming crab	COMMON			-	-	-	-
265	Atlantic seabob shrimp				-	-	-	OCT-JAN
	Blue crab	ABUNDANT						
	Brief squid					JAN-DEC		
	Brown shrimp			MAR-DEC	MAR-DEC	MAR-DEC	JAN-DEC	JAN-DEC
	Lesser blue crab				-	-	-	MAR-OCT
	White shrimp	ABUNDANT				MAR-DEC		
287	Blue crab	ABUNDANT			MAR-SEP		-	JAN-DEC
	Brief squid	ABUNDANT			MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC
	Grass shrimp	ABUNDANT			MAR-DEC	MAR-DEC	MAR-DEC	JAN-DEC
	Gulf stone crab	COMMON			JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Lesser blue crab	COMMON			NOV-MAR	MAR-NOV	MAR-DEC	JAN-DEC
						-	-	APR-OCT
298	Brown shrimp	ABUNDANT						APR-OCT
	White shrimp	ABUNDANT				FEB-APR	MAR-NOV	
365	Brown shrimp	ABUNDANT					JUN-OCT	JAN-DEC
	White shrimp	ABUNDANT						

MARINE MAMMAL:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Mating	Calving	Pupping	Molting
167	Bottlenose dolphin	HIGH					
170	Bottlenose dolphin				JAN-DEC	-	-
339	West Indian manatee	E E VERY RARE			JAN-DEC	-	-

REPTILE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Hatching	Interesting	Juveniles	Adults
70	Kemp's ridley sea turtle	E E 7-15 NESTS						
104	Gulf salt marsh snake			MAR-JUL	APR-SEP	-	APR-SEP	MAR-JUL
328	Diamondback terrapin			MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
	Green sea turtle	T T OCCASIONAL		APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
331	Kemp's ridley sea turtle	E E COMMON				-	MAR-NOV	-
332	Green sea turtle	T T OCCASIONAL				-	APR-NOV	-
	Hawksbill sea turtle	E E OCCASIONAL				-	MAR-NOV	-
	Kemp's ridley sea turtle	E E COMMON				-	MAR-OCT	-
	Loggerhead sea turtle	T T OCCASIONAL				-	APR-NOV	APR-NOV

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 48 (cont.)

BIOLOGICAL RESOURCES: (cont.)

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	X
104	Northern river otter		X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
141	PIPING PLOVER CRITICAL HABITAT	USFWS	

Upper Texas Coast: ESIMAP 49

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	-	-	-
	Bufflehead	UNCOMMON	X X X X X X X	-	-	-
	Canvasback	UNCOMMON	X X X X X X X	-	-	-
	Cormorants	COMMON	X X X X X X X X X X	-	-	-
	Diving birds		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 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	-	-	-
	Lesser scaup	COMMON	X 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 X	-	-	-
	Masked booby	UNCOMMON	X X X X X X X X	-	-	-
	Northern gannet	COMMON	X X X X X X X X	-	-	-
	Scoters	RARE	X X X X X X X	-	-	-
	Shearwaters	UNCOMMON	X X X X X X X	-	-	-
	Storm-petrels	RARE	X X X X X X X	-	-	-
	Terns	COMMON-ABUNDANT	X X X X X X X X X X	-	-	-
41	Black skimmer		X X X X X X X X X X	-	-	-
	Cormorants		X X X X X X X X X X	-	-	-
	Diving birds		X X X X X X X X X X	-	-	-
	Diving ducks		X X 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	-	-	-
	Loons		X X X X X X X X	-	-	-
	Pelicans		X X X X X X X X X X	-	-	-
	Terns		X X X X X X X X X X	-	-	-
73	Redhead	100-7000 BIRDS	X X X X X X X X	-	-	-
97	Least tern		X X X X X X X X	-	-	-
	Roseate spoonbill		X X X X X X X X X X	-	-	-
	Snowy plover		X X X X X X X X X X	-	-	-
98	Brown pelican		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 X	-	-	-
	Shorebirds		X X X X X X X X X X	-	-	-
	Snowy plover		X X X X X X X X X X	FEB-AUG	-	-
	Wading birds		X X X X X X X X X X	-	-	-
	Wilson's plover		X X X X X X X	APR-JUL	-	-
99	Piping plover	T T 70 INDIV	X X X X X X X X X X	-	-	-
101	White-tailed hawk	T 1 NEST	X X X X X X X X X X	JAN-MAY	-	-
102	Migratory songbirds		X X	-	-	-
	Rails		X X X X X X X X X X	-	-	-
103	American white pelican		X X X X X X X X	-	-	-
	Clapper rail		X X X X X X X X X X	FEB-SEP	-	-
	Dabbling ducks		X X X X X X X X	-	-	-
	Gulls		X X X X X X X X X X	-	-	-
	Marsh birds		X X X X X X X X X X	-	-	-
	Rails	HIGH	X X X X X X X X X X	-	-	-
	Raptors	HIGH	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	-	-	-
	Wading birds	HIGH	X X X X X X X X X X	-	-	-
	Waterfowl	HIGH	X X X X X X X X X X	-	-	-
104	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	-	-	-
	American white pelican		X X X X X X X	-	-	-
	Black skimmer	100S	X X X X X X X X X X	-	-	-
	Black-bellied plover	100S	X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
	Dabbling ducks		X X X X X X X X X	-	-	-
	Diving birds		X X X X X X X X X X	-	-	-
	Diving ducks		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 X	-	-	-
	Gulls		X X X X X X X X X X	-	-	-
	Killdeer	10S	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	-	FEB-APR JUN-NOV	-
	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	-	-	-
	Raptors		X X X X X X X X X X	-	-	-
	Reddish egret	T PRESENT	X X X X X X X X X X	-	-	-
	Redhead		X X X X X X X	-	-	-
	Ruddy turnstone	PRESENT	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	-	-	-
	Wading birds		X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X	-	-	-
	Western sandpiper	1000S	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	-	APR-APR AUG-AUG	-
	Yellowlegs	100S	X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
105	Piping plover	T T 54 INDIV	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	FEB-JUL	-	-
177	American coot	1000S	X X X X X X X X	-	-	-
	American wigeon	1000S	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	-	-	-
	Canada goose	100S	X X X X X X X X	-	-	-
	Canvasback	100S	X X X X X X X	-	-	-
	Fulvous whistling-duck	10S	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 X	-	-	-
	Green-winged teal	10000S	X X X X X X X X	-	-	-
	Lesser scaup	100S	X X X X X X X X	-	-	-
	Mallard	100S	X X X X X X X	-	-	-
	Mottled duck	100S	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	1000S	X X X X X X X X	-	-	-
	Redhead	1000S	X X X X X X X	-	-	-
	Ring-necked duck	10S	X X X X X X X	-	-	-
	Ruddy duck	100S	X X X X X X X	-	-	-
	Sandhill crane	100S	X X X X X X X	-	-	-
	Snow goose	1000S	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 49 (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
241	Black skimmer	78-500 PAIRS	X X X X X X X X X X X X	APR-SEP	-	-
	Black-crowned night-heron	3 PAIRS	X X X X X X X X X X X X	APR-AUG	APR-MAY	-
	Brown pelican	15-180 PAIRS	X X X X X X X X X X X X	APR-AUG	-	-
	Caspian tern	28-140 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Forster's tern	21-70 PAIRS	X X X X X X X X X X X X	MAR-AUG	-	-
	Great blue heron	8-18 PAIRS	X X X X X X X X X X X X	FEB-JUN	-	-
	Great egret	1-184 PAIRS	X X X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Gull-billed tern	17-150 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Laughing gull	161-11300 PAIRS	X X X X X X X X X X X X	FEB-AUG	-	-
	Least tern	200 PAIRS	X X X X X X X X	APR-SEP	-	-
	Reddish egret	T 2-12 PAIRS	X X X X X X X X X X X X	MAR-AUG	-	-
	Roseate spoonbill	12-64 PAIRS	X X X X X X X X X X X X	APR-AUG	-	-
	Royal tern	79-805 PAIRS	X X X X X X X X X X X X	FEB-AUG	-	-
	Sandwich tern	250-563 PAIRS	X X X X X X X X X X	MAR-AUG	-	-
	Snowy egret	16-250 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	14-762 PAIRS	X X X X X X X X X X X X	APR-AUG	-	-
	White ibis	3-47 PAIRS	X X X X X X X X X X X X	FEB-JUL	-	-
242	Forster's tern	50 PAIRS	X X X X X X X X X X X X	MAR-AUG	-	-
	Royal tern	40 PAIRS	X X X X X X X X X X X X	FEB-AUG	-	-
243	Black-crowned night-heron	1-110 PAIRS	X X X X X X X X X X X X	APR-AUG	APR-MAY	-
	Brown pelican	6-105 PAIRS	X X X X X X X X X X X X	APR-AUG	-	-
	Cattle egret	4-158 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Forster's tern	20-102 PAIRS	X X X X X X X X X X X X	MAR-AUG	-	-
	Great blue heron	1-77 PAIRS	X X X X X X X X X X X X	FEB-JUN	-	-
	Great egret	1-1401 PAIRS	X X X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Laughing gull	126-1062 PAIRS	X X X X X X X X X X X X	FEB-AUG	-	-
	Little blue heron	3-8 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Neotropic cormorant	32-78 PAIRS	X X X X X X X X X X X X	FEB-OCT	-	-
	Reddish egret	T 4-15 PAIRS	X X X X X X X X X X X X	MAR-AUG	-	-
	Roseate spoonbill	33-195 PAIRS	X X X X X X X X X X X X	APR-AUG	-	-
	Royal tern	25 PAIRS	X X X X X X X X X X X X	FEB-AUG	-	-
	Snowy egret	6-230 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	119-680 PAIRS	X X X X X X X X X X X X	APR-AUG	-	-
	White ibis	1-253 PAIRS	X X X X X X X X X X X X	FEB-JUL	-	-
	Yellow-crowned night-heron	2 PAIRS	X X X X X X X X	APR-SEP	-	-
244	Black skimmer	42-170 PAIRS	X X X X X X X X X X X X	APR-SEP	-	-
	Forster's tern	3-25 PAIRS	X X X X X X X X X X X X	MAR-AUG	-	-
	Gull-billed tern	14 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Laughing gull	3-378 PAIRS	X X X X X X X X X X X X	FEB-AUG	-	-
	Royal tern	4-7 PAIRS	X X X X X X X X X X X X	FEB-AUG	-	-
	Tricolored heron	14 PAIRS	X X X X X X X X X X X X	APR-AUG	-	-
245	Laughing gull	110 PAIRS	X X X X X X X X X X X X	FEB-AUG	-	-
	Snowy egret	14 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	53 PAIRS	X X X X X X X X X X X X	APR-AUG	-	-
262	Black skimmer	53-514 PAIRS	X X X X X X X X X X X X	APR-SEP	-	-
	Forster's tern	2-40 PAIRS	X X X X X X X X X X X X	MAR-AUG	-	-
	Gull-billed tern	30-434 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Laughing gull	5-117 PAIRS	X X X X X X X X X X X X	FEB-AUG	-	-
	Least tern	21-70 PAIRS	X X X X X X X X	APR-SEP	-	-
322	Ross's goose	10S	X X X X X X X X	-	-	-
	Snow goose	10S	X X X X X X X X	-	-	-
330	American coot	1000S	X X X X X X X X	-	-	-
	American wigeon	1000S	X X X X X X X X	-	-	-
	Blue-winged teal	10000S	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	10S	X X 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 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	100S	X X X X X X X X	-	-	-
	Mallard	100S	X X 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 X X X	-	-	-
	Northern shoveler	1000S	X X X X X X X X X X	-	-	-
	Redhead	1000S	X X X X X X X X	-	-	-
	Ring-necked duck	1000S	X X X X X X X X	-	-	-
	Ruddy duck	10S	X X X X X X X X	-	-	-
	Sandhill crane	100S	X X X X X X X X	-	-	-
	Snow goose	10000S	X X X X X X X X	-	-	-
	Wood duck	PRESENT	X X X X X X X X X X X X	FEB-JUL	-	-
368	American coot	100S	X X X X X X X X X X	-	-	-
	American wigeon	100S	X X X X X X X X	-	-	-
	Blue-winged teal	1000S	X X X X X X X X X X	-	-	-
	Bufflehead	100S	X X X X X X X X	-	-	-
	Canada goose	10S	X X X X X X X X	-	-	-
	Canvasback	100S	X X X X X X X X	-	-	-
	Gadwall	1000S	X X X X X X X X X X	-	-	-
	Greater white-fronted goose	100S	X X X X X X X X X X	-	-	-
	Green-winged teal	1000S	X X X X X X X X X X	-	-	-
	Lesser scaup	100S	X X X X X X X X	-	-	-
	Mallard	10S	X X 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	10S	X X X X X X X X X X	-	-	-
	Northern shoveler	100S	X X X X X X X X X X	-	-	-
	Redhead	10S	X X X X X X X X	-	-	-
	Ruddy duck	100S	X X X X X X X X	-	-	-
	Sandhill crane	PRESENT	X X X X X X X X	-	-	-
	Snow goose	1000S	X X X X X 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 X	-	-	-	APR-OCT	-
174	Bonnethead shark		X X X X X X X X	-	SEP-NOV	-	FEB-MAR NOV-DEC	-
	Tarpon	RARE	X 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
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 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 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

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 49 (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
305	Bay anchovy	COMMON	X 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 X	-	-	-	-	JAN-DEC
	Black drum	COMMON	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	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
	Gafftopsail catfish	COMMON	X X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gray snapper	COMMON	X 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 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	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 X	-	-	SEP-NOV	JAN-DEC	JAN-DEC
	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	-	-	-	OCT-JUN	JAN-DEC
	Silver perch	RARE	X 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 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	MAR-OCT	MAR-OCT	MAR-OCT	SEP-NOV	JAN-DEC
	Striped mullet	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	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	-	-	-	-	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 AUG-AUG	-	-	-	JAN-DEC
	Atlantic surfclam		X 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 X	-	-	-	-	-
	Mole crab		X 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 X	-	-	-	-	-
265	Atlantic seabob shrimp		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	-	-	-	-	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
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
291	Blue crab	ABUNDANT	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC
	Brown shrimp	HIGHLY ABUNDANT	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	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	COMMON	X X X X X X X	-	-	-	APR-OCT	APR-OCT
	White shrimp	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JUN-OCT	JUN-JAN	JAN-DEC
292	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	COMMON	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	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	-
	White shrimp	ABUNDANT	X X X X X X X X X X	-	-	JUN-OCT	JUN-DEC	APR-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
305	Blue crab	HIGHLY ABUNDANT	X 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 X	-	-	FEB-APR	APR-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
	White shrimp	ABUNDANT	X X X X X X X	-	-	JUN-OCT	JUN-DEC	MAY-JUN
352	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 X	-	-	FEB-APR	-	MAR-OCT
	White shrimp	ABUNDANT	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
167	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
103	Gulf salt marsh snake		X X X X X X X X X X X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
104	Gulf salt marsh snake		X X X X X X X X X X X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
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	-
330	Diamondback terrapin		X 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 X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
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 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
103	Northern river otter		X X X X X X X X X X X
104	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
106	SAN LUIS PASS COUNTY PARK		

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 49 (cont.)

HUMAN USE RESOURCES: (cont.)

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
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141	PIPING PLOVER CRITICAL HABITAT	USFWS	

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
-----	-----	-----	-----
234	CHRISTMAS BAY COASTAL PRESERVE	TGLO-TPWD	
250	WEST BAY BIRD ISLAND	HOUSTON AUDUBON (RICAHRD GIBBONS)	713/932-1639

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
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335	BRAZORIA NATIONAL WILDLIFE REFUGE		

Upper Texas Coast: ESIMAP 50

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			-	-	-
	Storm-petrels		RARE					X	X	X						-	-	-
	Terns		COMMON-ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
73	Redhead		100-7000 BIRDS	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	-	-
104	American avocet		100S	X	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	-	-	-
	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	-
	Dabbling ducks			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	-	-	-
	Dowitchers		1000S	X	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	-	-	-
	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		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	-	-	-
	Raptors			X	X	X	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	-	-	-
	Redhead			X	X	X							X	X	X	-	-	-
	Ruddy turnstone		PRESENT	X	X	X	X	X		X	X	X	X	X	X	-	-	-
	Shorebirds		1000S	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	-	-	-
	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	-
105	Piping plover	T T	54 INDIV	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
345	Piping plover	T T	1 INDIV	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
368	American coot		100S	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	-	-	-
	Bufflehead		100S	X	X	X								X	X	-	-	-
	Canada goose		10S	X	X	X							X	X	X	-	-	-
	Canvasback		100S	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		10S	X	X	X						X	X	X	X	-	-	-
	Northern shoveler		100S	X	X	X	X					X	X	X	X	-	-	-
	Redhead		10S	X	X	X							X	X	X	-	-	-
	Ruddy duck		100S	X	X	X							X	X	X	-	-	-
	Sandhill crane		PRESENT	X	X								X	X	X	-	-	-
	Snow goose		1000S	X	X	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	X			-	-	-	APR-OCT	-
173	Bonnethead shark			X	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
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	X	-	-	-	MAR-DEC	MAR-DEC
265	Atlantic bumper					X	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	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

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 50 (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
292	Brown shrimp	ABUNDANT	X X X X X X X X X X X	-	-	FEB-APR	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	-
	White shrimp	ABUNDANT	X X X X X X X X	-	-	JUN-OCT	JUN-DEC	APR-DEC
300	Blue crab	ABUNDANT	X 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 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 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 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 X	NOV-MAR	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	White shrimp	ABUNDANT	X X 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 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	-	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
104	Gulf salt marsh snake		X X X X X X X X X X X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
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	-	-	-	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
104	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
335	BRAZORIA NATIONAL WILDLIFE REFUGE		

Upper Texas Coast: ESIMAP 51 (cont.)

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
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25	BASTROP BAYOU COUNTY RD 227 STATE RAMP		
26	BASTROP BAYOU RAMP AT CR 227		
27	BASTROP MARINA		
85	MARLIN MARINA RAMP		
93	OYSTER CREEK RAMP		
94	OYSTER CREEK RAMP AT CR 227		
125	UNDER THE BRIDGE BAR BAIT CAMP RAMP		

HELIPORT:

HUN#	Name	Contact	Phone
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143	AIR LOGISTICS - FREEPORT		

MARINA:

HUN#	Name	Contact	Phone
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254	BASTROP MARINA		979/233-4091
267	JABO'S TACKLEBOX	JABO THOMPSON	979/233-2051
269	KIRBY MARINA		979/239-1081

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
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335	BRAZORIA NATIONAL WILDLIFE REFUGE		

Upper Texas Coast: ESIMAP 52

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	-	-	-
	Bufflehead	UNCOMMON	X 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	-	-	-
	Diving birds		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 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	-	-	-
	Lesser scaup	COMMON	X 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 X	-	-	-
	Masked booby	UNCOMMON	X X X X X X X X	-	-	-
	Northern gannet	COMMON	X X X X X X X X	-	-	-
	Scoters	RARE	X X X X X X X X	-	-	-
	Shearwaters	UNCOMMON	X X X X X X X X	-	-	-
	Storm-petrels	RARE	X X X X X X X X	-	-	-
	Terns	COMMON-ABUNDANT	X X X X X X X X X X	-	-	-
73	Redhead	100-7000 BIRDS	X X X X X X X X	-	-	-
81	Piping plover	T T 4 INDIV	X X X X X X X X X X	-	-	-
98	Brown pelican		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 X	-	-	-
	Shorebirds		X X 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 X	APR-JUL	-	-
103	American white pelican		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	-	-
	Dabbling ducks		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	-	-	-
	Rails	HIGH	X X X X X X X X X X X X	-	-	-
	Raptors	HIGH	X X X X X X X X X X X X	-	-	-
	Shorebirds	HIGH	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	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	-	-	-
104	American avocet	100S	X 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 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	-
	Dabbling ducks		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 X X	-	-	-
	Dowitchers	1000S	X 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 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	100S	X X 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	-	-	-
	Raptors		X X X 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	-	-	-
	Redhead		X X X X X X X X X X	-	-	-
	Ruddy turnstone	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 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	-	-	-
	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 X	-	MAR-MAY JUL-NOV	-
105	Piping plover	T T 54 INDIV	X X X X X X X X X X X X	-	-	-
113	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	-	-	-
	Raptors		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	-	-	-
	Shorebirds	HIGH	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	HIGH	X X X X X X X X X X X X	-	-	-
114	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 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	-	-	-
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 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 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 X X 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 X	-	-	-
	Peregrine falcon	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	-	-	-
	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 X X X X X	-	-	-
119	Piping plover	T T 10 INDIV	X X X X X X X X X X X X	-	-	-
137	Gulls		X X X X X X X X X X X X	-	-	-
	Shorebirds	HIGH	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	HIGH	X X X X X X X X X X X X	-	-	-
259	Black skimmer	320-1100 PAIRS	X X X X X X X X X X X X	APR-SEP	-	-
	Gull-billed tern	25-98 PAIRS	X X X X X X X X X X X X	APR-JUL	-	-
	Laughing gull	16 PAIRS	X X X X X X X X X X X X	FEB-AUG	-	-
	Least tern	12-40 PAIRS	X X X X X X X X X X	APR-SEP	-	-

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 52 (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
305	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 X	-	-	-	FEB-NOV	JAN-DEC
	Spotted seatrout	COMMON	X 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 X	-	-	-	JAN-DEC	JAN-DEC
308	Red drum	HIGH	X 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 X	JUN-JUL	-	-	-	MAY-AUG
	Gray snapper		X X X X X X X X X X X	-	-	-	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
370	Spinner shark		X 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 X	APR-APR AUG-AUG	-	-	-	JAN-DEC
	Atlantic surfclam		X 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 X	-	-	-	-	-
	Mole crab		X 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 X	-	-	-	-	-
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	-	-	-	-	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
300	Blue crab	ABUNDANT	X 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-NOV	-
	Grass shrimp	COMMON	X 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 X	NOV-MAR	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Lesser blue crab	COMMON	X X X X X X X X X	-	-	-	APR-NOV	-
	White shrimp	ABUNDANT	X 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 X	MAY-NOV	MAY-NOV	MAY-DEC	JAN-DEC	JAN-DEC
	Brown shrimp	ABUNDANT	X 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 X	NOV-MAR	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	White shrimp	ABUNDANT	X X X 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 X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
365	Brown shrimp	ABUNDANT	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
167	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	Interesting	Juveniles	Adults
55	Kemp's ridley sea turtle	E E 0-1 NEST	X X X X X X X	MAR-JUL	APR-SEP	-	APR-SEP	MAR-JUL
103	Gulf salt marsh snake		X X X X X X X X X X X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
104	Gulf salt marsh snake		X X X X X X X X X X X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
110	Kemp's ridley sea turtle	E E 1 NEST	X X X X X X X	MAR-JUL	APR-SEP	-	APR-SEP	MAR-JUL
111	Kemp's ridley sea turtle	E E 3-5 NESTS	X X X X X X X	MAR-JUL	APR-SEP	-	APR-SEP	MAR-JUL
112	Loggerhead sea turtle	T T 1 NEST	X X X X X X X X	APR-SEP	MAY-OCT	-	MAY-OCT	APR-SEP
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 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 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
103	Northern river otter		X X X X X X X X X X X
104	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
36	BEACH BAIT AND TACKLE RAMP		
44	BRIDGE BAIT BOAT RAMP		
65	FREEPORT COMMUNITY CENTER PUBLIC RAMP		
66	FREEPORT MUNICIPAL PARK PUBLIC RAMP		
67	FREEPORT NEW BRAZOS RIVER PUBLIC RAMP		
91	OLD COAST GUARD STATION RAMP		
98	QUINTANA BRIDGE PUBLIC RAMP		
127	VILLAGE OF SURFSIDE PUBLIC RAMP		

COAST GUARD:

HUN#	Name	Contact	Phone
138	USCG FREEPORT		979/482-1267

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
140	PIPING PLOVER CRITICAL HABITAT	USFWS	

HELIPORT:

HUN#	Name	Contact	Phone
150	BUCCANEER SHORE FACILITY		
165	GO HELITRANS		
167	HERCULES MARINE SERVICES CORP		
181	M-I DRILLING FLUIDS COMPANY		
188	MIDSTREAM FREEPORT		

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 52 (cont.)

HUMAN USE RESOURCES: (cont.)

MARINA:

HUN#	Name	Contact	Phone
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260	BRIDGE HARBOR MARINA		979/233-2101
276	MITCHELL'S PLEASURE PIER		979/233-0722

WATER INTAKE:

HUN#	Name	Contact	Phone
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313	CITY OF FREEPORT		
323	DOW CHEMICAL COMPANY PLANT A		

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
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335	BRAZORIA NATIONAL WILDLIFE REFUGE		

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	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	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	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	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	-	-
	Diving birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
115	Marsh birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Osprey		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	-	-	-
	Wading birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
117	Waterfowl		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	American white pelican		X	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	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	-	-	-
	Redhead	1000-20000 BIRDS	X	X	X								X	X	X	-	-
	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						-	-	-
	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	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	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	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	-
	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	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	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	APR-JUL	-	-
313	Greater white-fronted goose	10S	X X X X X X X	-	-	-
	Ross's goose	100S	X X X X X X X	-	-	-
	Snow goose	100S	X X X X X X X	-	-	-
315	Greater white-fronted goose	10S	X X X X X X X X X	-	-	-
316	Ross's goose	100S	X X X X X X X	-	-	-
	Snow goose	100S	X X X X X X X	-	-	-
319	Greater white-fronted goose	100S	X X X X X X X X X	-	-	-
	Ross's goose	1000S	X X X X X X X	-	-	-
	Snow goose	1000S	X X X X X X X	-	-	-
321	Ross's goose	1000S	X X X X X X X	-	-	-
	Snow goose	1000S	X X X X X X X	-	-	-
322	Ross's goose	10S	X X X X X X X	-	-	-
	Snow goose	10S	X X X X X X X	-	-	-
364	American coot	10000S	X X X X X X X X X	-	-	-
	American wigeon	10000S	X X X X X X X X X	-	-	-
	Blue-winged teal	1000S	X X X X X X X X X X X	-	-	-
	Bufflehead	10S	X X X X X X X	-	-	-
	Canada goose	100S	X X X X X X X X X	-	-	-
	Canvasback	100S	X 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 X X X	-	-	-
	Greater white-fronted goose	100S	X X X X X X X X X	-	-	-
	Green-winged teal	10000S	X X X X X X X X X X X	-	-	-
	Lesser scaup	1000S	X X X X X X X X X X X	-	-	-
	Mallard	10S	X X X X X X X X X X X	-	-	-
	Mottled duck	100S	X 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 X X X X	-	-	-
	Northern shoveler	10000S	X X X X X X X X X X X	-	-	-
	Redhead	10S	X X X X X X X X X X X	-	-	-
	Ring-necked duck	100S	X X X X X X X X X X X	-	-	-
	Ruddy duck	100S	X X X X X X X X X X X	-	-	-
	Sandhill crane	10S	X X X X X X X X X X X	-	-	-
	Snow goose	10000S	X X X X X X X X X X X	-	-	-
	Wood duck	10S	X X 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 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 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 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 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 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 X	SEP-FEB	-	-	OCT-DEC	SEP-FEB
	Southern kingfish		X 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 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 X X X	OCT-DEC	-	-	-	SEP-FEB
269	Striped mullet	HIGHLY ABUNDANT	X X 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 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		

Upper Texas Coast: ESIMAP 54

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	-	-	-
	Bufflehead	UNCOMMON	X X X X X X X X	-	-	-
	Canvasback	UNCOMMON	X X X X X X X X	-	-	-
	Cormorants	COMMON	X X X X X X X X X X X	-	-	-
	Diving birds		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 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	-	-	-
	Lesser scaup	COMMON	X 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 X	-	-	-
	Masked booby	UNCOMMON	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 X	-	-	-
	Storm-petrels	RARE	X X X X X X	-	-	-
	Terns	COMMON-ABUNDANT	X X X X X X X X X X X	-	-	-
118	Redhead	1000-20000 BIRDS	X X X X X X X X X X	-	-	-
120	Diving birds		X X X X X X X X X X X	-	-	-
	Gulls		X X X X X X X X X X X	-	-	-
	Marsh birds		X X X X X X X X X X X	-	-	-
	Pelicans		X X X X X X X X X X X	-	-	-
	Peregrine falcon	T	X X X X X X X X X X	-	-	-
	Raptors		X X X X X X X X X X X	-	-	-
	Shorebirds	HIGH	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	HIGH	X X X X X X X X X X X	-	-	-
	Waterfowl		X X X X X X X X X X X	-	-	-
	Wilson's plover		X X X X X X X	-	-	-
121	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	-	-	-
	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 X	-	MAR-MAY JUL-NOV	-
	Dunlin	1000S	X 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 MAR-APR JUL-NOV	-
	Marbled godwit	10S	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	-	-	-
	Osprey		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 X	-	-	-
	Raptors		X X X X X X X X X X X X	-	-	-
	Red knot	PRESENT	X 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	-	-	-
	Shorebirds	1000S	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	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 X X	-	MAR-MAY JUL-NOV	-
122	American avocet	100S	X 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	-	-	-
	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 X X	-	MAR-MAY JUL-NOV	-
	Dunlin	1000S	X 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 MAR-APR JUL-NOV	-
	Marbled godwit	PRESENT	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	-	-	-
	Raptors		X X X X X X X X X X X X	-	-	-
	Red knot	PRESENT	X 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	-	-	-
	Shorebirds	1000S	X X X X X X X X X X X X	-	-	-
	Snow goose	HIGH	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	1000S	X 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 X	-	-	-
	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 X X X X X	-	-	-
	Yellowlegs	100S	X X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
124	Scaup	HIGH	X X X X X X X X X X	-	-	-
125	American white pelican		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	-	-	-
	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	-	-	-
	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 X	-	-	-
	Snowy plover		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	-	-	-
	Wilson's plover		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 54 (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
128	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	-	-	-
	Peregrine falcon	T	X X X X X X X X X	-	-	-
	Shorebirds	HIGH	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	APR-JUL	-	-
129	Piping plover	T T 31 INDIV	X X X X X X X X X X X	-	-	-
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	-	-	-
	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	APR-JUL	-	-
261	Black-crowned night-heron	1-20 PAIRS	X X X X X X X X X X X	APR-AUG	APR-MAY	-
	Brown pelican	29 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	Cattle egret	92 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Forster's tern	10 PAIRS	X X X X X X X X X X X	MAR-AUG	-	-
	Great blue heron	35-79 PAIRS	X X X X X X X X X X X	FEB-JUN	-	-
	Great egret	88-532 PAIRS	X X X X X X X X X X X	MAR-JUL	MAR-APR	-
	Laughing gull	27-1764 PAIRS	X X X X X X X X X X X	FEB-AUG	-	-
	Neotropic cormorant	6-16 PAIRS	X X X X X X X X X X X	FEB-OCT	-	-
	Reddish egret	T 2-22 PAIRS	X X X X X X X X X X X	MAR-AUG	-	-
	Roseate spoonbill	19-278 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	Snowy egret	17-146 PAIRS	X X X X X X X X X X X	APR-JUL	-	-
	Tricolored heron	9-186 PAIRS	X X X X X X X X X X X	APR-AUG	-	-
	White ibis	8-70 PAIRS	X X X X X X X X X X X	FEB-JUL	-	-
	White-faced ibis	T 3 PAIRS	X X X X X X X X X X X	FEB-AUG	-	-
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	-	-	-
	Bufflehead	10S	X X X X X	-	-	-
	Canada goose	100S	X X X X X X X	-	-	-
	Canvasback	100S	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	-	-	-
	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	-	-	-
	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	-	-	-
	Ring-necked duck	100S	X X X X X X X	-	-	-
	Ruddy duck	100S	X X X X X X X	-	-	-
	Sandhill crane	10S	X X X X X X X	-	-	-
	Snow goose	10000S	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
123	Black drum	HIGH	X X X X X X X X X X X	FEB-JUL	-	MAR-JUL	AUG-JAN	JAN-DEC
	Red drum	HIGH	X X X X X X X X X X X	-	-	SEP-NOV	JAN-DEC	JAN-DEC
	Spotted seatrout	HIGH	X X X X X X X X X X X	FEB-OCT	FEB-OCT	-	-	JAN-DEC
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 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 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	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 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 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
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	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
	Pinfish	COMMON	X X X X X X X X	-	-	-	APR-NOV	APR-NOV

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 54 (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	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	-	-	-	NOV-JUL	JAN-DEC
	Silversides	RARE	X 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 X	-	-	-	JAN-DEC	JAN-DEC
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	FEB-NOV	JAN-DEC
	Spotfin mojarra	RARE	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 X	-	-	-	FEB-OCT	-
295	Black drum	COMMON	X 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 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 X	-	-	SEP-NOV	JAN-DEC	JAN-DEC
305	Atlantic croaker	HIGHLY ABUNDANT	X 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 X	-	-	-	MAY-DEC	-
	Bay anchovy	COMMON	X 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 X	-	-	-	-	JAN-DEC
	Black drum	COMMON	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	-	MAY-AUG	MAY-AUG	APR-NOV	JAN-DEC
	Gafftopsail catfish	COMMON	X X X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gray snapper	COMMON	X 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 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	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 X	-	-	SEP-NOV	JAN-DEC	JAN-DEC
	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	-	-	-	OCT-JUN	JAN-DEC
	Silver perch	RARE	X 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 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	MAR-OCT	MAR-OCT	MAR-OCT	SEP-NOV	JAN-DEC
	Striped mullet	COMMON	X 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 X	-	-	-	JAN-DEC	JAN-DEC
370	Spinner shark		X 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
123	Blue crab	HIGH	X X X X X X X X X X X	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
166	Atlantic ghost crab		X 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 X	MAR-MAY SEP-NOV	-	-	-	JAN-DEC
	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
	Speckled swimming crab	COMMON	X X X X X X X X X X X	-	-	-	-	-
265	Atlantic seabob shrimp		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	-	-	-	-	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
289	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	MAR-OCT	MAR-OCT	MAR-OCT	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 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 X	MAY-NOV	MAY-NOV	MAY-DEC	JAN-DEC	JAN-DEC
305	Blue crab	HIGHLY ABUNDANT	X 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 X	-	-	FEB-APR	APR-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
	White shrimp	ABUNDANT	X X 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 X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
352	Eastern oyster	REEF	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	-	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 X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
	Gulf salt marsh snake		X 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 X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
	Gulf salt marsh snake		X 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 X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
	Gulf salt marsh snake		X X X X X X X X X X X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
125	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	-	-	-	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
121	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
105	SAN BERNARD RIVER PUBLIC RAMP		

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
140	PIPING PLOVER CRITICAL HABITAT	USFWS	

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
236	JUSTIN HURST WMA	TPWD	

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
337	SAN BERNARD NATIONAL WILDLIFE REFUGE		

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 55

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	-	-	-
	Bufflehead	UNCOMMON	X 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	-	-	-
	Diving birds		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 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	-	-	-
	Lesser scaup	COMMON	X 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 X	-	-	-
	Masked booby	UNCOMMON	X X X X X X X X	-	-	-
	Northern gannet	COMMON	X X X X X X X X	-	-	-
	Scoters	RARE	X X X X X X X X	-	-	-
	Shearwaters	UNCOMMON	X X X X X X X X	-	-	-
	Storm-petrels	RARE	X X X X X X X X	-	-	-
	Terns	COMMON-ABUNDANT	X X X X X X X X X X	-	-	-
118	Redhead	1000-20000 BIRDS	X X 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 X X	-	MAR-MAY JUL-NOV	-
	Dunlin	1000S	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	-	-	-
	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 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 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 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 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 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 X X	-	MAR-MAY JUL-NOV	-
124	Scaup	HIGH	X X X X X X X X X X	-	-	-
125	American white pelican		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	-	-	-
	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	-	-	-
	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 X	-	-	-
	Snowy plover		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	-	-	-
	Wilson's plover		X X X X X X X X X X	-	-	-
126	American oystercatcher		X X X X X X X X X X X X	-	-	-
127	Snowy plover		X X X X X X X X X X X X	FEB-AUG	-	-
	Wilson's plover		X X X X X X X X X X	APR-JUL	-	-
128	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	-	-	-
	Least tern		X X X X X X X X X X	-	-	-
	Peregrine falcon	T	X X X X X X X X X X X X	-	-	-
	Shorebirds	HIGH	X 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 X	FEB-AUG	-	-
	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	HIGH	X X X X X X X X X X	APR-JUL	-	-
129	Piping plover	T T 31 INDIV	X X X X X X X X X X X X	-	-	-
135	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	-	-	-
	Least tern		X X X X X X X X X X	-	-	-
	Peregrine falcon	T	X X X X X X X X X X X X	-	-	-
	Piping plover	T T 27 INDIV	X X X X X X X X X X X X	-	-	-
	Shorebirds	HIGH	X 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 X	FEB-AUG	-	-
	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	HIGH	X X X X X X X X X X	APR-JUL	-	-
316	Ross's goose	100S	X X X X X X X X X X	-	-	-
	Snow goose	100S	X X X X X X X X X X	-	-	-
321	Ross's goose	1000S	X X X X X X X X X X	-	-	-
	Snow goose	1000S	X X X X X X X X X X	-	-	-
345	Piping plover	T T 1 INDIV	X X X X X X X X X X X X	-	-	-
364	American coot	10000S	X X X X X X X X X X	-	-	-
	American wigeon	10000S	X X X X X X X X X X	-	-	-
	Blue-winged teal	1000S	X X X X X X X X X X	-	-	-
	Bufflehead	10S	X X X X X X X X X X	-	-	-
	Canada goose	100S	X X X X X X X X X X	-	-	-
	Canvasback	100S	X X X X 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 X X	-	-	-
	Greater white-fronted goose	100S	X X X X X X X X X X	-	-	-
	Green-winged teal	10000S	X X X X X X X X X X	-	-	-
	Lesser scaup	1000S	X X X X X X X X X X	-	-	-
	Mallard	10S	X X X X 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

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 55 (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
301	Silversides	COMMON	X 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 X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	COMMON	X X X X X	-	-	-	JUN-NOV	-
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	-	FEB-OCT	FEB-NOV
	Spotfin mojarra	COMMON	X X X X	-	-	-	-	-
	Spotted seatrout	COMMON	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-OCT	JUN-NOV	JAN-DEC
	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	-	-	-	MAY-OCT	-
305	Atlantic croaker	HIGHLY ABUNDANT	X 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 X	MAR-NOV	MAR-NOV	MAR-NOV	JAN-NOV	JAN-DEC
	Bay whiff	COMMON	X 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 X	-	-	-	JAN-DEC	JAN-DEC
	Bull shark	COMMON	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 X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gray snapper	COMMON	X 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 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	RARE	X X X X X X X	-	-	-	MAR-NOV	MAR-NOV
	Red drum	ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X 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 X	MAY-SEP	MAY-SEP	MAY-SEP	OCT-FEB	JAN-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 X	-	-	-	FEB-NOV	JAN-DEC
	Spotted seatrout	COMMON	X 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 X	-	-	-	JAN-DEC	JAN-DEC
308	Red drum	HIGH	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
367	Dwarf seahorse		X X X X X X X X X X X	-	-	-	-	-
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 X	APR-APR AUG-AUG	-	-	-	JAN-DEC
	Atlantic surfclam		X 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 X	-	-	-	-	-
	Mole crab		X 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 X	-	-	-	-	-
265	Atlantic seabob shrimp		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	-	-	-	-	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
289	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	MAR-OCT	MAR-OCT	MAR-OCT	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	-	-	-	MAY-NOV	-
	White shrimp	ABUNDANT	X X 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 X	MAY-NOV	MAY-NOV	MAY-DEC	JAN-DEC	JAN-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	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Brief squid	COMMON	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	-	-	FEB-APR	MAR-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-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	APR-NOV	MAY-DEC	JAN-DEC
305	Blue crab	HIGHLY ABUNDANT	X 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 X	-	-	FEB-APR	APR-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
	White shrimp	ABUNDANT	X X X X 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 X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
352	Eastern oyster	REEF	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	-	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
55	Kemp's ridley sea turtle	E E 0-1 NEST	X X X X X X X	MAR-JUL	APR-SEP	-	APR-SEP	MAR-JUL
121	Diamondback terrapin		X 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 X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
125	Diamondback terrapin		X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
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	-	-	-	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
121	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
46	BRIDGE COVE MARINA RAMP		

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
140	PIPING PLOVER CRITICAL HABITAT	USFWS	

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
337	SAN BERNARD NATIONAL WILDLIFE REFUGE		

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 56

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	-	-	-	
	Bufflehead	UNCOMMON	X X X X X X X	-	-	-	
	Canvasback	UNCOMMON	X X X X X X X	-	-	-	
	Cormorants	COMMON	X X X X X X X X X X X	-	-	-	
	Diving birds		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 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	-	-	-	
	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	-	-	-	
	Northern gannet	COMMON	X X X X X X X X X	-	-	-	
	Scoters	RARE	X X X X X X	-	-	-	
	Shearwaters	UNCOMMON	X X X X X X	-	-	-	
	Storm-petrels	RARE	X X X X X	-	-	-	
	Terns	COMMON-ABUNDANT	X X X X X X X X X X X	-	-	-	
118	Redhead	1000-20000 BIRDS	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	-	-	-	
	Bald eagle	T	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	-	-	-	
	Black-bellied plover	100S	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	-	-	-	
	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 X	-	-	-	
	Gulls		X X X X X X X X X X X	-	-	-	
	Killdeer	10S	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	-	FEB-APR JUN-NOV	-	
	Marbled godwit	10S	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	-	-	-	
	Osprey		X X X X X X X X X	-	-	-	
	Pelicans		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	-	-	-	
	Red knot	PRESENT	X X X X X X	-	-	-	
	Reddish egret	T	PRESENT	X X X X X X X X X X X	-	-	-
	Shorebirds	1000S	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	HIGH	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	-	
	Willet	100S	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	-	
131	Gulls		X X X X X X X X X X X	-	-	-	
	Least tern		X X X X X X X	-	-	-	
	Peregrine falcon	T	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	HIGH	X X X X X X X X X X X	-	-	-	
	Waterfowl		X X X X X X X X X X X	-	-	-	
	Wilson's plover	HIGH	X X X X X X X	-	APR-JUL	-	
132	American avocet		X X X X X X X X X X X	-	MAR-APR JUL-NOV	-	
	Black skimmer		X X X X X X X X X X X	-	-	-	
	Black-necked stilt		X X X X X X X X X	-	-	-	
	Wading birds		X X X X X X X X X X X	-	-	-	
133	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	-	-	-	
	Black skimmer	100S	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	-	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	-	-	-	
	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	-	DEC-MAR	-	
	Long-billed curlew	PRESENT	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	-	
	Marsh birds		X X X X X X X X X X X	-	-	-	
	Raptors		X X X X X X X X X X X	-	-	-	
	Red knot	PRESENT	X X X X X X	-	-	-	
	Reddish egret	T	PRESENT	X X X X X X X X X X X	-	-	-
	Sandhill crane	HIGH	X X X X X X X X	-	-	-	
	Shorebirds	1000S	X X X X X X X X X X X	-	-	-	
	Wading birds		X X X X X X X X X X X	-	-	-	
	Waterfowl		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	-	
	Yellowlegs	100S	X 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	-	-	-	
	Cormorants		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 X	-	-	-	
	Geese		X 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	-	-	-	
	Loons		X X X X X X X X X	-	-	-	
	Pelicans		X X X X X X X X X X X	-	-	-	
	Raptors		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	-	-	-	
	Wading birds		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 56 (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
135	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 27 INDIV	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	APR-JUL	-	-
136	American avocet		X 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	-	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	-	-	-
	Least tern		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 X	-	APR-MAY AUG-AUG	-
	Shorebirds	100S	X X X X X X X X X X X	-	-	-
	Snowy plover		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	-	-	-
	Wilson's plover		X X X X X X X	APR-JUL	-	-
152	Piping plover	T T 17 INDIV	X X X X X X X X X X X	-	-	-
277	Bald eagle	T 1 NEST	X X X X X X X X X X X	OCT-JUL	-	-
322	Ross's goose	10S	X X X X X X X	-	-	-
	Snow goose	10S	X X X X X X X	-	-	-
366	American coot	1000S	X X X X X X X X	-	-	-
	American wigeon	1000S	X X X X X X X X X	-	-	-
	Blue-winged teal	1000S	X X X X X X X X X X	-	-	-
	Bufflehead	10S	X X X X X X X	-	-	-
	Canada goose	100S	X X X X X X X	-	-	-
	Gadwall	1000S	X X X X X X X X	-	-	-
	Greater white-fronted goose	10S	X X X X X X X X	-	-	-
	Green-winged teal	1000S	X X X X X X X X X	-	-	-
	Lesser scaup	100S	X X X X X X X X	-	-	-
	Mallard	PRESENT	X X X X X X X	-	-	-
	Mottled duck	10S	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	100S	X X X X X X X X X	-	-	-
	Redhead	10S	X X X X X X X	-	-	-
	Ruddy duck	100S	X X X X X X X	-	-	-
	Snow goose	1000S	X X X X 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	-
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 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 X	-	-	-	MAR-DEC	MAR-DEC
181	Blacktip shark		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 X	-	-	-	-	MAY-OCT
	Cobia		X X 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 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 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 X	SEP-FEB	-	-	OCT-DEC	SEP-FEB
	Southern kingfish		X X X X X X	-	-	-	-	JUN-OCT
	Spanish mackerel	ABUNDANT	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 X	DEC-APR	-	-	-	DEC-SEP
	Spotted seatrout		X 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 X X	OCT-DEC	-	-	-	SEP-FEB
301	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	APR-DEC
	Atlantic spadefish	RARE	X X X X X X X	-	-	-	JUL-OCT	-
	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 X	-	-	-	MAR-DEC	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Common snook	VERY RARE	X X X X X X X	-	-	-	APR-NOV	-
	Crevalle jack	COMMON	X X X X X X X X	-	-	-	APR-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	-	-	-	JAN-DEC	JAN-DEC
	Gray snapper	COMMON	X X X X X X X X X X X	-	-	-	AUG-OCT	JAN-DEC
	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	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
	Pinfish	ABUNDANT	X X X X X X X X X X X	-	-	-	FEB-NOV	JUN-JAN
	Red drum	COMMON	X X X X X X X X X X X	-	-	AUG-NOV	JAN-DEC	JAN-DEC
	Sand seatrout	COMMON	X X X X X X X X X X X	-	-	-	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 56 (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
301	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	JAN-DEC	JAN-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 flounder	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	COMMON	X X X X X X X X X X	-	-	-	JUN-NOV	-
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	-	FEB-OCT	FEB-NOV
	Spotfin mojarra	COMMON	X X X X X X X X X X	-	-	-	-	-
	Spotted seatrout	COMMON	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-OCT	JUN-NOV	JAN-DEC
	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 X X X	-	-	-	MAY-OCT	-
302	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	JAN-DEC	JAN-DEC	JAN-DEC	APR-DEC	JAN-DEC
	Bay whiff	COMMON	X X X X X X X X X X X	-	-	-	MAR-NOV	JAN-DEC
	Black drum	RARE	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	-	-	-	JAN-DEC	JAN-DEC
	Gizzard shad	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	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	-
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-JUL	MAY-JUL	MAY-JUL	MAY-SEP	JAN-DEC
	Pinfish	COMMON	X X X X X X X X X X X	-	-	-	JAN-OCT	FEB-NOV
	Red drum	ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	RARE	X X X X X X X X X X X	-	-	-	NOV-AUG	JAN-DEC
	Silversides	RARE	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	-	-	-	-	JAN-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 X	-	-	-	FEB-DEC	JAN-DEC
	Spotfin mojarra	RARE	X X X X X X X X X X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	X 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 X	-	-	-	JAN-DEC	JAN-DEC
	White mullet	RARE	X X X X X X X X X X	-	-	-	MAR-OCT	-
306	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	MAY-DEC
	Atlantic spadefish	RARE	X X X X X X X X X X X	-	-	-	MAR-DEC	-
	Bay anchovy	COMMON	X X X X X X X X X X X	MAR-NOV	MAR-NOV	MAR-NOV	JAN-NOV	JAN-DEC
	Bay whiff	RARE	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 X X X	APR-MAY	-	-	APR-SEP	APR-SEP
	Gray snapper	COMMON	X 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 X	-	-	-	JAN-DEC	NOV-JAN
	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	-	-	-	MAR-DEC	FEB-NOV
	Red drum	COMMON	X X X X X X X X X X X	-	-	AUG-NOV	JAN-DEC	JAN-DEC
	Sand seatrout	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-DEC	JAN-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 X	-	-	-	JAN-DEC	NOV-JUN
	Spotted seatrout	COMMON	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-OCT	JUN-NOV	JAN-DEC
	Striped mullet	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
311	Finetooth shark		X X X X X X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
367	Dwarf seahorse		X X X X X X X X X X X	-	-	-	-	-
370	Spinner shark		X X X X X 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
265	Atlantic seabob shrimp		X 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
301	Atlantic seabob shrimp	RARE	X X X X X X X X X X	-	-	-	-	AUG-NOV
	Blue crab	HIGHLY ABUNDANT	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	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	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 X X X	-	-	-	APR-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	APR-NOV	MAY-DEC	JAN-DEC
302	Atlantic rangia	COMMON	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	ABUNDANT	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	-	-	FEB-APR	FEB-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
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAY-NOV	JUN-DEC	JAN-DEC
306	Blue crab	HIGHLY ABUNDANT	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	-	-	FEB-APR	JAN-DEC	-
	White shrimp	COMMON	X X X X X X X X X X X	-	-	APR-NOV	MAY-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	-	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	Interneesting	Juveniles	Adults
121	Diamondback terrapin		X 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 X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
131	Diamondback terrapin		X 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 X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
133	Diamondback terrapin		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	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	-	-	-	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 X
133	Northern river otter		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 56 (cont.)

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
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47	CANEY CREEK MARINA		
49	CHARLIES BAIT RAMP		
81	LINDA'S		
88	MITCHELLS CUT PUBLIC RAMP		

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
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140	PIPING PLOVER CRITICAL HABITAT	USFWS	

MARINA:

HUN#	Name	Contact	Phone
----	-----	-----	-----
261	CANEY CREEK MARINA		979/245-3691

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
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337	SAN BERNARD NATIONAL WILDLIFE REFUGE		

Upper Texas Coast: ESIMAP 57

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Nesting	Migrating	Molting
133	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	-	-	-
	Black skimmer	100S	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	-	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	-	-	-
	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	-	-	-
	Killdeer	10S	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	-	FEB-APR	-
	Marbled godwit	10S	X X X X X X X X X X	-	JUN-NOV MAR-APR JUL-NOV	-
	Marsh birds		X X X X X X X X X X X	-	-	-
	Raptors		X X X X X X X X X X X	-	-	-
	Red knot	PRESENT	X X X X X X X X	-	-	-
	Reddish egret	T PRESENT	X X X X X X X X X X X	-	-	-
	Sandhill crane	HIGH	X X X X X X X X X	-	-	-
	Shorebirds	1000S	X X X X X X X X X X X	-	-	-
	Wading birds		X X X X X X X X X X X	-	-	-
	Waterfowl		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	-
	Yellowlegs	100S	X X X X X X X X X X X	-	MAR-MAY JUL-NOV	-
176	American coot	1000S	X X X X X X X X X	-	-	-
	American wigeon	1000S	X X X X X X X X X	-	-	-
	Blue-winged teal	1000S	X X X X X X X X X X	-	-	-
	Bufflehead	100S	X X X X X X X X X	-	-	-
	Canada goose	10S	X X X X X X X X X	-	-	-
	Canvasback	10S	X 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 X X	-	-	-
	Greater white-fronted goose	100S	X X X X X X X X X X	-	-	-
	Green-winged teal	1000S	X X X X X X X X X X	-	-	-
	Lesser scaup	100S	X X X X X X X X X	-	-	-
	Mallard	10S	X 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 X X	-	-	-
	Northern shoveler	1000S	X X X X X X X X X X	-	-	-
	Redhead	100S	X X X X X X X X X	-	-	-
	Ring-necked duck	10S	X X X X X X X X X	-	-	-
	Ruddy duck	100S	X X X X X X X X X	-	-	-
	Sandhill crane	100S	X X X X X X X X X	-	-	-
	Snow goose	10000S	X X X X X X X X X	-	-	-
277	Bald eagle	T 1 NEST	X X X X X X X X X X X	OCT-JUL	-	-
312	Sandhill crane	PRESENT	X X X X X X X X X X	-	-	-
314	Greater white-fronted goose	100S	X X X X X X X X X X	-	-	-
	Ross's goose	100S	X X X X X X X X X X	-	-	-
	Snow goose	100S	X X X X X X X X X X	-	-	-
315	Greater white-fronted goose	10S	X X X X X X X X X X	-	-	-
316	Ross's goose	100S	X X X X X X X X X X	-	-	-
	Snow goose	100S	X X X X X X X X X X	-	-	-
322	Ross's goose	10S	X X X X X X X X X X	-	-	-
	Snow goose	10S	X X X X X X X X X X	-	-	-
323	Ross's goose	100S	X X X X X X X X X X	-	-	-
	Sandhill crane	10S	X X X X X X X X X X	-	-	-
	Snow goose	100S	X X X X X X X X X X	-	-	-
324	Sandhill crane	10S	X X X X X X X X X X	-	-	-
325	Greater white-fronted goose	10S	X X X X X X X X X X	-	-	-
	Ross's goose	10S	X X X X X X X X X X	-	-	-
	Snow goose	10S	X X X X X X X 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
266	Tarpon	RARE	X X X X X X X X X X	-	-	-	MAR-NOV	-
302	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	JAN-DEC	JAN-DEC	JAN-DEC	APR-DEC	JAN-DEC
	Bay whiff	COMMON	X X X X X X X X X X X	-	-	-	MAR-NOV	JAN-DEC
	Black drum	RARE	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	-	-	-	JAN-DEC	JAN-DEC
	Gizzard shad	ABUNDANT	X X X X X X X X X X X	-	-	-	JAN-DEC	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	-
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-JUL	MAY-JUL	MAY-JUL	MAY-SEP	JAN-DEC
	Pinfish	COMMON	X X X X X X X X X X X	-	-	-	JAN-OCT	FEB-NOV
	Red drum	ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	RARE	X X X X X X X X X X X	-	-	-	NOV-AUG	JAN-DEC
	Silversides	RARE	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	-	-	-	-	JAN-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 X	-	-	-	FEB-DEC	JAN-DEC
	Spotfin mojarra	RARE	X X X X X X X X X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	X 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 X	-	-	-	JAN-DEC	JAN-DEC
	White mullet	RARE	X X X X X X X X X	-	-	-	MAR-OCT	-
306	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	MAY-DEC
	Atlantic spadefish	RARE	X X X X X X X X X X X	-	-	-	MAR-DEC	-
	Bay anchovy	COMMON	X X X X X X X X X X X	MAR-NOV	MAR-NOV	MAR-NOV	JAN-NOV	JAN-DEC
	Bay whiff	RARE	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 X X	APR-MAY	-	-	APR-SEP	APR-SEP
	Gray snapper	COMMON	X 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 X	-	-	-	JAN-DEC	NOV-JAN
	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	-	-	-	MAR-DEC	FEB-NOV
	Red drum	COMMON	X X X X X X X X X X X	-	-	AUG-NOV	JAN-DEC	JAN-DEC
	Sand seatrout	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-DEC	JAN-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 X	-	-	-	JAN-DEC	NOV-JUN
	Spotted seatrout	COMMON	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-OCT	JUN-NOV	JAN-DEC
	Striped mullet	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
367	Dwarf seahorse		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 57 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE:

RAR#	Species	S F Conc.	J F M A M J J A S O N D	Spawning	Eggs	Larvae	Juveniles	Adults
302	Atlantic rangia	COMMON	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	ABUNDANT	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	-	-	FEB-APR	FEB-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
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAY-NOV	JUN-DEC	JAN-DEC
306	Blue crab	HIGHLY ABUNDANT	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	-	-	FEB-APR	JAN-DEC	-
	White shrimp	COMMON	X X X X X X X X X X X	-	-	APR-NOV	MAY-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
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	Interneesting	Juveniles	Adults
133	Diamondback terrapin		X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
176	Diamondback terrapin		X 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 X	MAR-MAY	JUL-AUG	-	JAN-DEC	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

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
50	CHINQUAPIN RAMP		
63	FM 521		

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
334	BIG BOGGY NATIONAL WILDLIFE REFUGE		

Upper Texas Coast: ESIMAP 58

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	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	-	-	-
118	Redhead	1000-20000 BIRDS	X	X	X									X	X	X	-
131	Gulls		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	HIGH		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	HIGH		X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Waterfowl			X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Wilson's plover	HIGH			X	X	X	X	X	X	X				APR-JUL	-	-
	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	-	-	-
	Black skimmer	100S		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	-	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		-	-	-
	Diving birds			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	-	DEC-MAR	-
	Long-billed curlew	PRESENT		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	-	-	-
	Raptors			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	-	-	-
	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	-	-	-
	Waterfowl			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	-
	Yellowlegs	100S		X	X	X	X	X		X	X	X	X	X	-	MAR-MAY JUL-NOV	-
	Black skimmer			X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Cormorants			X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Dabbling ducks			X	X	X	X				X	X	X		-	-	-
	Diving ducks			X	X	X	X				X	X	X		-	-	-
	Geese			X	X	X	X				X	X	X		-	-	-
134	Grebes			X	X	X	X	X			X	X	X	X	-	-	-
	Gulls			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	-	-	-
	Raptors			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	-	-	-
	Wading birds			X	X	X	X	X	X	X	X	X	X	X	-	-	-
	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	-	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	-	-	-
	Least tern				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	FEB-AUG	-	-
	Wading birds			X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Wilson's plover				X	X	X	X	X	X					APR-JUL	-	-
137	Gulls			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	-	-	-
	Wading birds	HIGH		X	X	X	X	X	X	X	X	X	X	X	-	-	-
138	Dabbling ducks			X	X	X	X				X	X	X		-	-	-
	Redhead	HIGH		X	X	X					X	X	X		-	-	-
	Scaup	HIGH		X	X	X	X				X	X	X		-	-	-
	Waterfowl	HIGH		X	X	X	X	X	X	X	X	X	X	X	-	-	-
139	Diving birds			X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Marsh birds			X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Raptors			X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Shorebirds	HIGH		X	X	X	X			X	X	X	X	X	-	-	-
	Wading birds	HIGH		X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Waterfowl	HIGH		X	X	X	X	X	X	X	X	X	X	X	-	-	-
140	Piping plover	T T 70 INDIV		X	X	X	X	X		X	X	X	X	X	-	-	-
	Snowy plover	3 INDIV		X	X	X	X			X	X	X	X	X	-	-	-
152	Piping plover	T T 17 INDIV		X	X	X	X	X		X	X	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	-

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 58 (cont.)

BIOLOGICAL RESOURCES: (cont.)

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
131	Diamondback terrapin		X	X	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	X	X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
133	Diamondback terrapin		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

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
140	PIPING PLOVER CRITICAL HABITAT	USFWS	

Upper Texas Coast: ESIMAP 59

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	X	-	-	-
	Loons		X	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	-	-	-
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	-	-	-
	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	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	-
134	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	-
	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		-	-	-
	Diving ducks		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		-	-	-
	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	-	-	-
	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		-	-	-
136	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	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	-	-
	Gulls		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	-	-	-
	Dabbling ducks		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		-	-	-
	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	-	-	-
	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	-	-	-
137	Brown pelican		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	-	-	-
	Piping plover	T T 17 INDIV	X	X	X	X	X			X	X	X	X	X	-	-	-
	American oystercatcher	1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	American coot	1000S	X	X	X	X					X	X	X	X	-	-	-
	American wigeon	1000S	X	X	X						X	X	X	X	-	-	-
	Blue-winged teal	1000S	X	X	X	X	X			X	X	X	X	X	-	-	-
	Bufflehead	100S	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	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	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	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	-	-	-

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 59 (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
302	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	-
	Hardhead catfish	ABUNDANT	X X X X X X X X X X X	MAY-JUL	MAY-JUL	MAY-JUL	MAY-SEP	JAN-DEC
	Pinfish	COMMON	X X X X X X X X X X X	-	-	-	JAN-OCT	FEB-NOV
	Red drum	ABUNDANT	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	RARE	X X X X X X X X X X X	-	-	-	NOV-AUG	JAN-DEC
	Silversides	RARE	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	-	-	-	-	JAN-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 X	-	-	-	FEB-DEC	JAN-DEC
	Spotfin mojarra	RARE	X X X X X	-	-	-	-	-
	Spotted gar	ABUNDANT	X X X X X X X X X X X	APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC
	Spotted seatrout	COMMON	X 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 X	-	-	-	JAN-DEC	JAN-DEC
	White mullet	RARE	X X X X X X X X	-	-	-	MAR-OCT	-
306	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	MAY-DEC
	Atlantic spadefish	RARE	X X X X X X X X X X	-	-	-	MAR-DEC	-
	Bay anchovy	COMMON	X X X X X X X X X X X	MAR-NOV	MAR-NOV	MAR-NOV	JAN-NOV	JAN-DEC
	Bay whiff	RARE	X X X X X X X X X X X	-	-	-	MAR-DEC	JAN-DEC
	Gafftopsail catfish	COMMON	X X X X X	APR-MAY	-	-	APR-SEP	APR-SEP
	Gray snapper	COMMON	X 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 X	-	-	-	JAN-DEC	NOV-JAN
	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	-	-	-	MAR-DEC	FEB-NOV
	Red drum	COMMON	X X X X X X X X X X X	-	-	AUG-NOV	JAN-DEC	JAN-DEC
	Sand seatrout	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-DEC	JAN-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 X	-	-	-	JAN-DEC	NOV-JUN
	Spotted seatrout	COMMON	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-OCT	JUN-NOV	JAN-DEC
	Striped mullet	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
311	Finetooth shark		X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
367	Dwarf seahorse		X X X X X X X X X X X	-	-	-	-	-
370	Spinner shark		X 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
265	Atlantic seabob shrimp		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
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	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Brief squid	COMMON	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	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 X	-	-	-	APR-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	APR-NOV	MAY-DEC	JAN-DEC
302	Atlantic rangia	COMMON	X X X X X X X X X X X	MAR-OCT	-	MAR-OCT	JAN-DEC	JAN-DEC
	Blue crab	ABUNDANT	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	-	-	FEB-APR	FEB-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
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	MAY-NOV	JUN-DEC	JAN-DEC
306	Blue crab	HIGHLY ABUNDANT	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	-	-	FEB-APR	JAN-DEC	-
	White shrimp	COMMON	X X X X X X X X X X X	-	-	APR-NOV	MAY-DEC	JAN-DEC
348	Eastern oyster	REEF	X X X X X X X X X X X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
352	Eastern oyster	REEF	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	-	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
133	Diamondback terrapin		X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
141	Kemp's ridley sea turtle	E E 1-2 NESTS	X X X X X X	MAR-JUL	APR-SEP	-	APR-SEP	MAR-JUL
176	Diamondback terrapin		X 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 X	MAR-MAY	JUL-AUG	-	JAN-DEC	JAN-DEC
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 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 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 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
133	Northern river otter		X X X X X X X X X X X

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
140	PIPING PLOVER CRITICAL HABITAT	USFWS	

HELIPORT:

HUN#	Name	Contact	Phone
184	MATAGORDA SHORE FACILITY		

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
334	BIG BOGGY NATIONAL WILDLIFE REFUGE		

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

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	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	-	-	-
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			-	-	-
	Dabbling ducks	HIGH	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	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	-
134	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	-
	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	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	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	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	-	-	-
	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	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	X	-	-	-
136	Peregrine falcon	T	X	X	X	X				X	X	X	X	X	-	-	-
	Red knot	HIGH			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	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	X	X	X	-	APR-JUL	-
	Dabbling ducks		X	X	X	X	X			X	X	X	X	X	-	-	-
	Redhead	HIGH	X	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	-	-	-
	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	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	-	-	-
	American avocet	100S	X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-APR JUL-NOV	-
139	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	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	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	X	X	-	-	-
			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
			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 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

Upper Texas Coast: ESIMAP 61

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
			-	-	-	-	-	-	-	-	-	-	-	-			
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		-	-	-
	Diving ducks		X	X	X	X					X	X	X		-	-	-
	Geese		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	-	-	-
	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		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	-	-	-
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			-	-	-
	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	-	-	-
	Snowy plover	45 INDIV	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			-	-	-
	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			-	-	-
	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	X	-	MAR-APR JUL-NOV	-
	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	-	-	-
	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	-
149	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			-	-	-
	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	X	-	MAR-MAY JUL-NOV	-
	Dunlin	1000S	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	X	-	MAR-APR JUL-NOV	-
	Marsh birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Migratory songbirds			X	X										-	-	-
	Osprey		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	X	-	-	-
	Snow goose	HIGH	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	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	-
256	Black-crowned night-heron	2-3 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-MAY	-
	Cattle egret	72-130 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Great blue heron	2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	-
	Great egret	2-26 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-APR	-
	Green heron	2 INDIV		X	X	X	X	X	X	X	X				APR-JUN	-	-
	Little blue heron	2-40 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Neotropic cormorant	3 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-OCT	-	-
	Roseate spoonbill	1-9 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Snowy egret	19-30 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Tricolored heron	1-5 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	White ibis	17 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Yellow-crowned night-heron	2 PAIRS		X	X	X	X	X	X	X					APR-SEP	-	-
257	Cattle egret	250 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Little blue heron	200 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Snowy egret	50 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
258	Cattle egret	5-289 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Great blue heron	1 PAIR	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	-	-
	Great egret	1-73 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-APR	-
	Little blue heron	17-24 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Roseate spoonbill	28-31 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Snowy egret	5-104 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Tricolored heron	9-17 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
313	Greater white-fronted goose	10S	X	X	X					X	X	X			-	-	-
	Ross's goose	100S	X	X	X					X	X	X			-	-	-
	Snow goose	100S	X	X	X					X	X	X			-	-	-
314	Greater white-fronted goose	100S	X	X	X	X				X	X	X			-	-	-
	Ross's goose	100S	X	X	X					X	X	X			-	-	-
	Snow goose	100S	X	X	X					X	X	X			-	-	-
315	Greater white-fronted goose	10S	X	X	X	X				X	X	X			-	-	-
316	Ross's goose	100S	X	X	X					X	X	X			-	-	-
	Snow goose	100S	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 61 (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
317	Canada goose	100S	X X X X	-	-	-
318	Canada goose	100S	X X X X	-	-	-
	Ross's goose	1000S	X X X	-	-	-
	Snow goose	1000S	X X X	-	-	-
319	Greater white-fronted goose	100S	X X X X	-	-	-
	Ross's goose	1000S	X X X	-	-	-
	Snow goose	1000S	X X X	-	-	-
320	Canada goose	10S	X 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	-
175	Bonnethead shark		X X X X X X X	-	SEP-NOV	-	APR-NOV	-
179	Bull shark	COMMON	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	MAY-JUN	MAY-JUN	MAY-JUL	MAY-OCT	MAY-OCT
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	-
282	Alligator gar	COMMON	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	-	-	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	JAN-DEC	JAN-DEC	JAN-DEC	APR-NOV	JAN-DEC
	Bay whiff	COMMON	X X X X X X X X X X X	-	-	-	MAR-AUG	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Common snook	VERY RARE	X X X X X X X	-	-	-	APR-NOV	-
	Crevalle jack	COMMON	X X X X X X X	-	-	-	APR-NOV	-
	Gafftopsail catfish	ABUNDANT	X X X X X X	APR-MAY	-	-	APR-NOV	APR-NOV
	Gizzard shad	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Gray snapper	COMMON	X X X X X X X X X X X	-	-	-	AUG-OCT	JAN-DEC
	Gulf butterflyfish	COMMON	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	ABUNDANT	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	MAY-AUG	MAY-SEP	MAY-SEP	MAY-OCT	JAN-DEC
	Pinfish	COMMON	X X X X X X X X X X X	-	-	-	MAR-OCT	JAN-DEC
	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	NOV-JUN	JAN-DEC
	Silver perch	COMMON	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-DEC	JAN-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 flounder	COMMON	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	-
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	FEB-OCT	JAN-DEC
	Spotfin mojarra	RARE	X X X X X	-	-	-	-	-
	Spotted seatrout	COMMON	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-OCT	JUN-NOV	JAN-DEC
	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	-	-	-	APR-OCT	-
307	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	MAY-DEC
	Atlantic spadefish	RARE	X X X X X X X X X X X	-	-	-	JAN-DEC	-
	Bay anchovy	COMMON	X X X X X X X X X X X	MAR-NOV	MAR-NOV	MAR-NOV	JAN-NOV	JAN-DEC
	Bay whiff	RARE	X X X X X X X X X X X	-	-	-	MAR-NOV	JAN-DEC
	Gafftopsail catfish	COMMON	X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gray snapper	COMMON	X 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 X	-	-	-	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
	Red drum	COMMON	X X X X X X X X X X X	-	-	AUG-NOV	JAN-DEC	JAN-DEC
	Sand seatrout	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-DEC	JAN-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 X	-	-	-	JAN-DEC	NOV-JUL
	Spotted seatrout	COMMON	X 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 X	-	-	-	JAN-DEC	JAN-DEC
311	Finetooth shark		X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
367	Dwarf seahorse		X X X X X X X X X X X	-	-	-	-	-
370	Spinner shark		X 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
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	MAR-NOV	JAN-DEC	JAN-DEC	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	RARE	X X X X X X X	-	-	-	APR-APR	MAY-DEC
307	Blue crab	HIGHLY ABUNDANT	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	-	-	FEB-APR	JAN-DEC	-
	White shrimp	COMMON	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	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	-	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
144	Diamondback terrapin	HIGH	X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
149	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	-	-	-	APR-NOV	-

TERRESTRIAL MAMMAL:

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

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
240	MAD ISLAND WMA	TPWD	

NATURE CONSERVANCY:

HUN#	Name	Contact	Phone
296	CLIVE RUNNELLS FAM MAD ISL MARSH PRESRV		

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 62

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	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	-	-	-
118	Redhead	1000-20000 BIRDS	X	X	X								X	X	X	-	-
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	-	-	-
	Diving ducks		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	-	-	-
	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	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	-	-	-
	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	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	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	X	X	-	-	-
	Peregrine falcon	T	X	X	X	X			X	X	X	X	X	X	-	-	-
	Red knot	HIGH		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	X	-	-	-
	Snowy plover		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
139	Wading birds		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Wilson's plover			X	X	X	X	X	X	X	X	X	X	X	-	APR-JUL	-
	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	-	-	-
	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	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	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	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	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	-
	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	X	-	-	-
	Raptors		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red knot	PRESENT		X	X	X				X	X	X	X	X	-	-	-
	Reddish egret	T PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
144	Shorebirds	1000S	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	-	-	-
	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	-
	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
148	Osprey	HIGH	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	-	-	-
	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	-	-	-

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Upper Texas Coast: ESIMAP 62 (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
148	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	-
150	Black-bellied plover		10S	X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-MAY JUL-NOV	-
	Brown pelican			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least tern				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		10S	X	X	X	X	X		X	X	X	X	X		-	APR-MAY AUG-AUG	-
	Shorebirds		10S	X	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	-	-
151	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	-	-	-
	Gulls		HIGH	X	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	-	-	-
152	Piping plover	T T	17 INDIV	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
153	Piping plover	T T	9 INDIV	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
310	Piping plover	T T	POTENTIAL	X	X	X	X	X	X	X	X	X	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	-
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
173	Bonnethead shark			X	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
175	Bonnethead shark					X	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						-	-	-	-	-
	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	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	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	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			-	-	-	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	X	X		-	-	-	-	MAY-NOV
272	Common snook		RARE	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-	-	MAY-AUG
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
	Black drum		COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Common snook		VERY RARE			X	X	X	X	X	X	X				-	-	-	APR-NOV	-
	Crevalle jack		COMMON			X	X	X	X	X	X	X				-	-	-	APR-NOV	-
	Gafftopsail catfish		ABUNDANT			X	X	X	X	X	X	X				APR-MAY	-	-	APR-NOV	APR-NOV
	Gizzard shad		COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Gray snapper		COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	AUG-OCT	JAN-DEC
	Gulf butterfish		COMMON	X	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		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	MAY-OCT	JAN-DEC
	Pinfish		COMMON	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-OCT	JAN-DEC
	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	-	-	-	NOV-JUN	JAN-DEC
	Silver perch		COMMON	X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-DEC	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		COMMON	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	-
	Spot		HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	FEB-OCT	JAN-DEC
	Spotfin mojarra		RARE			X	X	X	X	X						-	-	-	-	-
	Spotted seatrout		COMMON	X	X	X	X	X	X	X	X	X	X	X	X	MAR-OCT	MAR-OCT	MAR-OCT	JUN-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	-
301	Atlantic croaker		HIGHLY ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-JUN	JAN-DEC	APR-DEC
	Atlantic spadefish		RARE						X	X	X	X				-	-	-	JUL-OCT	-

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 62 (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
301	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 X	-	-	-	MAR-DEC	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Common snook	VERY RARE	X X X X X X X X	-	-	-	APR-NOV	-
	Crevalle jack	COMMON	X X X X X X X	-	-	-	APR-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	-	-	-	JAN-DEC	JAN-DEC
	Gray snapper	COMMON	X X X X X X X X X X X	-	-	-	AUG-OCT	JAN-DEC
	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	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
	Pinfish	ABUNDANT	X X X X X X X X X X X	-	-	-	FEB-NOV	JUN-JAN
	Red drum	COMMON	X X X X X X X X X X X	-	-	AUG-NOV	JAN-DEC	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	JAN-DEC	JAN-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 flounder	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	COMMON	X X X X X X X X	-	-	-	JUN-NOV	-
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X	-	-	-	FEB-OCT	FEB-NOV
	Spotfin mojarra	COMMON	X X X X X X X	-	-	-	-	-
	Spotted seatrout	COMMON	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-OCT	JUN-NOV	JAN-DEC
	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	-	-	-	MAY-OCT	-
311	Finetooth shark		X X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
370	Spinner shark		X 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 X	APR-APR AUG-AUG	-	-	-	JAN-DEC
	Atlantic surfclam		X 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 X	-	-	-	-	-
	Mole crab		X 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 X	-	-	-	-	-
265	Atlantic seabob shrimp		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	-	-	-	-	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
282	Atlantic seabob shrimp	RARE	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	JAN-DEC	JAN-DEC	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	RARE	X X X X X X X X X	-	-	-	APR-APR	MAY-DEC
301	Atlantic seabob shrimp	RARE	X X X X X X X	-	-	-	-	AUG-NOV
	Blue crab	HIGHLY ABUNDANT	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	MAR-DEC	MAR-DEC	MAR-DEC	JAN-DEC	JAN-DEC
	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 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 X X	-	-	-	APR-NOV	-
	White shrimp	ABUNDANT	X X X X X X X X X X X	-	-	APR-NOV	MAY-DEC	JAN-DEC
348	Eastern oyster	REEF	X X X X X X X X X X X	MAR-DEC	MAR-DEC	-	-	JAN-DEC
352	Eastern oyster	REEF	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	-	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
143	Diamondback terrapin		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	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
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
143	Northern river otter		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

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
140	PIPING PLOVER CRITICAL HABITAT	USFWS	

Upper Texas Coast: ESIMAP 63

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	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	X	-	-	-
	118	Redhead	1000-20000 BIRDS	X	X	X							X	X	X	-	-	-
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	-	-	-	
	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	-	-	-	
	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	-	-	-	
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		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	-	-	-	
148		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	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	-	
	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	-	-	-		
149	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	-	
	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	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	-	-	-		
Migratory songbirds				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	-	-	-		
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	-	-	-		
150	Sandhill crane	HIGH	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	-	-	-	
	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	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	-	
	Black-bellied plover	10S	X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-MAY JUL-NOV	-	
	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	-	-	-	
Red knot	HIGH			X</														

Upper Texas Coast: ESIMAP 63 (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
153	Piping plover	T T 9 INDIV	X X X X X X X X X X X	-	-	-
310	Piping plover	T T POTENTIAL	X X X X X X X X 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 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 X	-	-	-	-	JUN-OCT
175	Bonnethead shark		X 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
179	Bull shark	COMMON	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	-	-	-	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	-	-	-	-	-
	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	-	-	-	-	-
	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 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 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 X	DEC-APR	-	-	-	DEC-SEP
	Spotted seatrout		X X 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 X X	-	-	-	MAR-NOV	-
268	Striped mullet	ABUNDANT	X X X X 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	-	-	-	JAN-DEC	JAN-DEC
	Atlantic bumper	COMMON	X X X X X X	-	-	-	-	JUL-OCT
	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	MAY-DEC
	Atlantic spadefish	RARE	X X X X X	-	-	-	AUG-SEP	-
	Bay anchovy	COMMON	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	-	-	-	MAR-AUG	JAN-DEC
	Black drum	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Common snook	VERY RARE	X X X X X X X X	-	-	-	APR-NOV	-
	Crevalle jack	COMMON	X X X X X X X X	-	-	-	APR-NOV	-
	Gafftopsail catfish	ABUNDANT	X X X X X X X X	APR-MAY	-	-	APR-NOV	APR-NOV
	Gizzard shad	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Gray snapper	COMMON	X X X X X X X X X X X	-	-	-	AUG-OCT	JAN-DEC
	Gulf butterflyfish	COMMON	X X 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	ABUNDANT	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	MAY-AUG	MAY-SEP	MAY-SEP	MAY-OCT	JAN-DEC
	Pinfish	COMMON	X X X X X X X X X X X	-	-	-	MAR-OCT	JAN-DEC
	Red drum	COMMON	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	-	-	-	JAN-DEC	JAN-DEC
	Sheepshead	COMMON	X X X X X X X X X X X	-	-	-	NOV-JUN	JAN-DEC
	Silver perch	COMMON	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-DEC	JAN-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 flounder	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Southern kingfish	RARE	X X X X X X X	-	-	-	JUN-NOV	-
	Spot	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	-	FEB-OCT	JAN-DEC
	Spotfin mojarra	RARE	X X X X X	-	-	-	-	-
	Spotted seatrout	COMMON	X X X X X X X X X X X	MAR-OCT	MAR-OCT	MAR-OCT	JUN-NOV	JAN-DEC
	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	-	-	-	APR-OCT	-
307	Atlantic croaker	HIGHLY ABUNDANT	X X X X X X X X X X X	-	-	JAN-JUN	JAN-DEC	MAY-DEC
	Atlantic spadefish	RARE	X X X X X X X X X X X	-	-	-	JAN-DEC	-
	Bay anchovy	COMMON	X X X X X X X X X X X	MAR-NOV	MAR-NOV	MAR-NOV	JAN-NOV	JAN-DEC
	Bay whiff	RARE	X X X X X X X X X X X	-	-	-	MAR-NOV	JAN-DEC
	Gafftopsail catfish	COMMON	X X X X X X X	APR-MAY	-	-	APR-OCT	APR-OCT
	Gray snapper	COMMON	X 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 X	-	-	-	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
	Red drum	COMMON	X X X X X X X X X X X	-	-	AUG-NOV	JAN-DEC	JAN-DEC
	Sand seatrout	COMMON	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Silver perch	RARE	X X X X X X X X X X X	MAY-SEP	MAY-SEP	MAY-SEP	MAR-DEC	JAN-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 X	-	-	-	JAN-DEC	NOV-JUL
	Spotted seatrout	COMMON	X 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 X	-	-	-	JAN-DEC	JAN-DEC
311	Finetooth shark		X X X X X X	-	MAY-JUN	MAY-OCT	-	MAY-JUN
367	Dwarf seahorse		X X X X X X X X X X X	-	-	-	-	-
369	Spinner shark		X X X X X X	MAY-JUN	MAY-JUN	MAY-JUL	MAY-OCT	MAY-OCT
370	Spinner shark		X 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
265	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	-	-	-	-	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

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 63 (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
282	Atlantic seabob shrimp	RARE						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
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

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
144	Diamondback terrapin	HIGH	X X X X X X X X X X X X	APR-MAY	JUN-SEP	-	JAN-DEC	JAN-DEC
149	Diamondback terrapin		X 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	-	-	-	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	-	-	-	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 X	-	-	-	JAN-DEC	-

TERRESTRIAL MAMMAL:

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

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
140	PIPING PLOVER CRITICAL HABITAT	USFWS	

NATURE CONSERVANCY:

HUN#	Name	Contact	Phone
296	CLIVE RUNNELLS FAM MAD ISL MARSH PRESRV		