

Alabama: 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
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2	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Bonaparte's gull		X	X	X	X	X						X	X	-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X								X	X	-	-	-
	Canvasback		X	X	X								X	X	-	-	-
	Common goldeneye		X	X	X								X	X	-	-	-
	Common loon		X	X	X	X	X				X	X	X	X	-	-	-
	Forster's tern		X	X	X	X							X	X	-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Horned grebe		X	X	X	X	X				X	X	X	X	-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least tern		X	X	X	X					X	X	X	X	-	-	-
	Lesser scaup		X	X	X								X	X	-	-	-
	Magnificent frigatebird					X	X	X	X	X	X	X	X	X	-	-	-
	Northern gannet		X	X	X	X	X				X	X	X	X	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Redhead		X	X	X								X	X	-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
3	Double-crested cormorant		X	X	X							X	X	X	-	-	-
	Greater scaup		X	X	X								X	X	-	-	-
	Hooded merganser		X	X	X	X							X	X	-	-	-
	Red-breasted merganser		X	X	X								X	X	-	-	-
	Reddish egret	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		X	X	X								X	X	-	-	-
4	American oystercatcher	P	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Black-bellied plover		X	X	X	X	X						X	X	-	-	-
	Greater yellowlegs		X	X	X	X							X	X	-	-	-
	Least tern		X	X	X	X					X	X	X	X	-	-	-
	Piping plover	P T	X	X	X						X	X	X	X	-	-	-
	Reddish egret	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Spotted sandpiper		X	X	X	X					X	X	X	X	-	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Wilson's plover	P		X	X	X	X	X	X	X	X				MAR-JUN	-	-
7	American bittern		X	X	X									X	-	-	-
	Black tern		X	X	X	X							X	X	-	-	-
	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal		X	X									X		-	-	-
	Caspian tern		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	MAY-AUG	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Greater yellowlegs		X	X	X	X							X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Least bittern			X	X	X	X	X	X	X	X	X			MAY-JUL	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Purple gallinule			X	X	X	X	X	X						MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Solitary sandpiper			X	X	X	X				X	X	X		-	-	-
	Spotted sandpiper		X	X	X	X					X	X	X	X	-	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
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5	Atlantic croaker		4	4	4	4	4	4	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		3	3	3	4	4	4	4	4	4	4	4	4	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish								1	2	2	2	1		-	-	-	-	JUN-OCT
	Gray snapper						1	1	1	1	1	1	1	1	-	-	-	-	MAY-DEC
	Gulf killifish		2	2	2	2	3	3	3	3	3	3	3	2	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gulf menhaden		4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Gulf toadfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pigfish			1	1	1	1	1	1	1	1	2	1		-	-	-	-	MAR-NOV
	Pinfish		3	3	3	3	4	4	4	4	4	4	3	3	NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	SEP-NOV	SEP-FEB	SEP-FEB	JAN-DEC	JAN-DEC
	Sand seatrout		4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC
	Silver perch		3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Southern flounder		3	3	3	3	3	3	3	3	2	3	3	3	SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC
	Southern kingfish		2	2	3	3	3	3	3	3	3	3	3	3	-	-	-	-	JAN-DEC
	Spot		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAR	NOV-APR	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra						1	2	2	2	1	1	1		-	-	-	-	MAY-NOV
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Star drum		1	1	2	2	2	2	2	2	2	2	1	1	-	-	-	-	JAN-DEC
	Striped anchovy					1	1	1	1	1	1	1	1	1	-	-	-	-	APR-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	1	1	1	1	1	1	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
6	Inland silverside		3	3	3	3	3	4	4	4	4	4	4	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	2	1	1	1	1	1	1	1	1	JUN-JUL	-	-	-	JAN-DEC
	Marsh killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Northern kingfish				1	1	2	2	2	1	1	1	1		-	-	-	-	MAR-DEC
	Rough silverside		3	3	3	3	3	4	4	4	4	4	4	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
8	Atlantic spadefish					2	2	2	3	3	3	2	1		-	-	JUN-SEP	-	APR-DEC
	Atlantic sturgeon		1	1	1	1						1	1	1	-	-	-	-	OCT-MAY
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish					2	2	2	2	2	2	2			APR-OCT	-	-	-	APR-OCT
	Florida pompano				1	2	3	3	3	2	2	1	1		MAY-JUL	MAY-JUL	MAY-JUL	MAY-NOV	MAR-SEP
	Gulf butterflyfish		2	2	2	3	3	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf flounder		2	2	2	2	2	2	2	2	2	2	2	2	NOV-FEB	NOV-FEB	NOV-FEB	JAN-DEC	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	1	1	-	-	-	JAN-DEC	-
	Ladyfish				1	1	2	2	1	1	1	1			-	-	-	-	MAR-OCT
	Scaled sardine					1	1	1	2	2	2	2			-	-	-	-	APR-OCT
	Sheepshead		2	2	2	2	2	2	2	2	2	2	2	2	FEB-MAR	FEB-APR	FEB-MAY	JAN-DEC	JAN-DEC
	Silver seatrout		1	1	1	1	1	1	1	2	2	1	1	1	-	-	-	-	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.

Alabama: ESIMAP 1 (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
8	Southern hake		1	1	1	1							1		-	-	-	-	FEB-MAY OCT-OCT
	Spanish mackerel		1	1	1	3	3	3	3	3	3	1	1	1	JUN-SEP	JUN-SEP	JUN-SEP	APR-SEP	JAN-DEC
	Spotted hake		1	1	1	1	1								-	-	-	-	JAN-JUN
	Tarpon		2	2	2	2	2	2	2	2	2	2	2	2	APR-SEP	APR-SEP	MAY-SEP	JAN-DEC	JAN-DEC
9	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
10	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	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
5	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
6	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW					X	X	X	X	X	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
93	Mississippi diamondback terrapin	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
151	Green sea turtle	P T		X	X	X	X	X	X	X	X	X	X		-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E		X	X	X	X	X	X	X	X	X	X		-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E		X	X	X	X	X	X	X	X	X	X		-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T		X	X	X	X	X	X	X	X	X	X		-	-	-	MAR-NOV	APR-SEP

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
20	PIPING PLOVER CRITICAL HABITAT	USFWS	251/441-5181

Alabama: 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
2	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Canvasback		X	X	X							X	X		-	-	-
	Common goldeneye		X	X	X							X	X		-	-	-
	Common loon		X	X	X	X	X			X	X	X	X		-	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Horned grebe		X	X	X	X	X			X	X	X	X		-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least tern		X	X	X	X				X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Magnificent frigatebird				X	X	X	X	X	X	X	X	X	X	-	-	-
	Northern gannet		X	X	X	X	X			X	X	X	X		-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
3	Double-crested cormorant		X	X	X							X	X	X	-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Reddish egret	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		X	X	X							X	X		-	-	-
7	American bittern		X	X	X								X		-	-	-
	Black tern		X	X	X	X						X	X	X	-	-	-
	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal		X	X								X			-	-	-
	Caspian tern		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	MAY-AUG	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Greater yellowlegs		X	X	X	X						X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Least bittern			X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Purple gallinule			X	X	X	X	X	X						MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Solitary sandpiper		X	X	X	X				X	X	X			-	-	-
	Spotted sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
5	Atlantic croaker		4	4	4	4	4	4	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		3	3	3	4	4	4	4	4	4	4	4	4	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish						1	2	2	2	1				-	-	-	-	JUN-OCT
	Gray snapper						1	1	1	1	1	1	1	1	-	-	-	-	MAY-DEC
	Gulf killifish		2	2	2	2	3	3	3	3	3	3	3	2	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gulf menhaden		4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Gulf toadfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pigfish			1	1	1	1	1	1	1	2	1			-	-	-	-	MAR-NOV
	Pinfish		3	3	3	3	4	4	4	4	4	3		3	NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	SEP-NOV	SEP-FEB	SEP-FEB	JAN-DEC	JAN-DEC
	Sand seatrout		4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC
	Silver perch		3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Southern flounder		3	3	3	3	3	3	3	3	2	3	3	3	SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC
	Southern kingfish		2	2	3	3	3	3	3	3	3	3	3	3	-	-	-	-	JAN-DEC
	Spot		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAR	NOV-APR	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra			1	2	2	2	1	1	1					-	-	-	-	MAY-NOV
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Star drum		1	1	2	2	2	2	2	2	2	2	1	1	-	-	-	-	JAN-DEC
	Striped anchovy			1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	APR-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	1	1	1	1	1	1	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
6	Inland silverside		3	3	3	3	4	4	4	4	4	4	4	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	2	1	1	1	1	1	1	1	JUN-JUL	-	-	-	JAN-DEC
	Marsh killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Northern kingfish			1	1	2	2	2	1	1	1	1	1	1	-	-	-	-	MAR-DEC
	Rough silverside		3	3	3	3	3	4	4	4	4	4	4	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
9	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
10	Gulf sturgeon	P T	X	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
186	Many-flowered grass-pink		X	X	X	X	X	X	X	X	X	X	X	X
190	Georgia tickseed		X	X	X	X	X	X	X	X	X	X	X	X
219	Yellow fringeless orchid		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
5	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
6	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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.

Alabama: ESIMAP 2 (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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW						X	X	X	X	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
25	Gopher tortoise	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
93	Mississippi diamondback terrapin	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
151	Green sea turtle	P T			X	X	X	X	X	X	X	X	X		-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E			X	X	X	X	X	X	X	X	X		-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E			X	X	X	X	X	X	X	X	X		-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T			X	X	X	X	X	X	X	X	X		-	-	-	MAR-NOV	APR-SEP

HUMAN USE RESOURCES:

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
81	GRAND BAY NATIONAL WILDLIFE REFUGE	USFWS	228/475-0765

Alabama: 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
-----	-----	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----
2	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Bonaparte's gull		X	X	X	X	X						X	X	-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X								X	X	-	-	-
	Canvasback		X	X	X								X	X	-	-	-
	Common goldeneye		X	X	X								X	X	-	-	-
	Common loon		X	X	X	X	X				X	X	X	X	-	-	-
	Forster's tern		X	X	X	X							X	X	-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Horned grebe		X	X	X	X	X				X	X	X	X	-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least tern		X	X	X	X				X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X								X	X	-	-	-
	Magnificent frigatebird					X	X	X	X	X	X	X	X	X	-	-	-
	Northern gannet		X	X	X	X	X				X	X	X	X	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Redhead		X	X	X								X	X	-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
3	Double-crested cormorant		X	X	X							X	X	X	-	-	-
	Greater scaup		X	X	X								X	X	-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Reddish egret		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
7	Ruddy duck	P	X	X	X								X	X	-	-	-
	American bittern		X	X	X								X		-	-	-
	Black tern		X	X	X	X						X	X	X	-	-	-
	Black-crowned night-heron					X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal		X	X								X			-	-	-
	Caspian tern		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	MAY-AUG	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Greater yellowlegs		X	X	X	X						X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Least bittern					X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Purple gallinule					X	X	X	X	X					MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Solitary sandpiper		X	X	X	X						X	X	X	-	-	-
	Spotted sandpiper		X	X	X	X					X	X	X	X	-	-	-
94	Tricolored heron	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	American oystercatcher		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Black skimmer		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Black-necked stilt		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common tern					X	X	X	X	X					-	-	-
	Green heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gull-billed tern	P				X	X	X	X	X	X	X			-	-	-
	Pied-billed grebe		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Wilson's plover	P				X	X	X	X	X	X				MAR-JUN	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
5	Atlantic croaker		4	4	4	4	4	3	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		3	3	3	4	4	4	4	4	4	4	4	4	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish							1	2	2	2	1			-	-	-	-	JUN-OCT
	Gray snapper						1	1	1	1	1	1	1	1	-	-	-	-	MAY-DEC
	Gulf killifish		2	2	2	2	3	3	3	3	3	3	3	2	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gulf menhaden		4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Gulf toadfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pigfish				1	1	1	1	1	1	1	2	1		-	-	-	-	MAR-NOV
	Pinfish		3	3	3	3	3	4	4	4	4	4	3	3	NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	SEP-NOV	SEP-FEB	SEP-FEB	JAN-DEC	JAN-DEC
	Sand seatrout		4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC
	Silver perch		3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Southern flounder		3	3	3	3	3	3	3	3	2	3	3	3	SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC
	Southern kingfish		2	2	3	3	3	3	3	3	3	3	3	3	-	-	-	-	JAN-DEC
	Spot		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAR	NOV-APR	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra						1	2	2	2	1	1	1		-	-	-	-	MAY-NOV
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Star drum		1	1	2	2	2	2	2	2	2	2	1	1	-	-	-	-	JAN-DEC
	Striped anchovy						1	1	1	1	1	1	1	1	-	-	-	-	APR-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	1	1	1	1	1	1	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
6	Inland silverside		3	3	3	3	3	4	4	4	4	4	4	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	2	1	1	1	1	1	1	1	JUN-JUL	-	-	-	JAN-DEC
	Marsh killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Northern kingfish				1	1	2	2	2	1	1	1	1	1	-	-	-	-	MAR-DEC
	Rough silverside		3	3	3	3	3	4	4	4	4	4	4	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
8	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Atlantic spadefish				2	2	2	3	3	3	3	2	1	-	-	-	JUN-SEP	-	APR-DEC
	Atlantic sturgeon		1	1	1	1	1					1	1	1	-	-	-	-	OCT-MAY
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish					2	2	2	2	2	2	2		APR-OCT	-	-	-	-	APR-OCT
	Florida pompano					1	2	3	3	3	2	2	1	1	MAY-JUL	MAY-JUL	MAY-JUL	MAY-NOV	MAR-SEP
	Gulf butterflyfish		2	2	2	3	3	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf flounder		2	2	2	2	2	2	2	2	2	2	2	2	NOV-FEB	NOV-FEB	NOV-FEB	JAN-DEC	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	1	1	-	-	-	JAN-DEC	-
	Ladyfish				1	1	2	2	1	1	1	1		-	-	-	-	-	MAR-OCT
	Scaled sardine					1	1	1	2	2	2			-	-	-	-	-	APR-OCT
	Sheepshead		2	2	2	2	2	2	2	2	2	2	2	2	FEB-MAR	FEB-APR	FEB-MAY	JAN-DEC	JAN-DEC
	Silver seatrout		1	1	1	1	1	1	1	2	2	1	1	1	-	-	-	-	JAN-DEC
	Southern hake			1	1	1	1					1		-	-	-	-	-	FEB-MAY
															-	-	-	-	OCT-OCT

Alabama: ESIMAP 3 (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
8	Spanish mackerel		1	1	1	3	3	3	3	3	3	1	1	1	JUN-SEP	JUN-SEP	JUN-SEP	APR-SEP	JAN-DEC
	Spotted hake		1	1	1	1	1	1							-	-	-	-	JAN-JUN
	Tarpon		2	2	2	2	2	2	2	2	2	2	2	2	APR-SEP	APR-SEP	MAY-SEP	JAN-DEC	JAN-DEC
9	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
10	Gulf sturgeon	P T	X	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
159	Crenate milkwort		X	X	X	X	X	X	X	X	X	X	X	X
172	Tiny-leaved buckthorn		X	X	X	X	X	X	X	X	X	X	X	X
181	Harper's yellow-eyed grass		X	X	X	X	X	X	X	X	X	X	X	X
185	Bearded grass-pink		X	X	X	X	X	X	X	X	X	X	X	X
187	Bandana-of-the-everglades		X	X	X	X	X	X	X	X	X	X	X	X
207	Spoon-flower		X	X	X	X	X	X	X	X	X	X	X	X
210	Climbing fetter-bush		X	X	X	X	X	X	X	X	X	X	X	X
215	Large white fringed orchid		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
5	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
6	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW					X	X	X	X	X	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
92	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
93	Mississippi diamondback terrapin	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
151	Green sea turtle	P T			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
10	BOAT RAMP		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
22	GRAND BAY SAVANNA ADDITION FW 24	CARL FERRARO; ADCNR-SLD	251/929-0900
23	GRAND BAY SAVANNA FW 4	CARL FERRARO; ADCNR-SLD	251/929-0900

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
81	GRAND BAY NATIONAL WILDLIFE REFUGE	USFWS	228/475-0765

Alabama: 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
----	-----	-	-	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----
2	American white pelican	P			X	X	X	X						X	X	X	-	-	-
	Bonaparte's gull				X	X	X	X	X						X	X	-	-	-
	Brown pelican				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead				X	X	X								X	X	-	-	-
	Canvasback				X	X	X								X	X	-	-	-
	Common goldeneye				X	X	X								X	X	-	-	-
	Common loon				X	X	X	X	X				X	X	X	X	-	-	-
	Forster's tern				X	X	X	X							X	X	-	-	-
	Herring gull				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Horned grebe				X	X	X	X	X				X	X	X	X	-	-	-
	Laughing gull				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least tern				X	X	X	X					X	X	X	X	-	-	-
	Lesser scaup				X	X	X								X	X	-	-	-
	Magnificent frigatebird						X	X	X	X	X	X	X	X	X	X	-	-	-
	Northern gannet				X	X	X	X	X				X	X	X	X	-	-	-
	Osprey	P			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Redhead				X	X	X								X	X	-	-	-
	Ring-billed gull				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
3	Double-crested cormorant				X	X	X							X	X	X	-	-	-
	Greater scaup				X	X	X								X	X	-	-	-
	Hooded merganser				X	X	X	X						X	X	X	-	-	-
	Red-breasted merganser				X	X	X							X	X	X	-	-	-
	Reddish egret	P			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck				X	X	X								X	X	-	-	-
7	American bittern				X	X	X								X		-	-	-
	Black tern				X	X	X	X						X	X	X	-	-	-
	Black-crowned night-heron					X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal				X	X								X			-	-	-
	Caspian tern				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	MAY-AUG	-	-
	Common moorhen				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Great blue heron				X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-
	Great egret				X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Greater yellowlegs				X	X	X	X						X	X	X	-	-	-
	Killdeer				X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	King rail				X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Least bittern					X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Little blue heron				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Mottled duck				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Purple gallinule					X	X	X	X	X	X						MAY-JUL	-	-
	Snowy egret				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Solitary sandpiper				X	X	X	X					X	X	X		-	-	-
	Spotted sandpiper				X	X	X	X					X	X	X	X	-	-	-
	Tricolored heron				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	White ibis				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Willet				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Yellow-crowned night-heron				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
95	American oystercatcher	P	10	PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Black skimmer				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Cattle egret					X	X	X	X	X	X	X	X				MAY-JUN	-	-
	Clapper rail				X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great egret				X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Least tern		50	PAIRS		X	X	X	X	X							MAY-JUL	-	-
	Louisiana seaside sparrow				X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Shorebirds				X	X	X	X					X	X	X	X	-	-	-
	Snowy egret				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	White ibis					X	X	X	X	X	X	X					APR-JUN	-	-
96	Black scoter				X	X									X	X	-	-	-
	White-winged scoter				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	
-----	-----	-	-	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----	-----	-----	
5	Atlantic croaker	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC	
	Atlantic stingray	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
	Bay anchovy	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	
	Bay whiff	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
	Crevalle jack	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP	
	Darter goby	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
	Fringed flounder	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
	Gafftopsail catfish							1	2	2	2	1					-	-	-	-	JUN-OCT	
	Gray snapper							1	1	1	1	1	1	1	1	1	-	-	-	-	MAY-DEC	
	Gulf killifish	2	2	2	2	3	3	3	3	3	3	3	3	3	3	2	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	
	Gulf menhaden	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC	
	Gulf toadfish	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
	Hardhead catfish	2	2	2	4	4	4	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC	
	Least puffer	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
	Pigfish				1	1	1	1	1	1	1	2	1				-	-	-	-	MAR-NOV	
	Pinfish	3	3	3	3	3	4	4	4	4	4	4	3	3			NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC	
	Red drum	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	SEP-NOV	SEP-FEB	SEP-FEB	JAN-DEC	JAN-DEC	
	Sand seatrout	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC	
	Silver perch	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC	
	Southern flounder	3	3	3	3	3	3	3	3	2	3	3	3	3			SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC	
	Southern kingfish	2	2	3	3	3	3	3	3	3	3	3	3	3			-	-	-	-	JAN-DEC	
	Spot	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAR	NOV-APR	NOV-MAR	JAN-DEC	JAN-DEC	
	Spotfin mojarra						1	2	2	2	1	1	1				-	-	-	-	MAY-NOV	
	Spotted seatrout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC	
	Star drum	1	1	2	2	2	2	2	2	2	2	1	1				-	-	-	-	JAN-DEC	
	Striped anchovy				1	1	1	1	1	1	1	1	1	1			-	-	-	-	APR-DEC	
	Striped mullet	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC	
	Threadfin shad	2	2	2	2	2	1	1	1	1	1	1	1	2			-	-	-	-	JAN-DEC	
	White mullet	1	1	1	1	1	1	1	1	1	1	1	1	1	1		-	-	-	-	JAN-DEC	
	8	Atlantic spadefish				2	2	2	3	3	3	3	2	1			-	-	JUN-SEP	-	APR-DEC	
		Atlantic sturgeon	1	1	1	1	1									1	1	-	-	-	-	OCT-MAY
		Black drum	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
		Bluefish				2	2	2	2	2	2							APR-OCT	-	-	-	APR-OCT
		Florida pompano				1	2	3	3	3	2	2	1	1				MAY-JUL	MAY-JUL	MAY-JUL	MAY-NOV	MAR-SEP
Gulf butterflyfish		2	2	2	3	3	2	2	2	2	2	2	2	2			-	-	-	-	JAN-DEC	
Gulf flounder		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	NOV-FEB	NOV-FEB	NOV-FEB	JAN-DEC	JAN-DEC	
Harvestfish		1	1	1	2	2	2	2	2	2	2	2	1	1			-	-	-	-	JAN-DEC	
Ladyfish					1	1	2	2	1	1	1	1					-	-	-	-	MAR-OCT	
Scaled sardine						1	1	1	1	2	2	2					-	-	-	-	APR-OCT	
Sheepshead		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	FEB-MAR	FEB-APR	FEB-MAY	JAN-DEC	JAN-DEC	
Silver seatrout		1	1	1	1	1	1	1	1	2	2	1	1	1			-	-	-	-	JAN-DEC	
Southern hake					1	1	1	1							1		-	-	-	-	FEB-MAY	
																					OCT-OCT	
Spanish mackerel		1	1	1	3	3	3	3	3	3	3	1	1	1	1	1	JUN-SEP	JUN-SEP	JUN-SEP	APR-SEP	JAN-DEC	

Alabama: ESIMAP 4 (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
			-	-	-	-	-	-	-	-	-	-	-	-					
8	Spotted hake		1	1	1	1	1	1							-	-	-	-	JAN-JUN
	Tarpon		2	2	2	2	2	2	2	2	2	2	2	2	APR-SEP	APR-SEP	MAY-SEP	JAN-DEC	JAN-DEC
9	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
10	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	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
			-	-	-	-	-	-	-	-	-	-	-	-					
5	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
97	Eastern oyster		2	2	2	2	2	2	2	2	2	2	2	2	APR-NOV	-	APR-NOV	APR-NOV	-

MARINE MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting
			-	-	-	-	-	-	-	-	-	-	-	-				
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW					X	X	X	X	X	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
			-	-	-	-	-	-	-	-	-	-	-	-					
93	Mississippi diamondback terrapin	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
95	Mississippi diamondback terrapin	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
151	Green sea turtle	P T		X	X	X	X	X	X	X	X	X	X		-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E		X	X	X	X	X	X	X	X	X	X		-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E		X	X	X	X	X	X	X	X	X	X		-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T		X	X	X	X	X	X	X	X	X	X		-	-	-	MAR-NOV	APR-SEP

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
20	PIPING PLOVER CRITICAL HABITAT	USFWS	251/441-5181

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.

Alabama: 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
					-	-	-	-	-	-	-	-	-	-	-	-			
2	American white pelican	P			X	X	X	X						X	X	X	-	-	-
	Bonaparte's gull				X	X	X	X	X						X	X	-	-	-
	Brown pelican				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead				X	X	X								X	X	-	-	-
	Canvasback				X	X	X								X	X	-	-	-
	Common goldeneye				X	X	X								X	X	-	-	-
	Common loon				X	X	X	X	X				X	X	X	X	-	-	-
	Forster's tern				X	X	X	X							X	X	-	-	-
	Herring gull				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Horned grebe				X	X	X	X	X				X	X	X	X	-	-	-
	Laughing gull				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least tern				X	X	X	X				X	X	X	X	X	-	-	-
	Lesser scaup				X	X	X								X	X	-	-	-
	Magnificent frigatebird						X	X	X	X	X	X	X	X	X	X	-	-	-
	Northern gannet				X	X	X	X	X				X	X	X	X	-	-	-
	Osprey	P			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Redhead				X	X	X								X	X	-	-	-
	Ring-billed gull				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
3	Double-crested cormorant				X	X	X							X	X	X	-	-	-
	Greater scaup				X	X	X								X	X	-	-	-
	Hooded merganser				X	X	X	X						X	X	X	-	-	-
	Red-breasted merganser				X	X	X							X	X	X	-	-	-
	Reddish egret	P			X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck				X	X	X								X	X	-	-	-
96	Black scoter				X	X									X	X	-	-	-
	White-winged scoter				X	X									X	X	-	-	-
98	Bufflehead				X	X	X								X	X	-	-	-
	Common goldeneye				X	X	X								X	X	-	-	-
	Greater scaup				X	X	X								X	X	-	-	-
	Lesser scaup				X	X	X								X	X	-	-	-
	Red-breasted merganser				X	X	X								X	X	-	-	-
99	American oystercatcher	P	3	PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Black skimmer		10	PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Caspian tern				X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Cattle egret		500	PAIRS		X	X	X	X	X	X	X	X				MAY-JUN	-	-
	Clapper rail				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Glossy ibis				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Great blue heron		20	PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-
	Great egret		20	PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Little blue heron		150	PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Louisiana seaside sparrow				X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Mottled duck				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Reddish egret	P	5	PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern				X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Snowy egret		250	PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		400	PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	White ibis		200	PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
100	American oystercatcher	P	1	PAIR	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
102	Bald eagle	P	T		X	X	X								X	X	-	-	-
103	Least tern		100	PAIRS		X	X	X	X	X	X						MAY-JUL	-	-
106	Black tern				X	X	X	X							X	X	-	-	-
	Black-bellied plover				X	X	X	X	X						X	X	-	-	-
	Dunlin				X	X	X	X							X	X	-	-	-
	Greater yellowlegs				X	X	X	X							X	X	-	-	-
	Least sandpiper				X	X	X	X							X	X	-	-	-
	Red knot				X	X	X	X							X	X	-	-	-
	Reddish egret	P			X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Ruddy turnstone				X	X	X								X	X	-	-	-
	Sanderling				X	X	X	X		X	X	X	X	X			-	-	-
	Sandwich tern					X	X	X	X	X	X	X	X	X			JUN-JUL	-	-
	Semipalmated plover				X	X	X	X							X	X	-	-	-
	Semipalmated sandpiper				X	X	X	X							X	X	-	-	-
	Spotted sandpiper				X	X	X	X		X	X	X	X	X			-	-	-
	Western sandpiper				X	X	X	X		X	X	X	X	X			-	-	-
	Willet				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
107	Black-crowned night-heron					X	X	X	X	X	X	X	X	X			APR-JUN	-	-
	Blue-winged teal				X	X									X		-	-	-
	Cattle egret					X	X	X	X	X	X	X	X				MAY-JUN	-	-
	Clapper rail				X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron				X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret				X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal				X	X	X								X	X	-	-	-
	Killdeer				X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron				X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule					X	X	X	X	X	X						MAY-JUL	-	-
	Snowy egret				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet				X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
108	Black skimmer				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gull-billed tern	P				X	X	X	X	X	X	X					-	-	-
109	Piping plover	P	T		X	X	X			X	X	X	X	X			-	-	-
	Short-billed dowitcher				X	X	X	X							X	X	-	-	-
110	American bittern				X	X	X								X		-	-	-
	American coot				X	X	X	X							X	X	-	-	-
	American wigeon				X	X	X	X							X	X	-	-	-
	Canada goose				X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Common moorhen				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gadwall				X	X	X	X							X	X	-	-	-
	Green-backed heron				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	King rail				X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Least bittern					X	X	X	X	X	X	X	X	X			MAY-JUL	-	-
	Mallard				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Mottled duck				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Northern harrier				X	X									X	X	-	-	-
	Pied-billed grebe				X	X	X	X	X						X	X	-	-	-
	Snow goose				X	X	X								X	X	-	-	-
	Solitary sandpiper					X	X	X	X						X	X	-	-	-
	Sora				X	X	X	X				X	X	X	X	X	-	-	-
	Spotted sandpiper				X	X	X	X				X	X	X	X	X	-	-	-
	Virginia rail				X	X	X	X				X	X	X	X	X	-	-	-
	White ibis				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
111	Black-necked stilt					X	X	X	X								-	-	-
	Caspian tern				X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Green heron				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Nelson's sharp-tailed sparrow				X	X	X	X							X	X	-	-	-
	Pectoral sandpiper					X	X	X				X	X	X			-	-	-
	Spotted sandpiper				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.

BIOLOGICAL RESOURCES: (cont.)

[illegible][illegible]

Alabama: ESIMAP 5 (cont.)

BIOLOGICAL RESOURCES: (cont.)

HABITAT: (cont.)

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
-----	-----	- - - - -	-	-	-	-	-	-	-	-	-	-	-	-
202	Christmas berry		X	X	X	X	X	X	X	X	X	X	X	X
203	Christmas berry		X	X	X	X	X	X	X	X	X	X	X	X
	Tiny-leaved buckthorn		X	X	X	X	X	X	X	X	X	X	X	X
217	Flax-leaf false-foxglove		X	X	X	X	X	X	X	X	X	X	X	X
	Lattice jointgrass		X	X	X	X	X	X	X	X	X	X	X	X
	Yellow fringeless orchid		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
-----	-----	- - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----	-----	-----
5	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
6	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
104	Hooked mussel		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
112	Eastern oyster		4	4	4	4	4	4	4	4	4	4	4	4	APR-NOV	-	APR-NOV	APR-NOV	JAN-DEC
114	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	MAR-NOV	JUN-AUG
	Pink shrimp		2	2	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-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
-----	-----	- - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----	-----
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW				X	X	X	X	X	X	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
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18	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
93	Mississippi diamondback terrapin	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
99	Gulf salt marsh snake	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Mississippi diamondback terrapin	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
100	Mississippi diamondback terrapin	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
101	Gulf salt marsh snake	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
111	Gulf salt marsh snake	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Mississippi diamondback terrapin	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
117	Green sea turtle	P T		X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E		X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
	Loggerhead sea turtle	P T		X	X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
126	Green water snake		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Gulf salt marsh snake	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
151	Green sea turtle	P T		X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E		X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E		X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T		X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
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2	DAUPHIN ISLAND AIRPORT		

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
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20	PIPING PLOVER CRITICAL HABITAT	USFWS	251/441-5181

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.

Alabama: 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
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2	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Canvasback		X	X	X							X	X		-	-	-
	Common goldeneye		X	X	X							X	X		-	-	-
	Common loon		X	X	X	X	X			X	X	X	X		-	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Horned grebe		X	X	X	X	X			X	X	X	X		-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least tern		X	X	X	X				X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Magnificent frigatebird					X	X	X	X	X	X	X	X	X	-	-	-
	Northern gannet		X	X	X	X	X			X	X	X	X		-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
106	Black tern		X	X	X	X						X	X	X	-	-	-
	Black-bellied plover		X	X	X	X	X					X	X		-	-	-
	Dunlin		X	X	X	X						X	X	X	-	-	-
	Greater yellowlegs		X	X	X	X						X	X	X	-	-	-
	Least sandpiper		X	X	X	X						X	X	X	-	-	-
	Red knot		X	X	X	X						X	X		-	-	-
	Reddish egret	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Ruddy turnstone		X	X	X							X	X		-	-	-
	Sanderling		X	X	X	X	X			X	X	X	X	X	-	-	-
	Sandwich tern			X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Semipalmated plover		X	X	X	X						X	X	X	-	-	-
	Semipalmated sandpiper		X	X	X	X						X	X	X	-	-	-
	Spotted sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	Western sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
115	Magnificent frigatebird					X	X	X	X	X	X	X	X		-	-	-
	Northern gannet	COMMON	X	X	X	X	X			X	X	X	X		-	-	-
116	Black skimmer	100 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Caspian tern	25 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Gull-billed tern	P 25 PAIRS		X	X	X	X	X	X	X					MAY-JUL	-	-
	Least tern	100 PAIRS		X	X	X	X	X	X						MAY-JUL	-	-
	Piping plover	P T	X	X	X					X	X	X	X	X	-	-	-
	Royal tern	75 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Snowy plover	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Wilson's plover	P		X	X	X	X	X	X	X	X	X	X		MAY-JUL	-	-
118	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common loon		X	X	X	X	X					X	X	X	-	-	-
	Double-crested cormorant		X	X	X							X	X	X	-	-	-
	Herring gull		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	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Surf scoter		X	X								X	X		-	-	-
	White-winged scoter		X	X								X	X		-	-	-
120	American oystercatcher	P	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
121	Bald eagle	P 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
----	-----	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----	-----	-----
5	Atlantic croaker		4	4	4	4	4	4	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		3	3	3	4	4	4	4	4	4	4	4	4	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish								1	2	2	2	1		-	-	-	-	JUN-OCT
	Gray snapper						1	1	1	1	1	1	1	1	-	-	-	-	MAY-DEC
	Gulf killifish		2	2	2	2	3	3	3	3	3	3	3	2	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gulf menhaden		4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Gulf toadfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pigfish			1	1	1	1	1	1	1	1	2	1		-	-	-	-	MAR-NOV
	Pinfish		3	3	3	3	4	4	4	4	4	3	3		NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	SEP-NOV	SEP-FEB	SEP-FEB	JAN-DEC	JAN-DEC
	Sand seatrout		4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC
	Silver perch		3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Southern flounder		3	3	3	3	3	3	3	2	3	3	3	3	SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC
	Southern kingfish		2	2	3	3	3	3	3	3	3	3	3	3	-	-	-	-	JAN-DEC
	Spot		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAR	NOV-APR	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra						1	2	2	1	1	1	1		-	-	-	-	MAY-NOV
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Star drum		1	1	2	2	2	2	2	2	2	2	1	1	-	-	-	-	JAN-DEC
	Striped anchovy					1	1	1	1	1	1	1	1	1	-	-	-	-	APR-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	1	1	1	1	1	1	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
8	Atlantic spadefish					2	2	3	3	3	3	2	1		-	-	JUN-SEP	-	APR-DEC
	Atlantic sturgeon		1	1	1	1						1	1	1	-	-	-	-	OCT-MAY
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish					2	2	2	2	2	2				APR-OCT	-	-	-	APR-OCT
	Florida pompano				1	2	3	3	3	2	2	1	1		MAY-JUL	MAY-JUL	MAY-JUL	MAY-NOV	MAR-SEP
	Gulf butterflyfish		2	2	2	3	3	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf flounder		2	2	2	2	2	2	2	2	2	2	2	2	NOV-FEB	NOV-FEB	NOV-FEB	JAN-DEC	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	1	1	-	-	-	JAN-DEC	-
	Ladyfish				1	1	2	2	1	1	1	1	1		-	-	-	-	MAR-OCT
	Scaled sardine					1	1	1	1	2	2	2			-	-	-	-	APR-OCT
	Sheepshead		2	2	2	2	2	2	2	2	2	2	2	2	FEB-MAR	FEB-APR	FEB-MAY	JAN-DEC	JAN-DEC
	Silver seatrout		1	1	1	1	1	1	1	2	2	1	1	1	-	-	-	-	JAN-DEC
	Southern hake			1	1	1	1					1			-	-	-	-	FEB-MAY
																			OCT-OCT
	Spanish mackerel		1	1	1	3	3	3	3	3	3	1	1	1	JUN-SEP	JUN-SEP	JUN-SEP	APR-SEP	JAN-DEC
	Spotted hake		1	1	1	1	1	1							-	-	-	-	JAN-JUN
	Tarpon		2	2	2	2	2	2	2	2	2	2	2	2	APR-SEP	APR-SEP	MAY-SEP	JAN-DEC	JAN-DEC
10	Gulf sturgeon	P T	X	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.

Alabama: ESIMAP 6 (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
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119	Atlantic croaker		4	4	4	4	4	4	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC
	Atlantic sharpnose shark			2	2	2	2	2	2	2	2				-	-	-	-	MAR-OCT
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		3	3	3	4	4	4	4	4	4	4	4	4	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bighead searobin			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-DEC
	Blacktip shark			2	2	2	2	2	2	2	2	2			-	-	-	-	MAR-OCT
	Blue runner											2	2		-	-	-	-	SEP-OCT
	Bonnethead shark												1		-	-	-	-	OCT-OCT
	Broad flounder		1	1	1	1	1	1							-	-	-	-	JAN-JUN
	Bull shark			2	2	2	2	2	2	2	2	2			-	-	-	-	MAR-OCT
	Cobia									1	1	1			-	-	-	-	JUL-SEP
	Crested cusk-eel		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Dolphin											2			-	-	-	-	SEP-SEP
	Finetooth shark		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Florida pompano			1	2	3	3	3	2	2	1	1			MAY-JUL	MAY-JUL	MAY-JUL	MAY-NOV	MAR-SEP
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish						1	2	2	2	1				-	-	-	-	JUN-OCT
	Gray snapper						1	1	1	1	1	1	1	1	-	-	-	-	MAY-DEC
	Gulf flounder		2	2	2	2	2	2	2	2	2	2	2	2	NOV-FEB	NOV-FEB	NOV-FEB	JAN-DEC	JAN-DEC
	Gulf killifish		2	2	2	2	3	3	3	3	3	3	3	2	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gulf menhaden		4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Gulf toadfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Inshore lizardfish		1	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	4	4	4	4	4	3	3	NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	SEP-NOV	SEP-FEB	SEP-FEB	JAN-DEC	JAN-DEC
	Red snapper							1	2	1	2	2			-	-	-	-	JUN-OCT
	Rough scad						2	1				1	1		-	-	-	-	MAY-JUN
																			SEP-OCT
	Sand seatrout		4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC
	Silver perch		3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Silver seatrout			2		2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-FEB
																			MAY-SEP
	Skilletfish		2	2	2	2	2	2	2	1	1	1	1		-	-	-	-	JAN-NOV
	Skipjack herring		1	1	1	1	1	1		1				1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern flounder		3	3	3	3	3	3	3	3	2	3	3	3	SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC
	Southern hake			1	1	1	1					1			-	-	-	-	FEB-MAY
																			OCT-OCT
	Southern kingfish		2	2	3	3	3	3	3	3	3	3	3	3	-	-	-	-	JAN-DEC
	Spanish sardine				1			1	1						-	-	-	-	APR-APR
																			JUN-JUL
	Speckled worm eel		2	2	2	2	1	1			1	1	1	1	-	-	-	-	SEP-JUN
	Spinner shark				1	1	1	1	1	1	1	1			-	-	-	-	MAR-OCT
	Spot		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAR	NOV-APR	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra						1	2	2	2	1	1	1	1	-	-	-	-	MAY-NOV
	Spotted hake			1	1	1	1						1		-	-	-	-	FEB-MAY
																			NOV-NOV
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Star drum		1	1	2	2	2	2	2	2	2	2	1	1	-	-	-	-	JAN-DEC
	Striped anchovy					1	1	1	1	1	1	1	1	1	-	-	-	-	APR-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	1	1	1	1	1	1	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
122	Gulf kingfish		2		2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-JAN
	Halfbeak				1	1	2	2	2	1	1				-	-	-	-	APR-OCT
	Inland silverside		3	3	3	3	3	4	4	4	4	4	4	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	2	1	1	1	1	1	1	1	JUN-JUL	-	-	-	JAN-DEC
	Marsh killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Northern kingfish				1	1	2	2	1	1	1	1	1	1	-	-	-	-	MAR-DEC
	Rough silverside		3	3	3	3	3	4	4	4	4	4	4	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
123	Atlantic spadefish					2	2	3	3	3	3	2	1		-	-	JUN-SEP	-	APR-DEC
	Atlantic thread herring				2	2	2	2	2	2	2	2	1		-	-	-	-	MAR-NOV
	Banded drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-NOV
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish						2	2	2	2	2	2			APR-OCT	-	-	-	APR-OCT
	Gulf butterflyfish		2	2	2	3	3	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	1	1	-	-	-	JAN-DEC	-
	King mackerel						1	2	2	2	2	2	1		-	-	-	-	MAY-NOV
	Ladyfish					1	1	2	2	1	1	1	1		-	-	-	-	MAR-OCT
	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Longnose anchovy		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Scaled sardine						1	1	1	2	2	2			-	-	-	-	APR-OCT
	Sheepshead		2	2	2	2	2	2	2	2	2	2	2	2	FEB-MAR	FEB-APR	FEB-MAY	JAN-DEC	JAN-DEC
	Spanish mackerel		1	1	1	3	3	3	3	3	3	1	1	1	JUN-SEP	JUN-SEP	JUN-SEP	APR-SEP	JAN-DEC
124	Gulf sturgeon	P T COMMON	X											X	-	-	-	-	DEC-JAN

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
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5	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	2		-	-	-	JAN-DEC	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
119	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
122	Five-slotted sand dollar			1						1	2	2	2	2	-	-	-	-	FEB-FEB
																			JUL-NOV
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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
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Alabama: 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	Interesting	Juveniles	Adults
117	Green sea turtle	P T					X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E					X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
	Loggerhead sea turtle	P T					X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
151	Green sea turtle	P T					X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E					X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E					X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T					X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
20	PIPING PLOVER CRITICAL HABITAT	USFWS	251/441-5181

Alabama: 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
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2	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Bonaparte's gull		X	X	X	X	X						X	X	-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X								X	X	-	-	-
	Canvasback		X	X	X								X	X	-	-	-
	Common goldeneye		X	X	X								X	X	-	-	-
	Common loon		X	X	X	X	X			X	X	X	X		-	-	-
	Forster's tern		X	X	X	X							X	X	-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Horned grebe		X	X	X	X	X			X	X	X	X		-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Least tern		X	X	X	X				X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X								X	X	-	-	-
	Magnificent frigatebird					X	X	X	X	X	X	X	X		-	-	-
	Northern gannet		X	X	X	X	X			X	X	X	X		-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Redhead		X	X	X								X	X	-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
106	Black tern		X	X	X	X							X	X	-	-	-
	Black-bellied plover		X	X	X	X	X						X	X	-	-	-
	Dunlin		X	X	X	X							X	X	-	-	-
	Greater yellowlegs		X	X	X	X							X	X	-	-	-
	Least sandpiper		X	X	X	X							X	X	-	-	-
	Red knot		X	X	X	X							X	X	-	-	-
	Reddish egret	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Ruddy turnstone		X	X	X								X	X	-	-	-
	Sanderling		X	X	X	X	X			X	X	X	X	X	-	-	-
	Sandwich tern			X	X	X	X	X	X	X	X	X	X		JUN-JUL	-	-
	Semipalmated plover		X	X	X	X							X	X	-	-	-
	Semipalmated sandpiper		X	X	X	X							X	X	-	-	-
	Spotted sandpiper		X	X	X	X				X	X	X	X		-	-	-
	Western sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
108	Black skimmer		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gull-billed tern	P		X	X	X	X	X	X	X	X	X	X		-	-	-
109	Piping plover	P T	X	X	X					X	X	X	X	X	-	-	-
	Short-billed dowitcher		X	X	X	X							X	X	-	-	-
115	Magnificent frigatebird					X	X	X	X	X	X	X			-	-	-
	Northern gannet	COMMON	X	X	X	X	X			X	X	X	X		-	-	-
116	Black skimmer	100 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Caspian tern	25 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Gull-billed tern	P 25 PAIRS		X	X	X	X	X	X	X	X	X			MAY-JUL	-	-
	Least tern	100 PAIRS		X	X	X	X	X	X						MAY-JUL	-	-
	Piping plover	P T	X	X	X					X	X	X	X	X	-	-	-
	Royal tern	75 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Snowy plover	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Wilson's plover	P		X	X	X	X	X	X	X	X	X			MAY-JUL	-	-
118	Bonaparte's gull		X	X	X	X	X						X	X	-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common loon		X	X	X	X							X	X	-	-	-
	Double-crested cormorant		X	X	X								X	X	-	-	-
	Herring gull		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	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X								X	X	-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Surf scoter		X	X									X	X	-	-	-
	White-winged scoter		X	X									X	X	-	-	-
125	Least tern				X	X	X	X	X	X					MAY-JUL	-	-
	Piping plover	P T	X	X	X					X	X	X	X	X	-	-	-
	Wilson's plover	P		X	X	X	X	X	X	X	X	X			MAR-JUN	-	-
128	American oystercatcher	P 2 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Black skimmer	200 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Common tern	25-50 PAIRS		X	X	X	X	X	X						MAY-JUL	-	-
	Double-crested cormorant	10000 BIRDS	X	X	X					X	X	X	X		-	-	-
	Gull-billed tern	P 25-50 PAIRS		X	X	X	X	X	X	X	X				MAY-JUL	-	-
	Piping plover	P T	X	X	X					X	X	X	X	X	-	-	-
	Shorebirds			X	X	X				X	X	X			-	-	-
	Snowy plover	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Wilson's plover	P 1 PAIR		X	X	X	X	X	X	X	X				MAR-JUN	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
----	-----	- - -	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----	-----	-----
5	Atlantic croaker		4	4	4	4	4	4	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		3	3	3	4	4	4	4	4	4	4	4	4	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish						1	2	2	2	1				-	-	-	-	JUN-OCT
	Gray snapper					1	1	1	1	1	1	1	1	1	-	-	-	-	MAY-DEC
	Gulf killifish		2	2	2	2	3	3	3	3	3	3	2		JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gulf menhaden		4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Gulf toadfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pigfish			1	1	1	1	1	1	1	2	1			-	-	-	-	MAR-NOV
	Pinfish		3	3	3	3	4	4	4	4	4	3	3		NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	SEP-NOV	SEP-FEB	SEP-FEB	JAN-DEC	JAN-DEC
	Sand seatrout		4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC
	Silver perch		3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Southern flounder		3	3	3	3	3	3	3	2	3	3	3		SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC
	Southern kingfish		2	2	3	3	3	3	3	3	3	3	3	3	-	-	-	-	JAN-DEC
	Spot		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAR	NOV-APR	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra					1	2	2	2	1	1	1	1		-	-	-	-	MAY-NOV
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Star drum		1	1	2	2	2	2	2	2	2	1	1		-	-	-	-	JAN-DEC
	Striped anchovy					1	1	1	1	1	1	1	1		-	-	-	-	APR-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	1	1	1	1	1	1	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
8	Atlantic spadefish					2	2	3	3	3	2	1			-	-	JUN-SEP	-	APR-DEC
	Atlantic sturgeon		1	1	1	1						1	1	1	-	-	-	-	OCT-MAY
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish				2	2	2	2	2	2	2				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.

Alabama: ESIMAP 7 (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
			-	-	-	-	-	-	-	-	-	-	-	-					
8	Florida pompano				1	2	3	3	3	2	2	1	1		MAY-JUL	MAY-JUL	MAY-JUL	MAY-NOV	MAR-SEP
	Gulf butterflyfish		2	2	2	3	3	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf flounder		2	2	2	2	2	2	2	2	2	2	2	2	NOV-FEB	NOV-FEB	NOV-FEB	JAN-DEC	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	1	1	-	-	-	JAN-DEC	-
	Ladyfish				1	1	2	2	1	1	1	1			-	-	-	-	MAR-OCT
	Scaled sardine					1	1	1	1	2	2	2			-	-	-	-	APR-OCT
	Sheepshead		2	2	2	2	2	2	2	2	2	2	2	2	FEB-MAR	FEB-APR	FEB-MAY	JAN-DEC	JAN-DEC
	Silver seatrout		1	1	1	1	1	1	1	2	2	1	1	1	-	-	-	-	JAN-DEC
	Southern hake		1	1	1	1						1			-	-	-	-	FEB-MAY
																			OCT-OCT
	Spanish mackerel		1	1	1	3	3	3	3	3	3	1	1	1	JUN-SEP	JUN-SEP	JUN-SEP	APR-SEP	JAN-DEC
	Spotted hake		1	1	1	1	1	1							-	-	-	-	JAN-JUN
	Tarpon		2	2	2	2	2	2	2	2	2	2	2	2	APR-SEP	APR-SEP	MAY-SEP	JAN-DEC	JAN-DEC
10	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
119	Atlantic croaker		4	4	4	4	4	4	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC
	Atlantic sharpnose shark				2	2	2	2	2	2	2	2			-	-	-	-	MAR-OCT
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		3	3	3	4	4	4	4	4	4	4	4	4	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bighead searobin		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-DEC
	Blacktip shark		2	2	2	2	2	2	2	2	2	2			-	-	-	-	MAR-OCT
	Blue runner											2	2		-	-	-	-	SEP-OCT
	Bonnethead shark												1		-	-	-	-	OCT-OCT
	Broad flounder		1	1	1	1	1	1							-	-	-	-	JAN-JUN
	Bull shark		2	2	2	2	2	2	2	2	2	2			-	-	-	-	MAR-OCT
	Cobia							1	1	1					-	-	-	-	JUL-SEP
	Crested cusk-eel		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Dolphin											2			-	-	-	-	SEP-SEP
	Finetooth shark		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Florida pompano		1	2	3	3	3	2	2	1	1				MAY-JUL	MAY-JUL	MAY-JUL	MAY-NOV	MAR-SEP
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish				1	2	2	2	1						-	-	-	-	JUN-OCT
	Gray snapper					1	1	1	1	1	1	1	1		-	-	-	-	MAY-DEC
	Gulf flounder		2	2	2	2	2	2	2	2	2	2	2	2	NOV-FEB	NOV-FEB	NOV-FEB	JAN-DEC	JAN-DEC
	Gulf killifish		2	2	2	2	3	3	3	3	3	3	3	2	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gulf menhaden		4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Gulf toadfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Inshore lizardfish		1	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	4	4	4	4	4	3	3	NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	SEP-NOV	SEP-FEB	SEP-FEB	JAN-DEC	JAN-DEC
	Red snapper					1	2	1	2	2					-	-	-	-	JUN-OCT
	Rough scad					2	1			1	1				-	-	-	-	MAY-JUN
																			SEP-OCT
	Sand seatrout		4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC
	Silver perch		3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Silver seatrout		2		2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-FEB
																			MAY-SEP
	Skilletfish		2	2	2	2	2	2	2	1	1	1	1		-	-	-	-	JAN-NOV
	Skipjack herring		1	1	1	1	1	1		1			1		-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern flounder		3	3	3	3	3	3	3	3	2	3	3	3	SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC
	Southern hake		1	1	1	1					1				-	-	-	-	FEB-MAY
																			OCT-OCT
	Southern kingfish		2	2	3	3	3	3	3	3	3	3	3	3	-	-	-	-	JAN-DEC
	Spanish sardine				1		1	1							-	-	-	-	APR-APR
																			JUN-JUL
	Speckled worm eel		2	2	2	2	1	1			1	1	1	1	-	-	-	-	SEP-JUN
	Spinner shark				1	1	1	1	1	1	1	1			-	-	-	-	MAR-OCT
	Spot		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAR	NOV-APR	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra				1	2	2	2	1	1	1				-	-	-	-	MAY-NOV
	Spotted hake		1	1	1	1						1			-	-	-	-	FEB-MAY
																			NOV-NOV
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Star drum		1	1	2	2	2	2	2	2	2	2	1	1	-	-	-	-	JAN-DEC
	Striped anchovy				1	1	1	1	1	1	1	1	1		-	-	-	-	APR-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	1	1	1	1	1	1	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
122	Gulf kingfish		2		2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-JAN
	Halfbeak				1	1	2	2	1	1					-	-	-	-	APR-OCT
	Inland silverside		3	3	3	3	3	4	4	4	4	4	4	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	2	1	1	1	1	1	1	1	JUN-JUL	-	-	-	JAN-DEC
	Marsh killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Northern kingfish				1	1	2	2	1	1	1	1	1		-	-	-	-	MAR-DEC
	Rough silverside		3	3	3	3	3	4	4	4	4	4	4	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
123	Atlantic spadefish				2	2	3	3	3	3	2	1			-	-	JUN-SEP	-	APR-DEC
	Atlantic thread herring				2	2	2	2	2	2	2	1			-	-	-	-	MAR-NOV
	Banded drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-NOV
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish				2	2	2	2	2	2					APR-OCT	-	-	-	APR-OCT
	Gulf butterflyfish		2	2	2	3	3	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	1	1	-	-	-	JAN-DEC	-
	King mackerel					1	2	2	2	2	2	1			-	-	-	-	MAY-NOV
	Ladyfish				1	1	2	2	1	1	1	1			-	-	-	-	MAR-OCT
	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Longnose anchovy		1	1	1	1	1	1	1	1	1	1	1		-	-	-	-	JAN-DEC
	Scaled sardine				1	1	1	2	2	2					-	-	-	-	APR-OCT
	Sheepshead		2	2	2	2	2	2	2	2	2	2	2	2	FEB-MAR	FEB-APR	FEB-MAY	JAN-DEC	JAN-DEC
	Spanish mackerel		1	1	1	3	3	3	3	3	3	1	1	1	JUN-SEP	JUN-SEP	JUN-SEP	APR-SEP	JAN-DEC
124	Gulf sturgeon	P T COMMON	X											X	-	-	-	-	DEC-JAN

INVERTEBRATE:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
5	Atlantic brief squid				2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab				4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp				4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Grass shrimp				3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Pink shrimp				1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp				4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
119	Atlantic brief squid				2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab				4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp				4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Pink shrimp				1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC

Alabama: ESIMAP 7 (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
119	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
122	Five-slotted sand dollar		1						1	2	2	2	2		-	-	-	-	FEB-FEB
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JUL-NOV
	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW						X	X	X	X	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
117	Green sea turtle	P T				X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E				X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
	Loggerhead sea turtle	P T				X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
126	Green water snake		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Gulf salt marsh snake	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
151	Green sea turtle	P T				X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E				X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E				X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T				X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
20	PIPING PLOVER CRITICAL HABITAT	USFWS	251/441-5181

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.

Alabama: 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
----	-----	-	-	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----
98	Bufflehead				X	X	X								X	X	-	-	-
	Common goldeneye				X	X	X								X	X	-	-	-
	Greater scaup				X	X	X								X	X	-	-	-
	Lesser scaup				X	X	X								X	X	-	-	-
	Red-breasted merganser				X	X	X							X	X	X	-	-	-
106	Black tern				X	X	X	X						X	X	X	-	-	-
	Black-bellied plover				X	X	X	X	X					X	X		-	-	-
	Dunlin				X	X	X	X						X	X	X	-	-	-
	Greater yellowlegs				X	X	X	X						X	X	X	-	-	-
	Least sandpiper				X	X	X	X						X	X	X	-	-	-
	Red knot				X	X	X	X						X	X		-	-	-
	Reddish egret	P			X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Ruddy turnstone				X	X	X							X	X		-	-	-
	Sanderling				X	X	X	X	X		X	X	X	X	X		-	-	-
	Sandwich tern					X	X	X	X	X	X	X	X	X	X		JUN-JUL	-	-
	Semipalmated plover				X	X	X	X						X	X	X	-	-	-
	Semipalmated sandpiper				X	X	X	X						X	X	X	-	-	-
	Spotted sandpiper				X	X	X	X			X	X	X	X	X		-	-	-
	Western sandpiper				X	X	X	X			X	X	X	X	X		-	-	-
	Willet				X	X	X	X	X	X	X	X	X	X	X		MAY-JUL	-	-
115	Magnificent frigatebird					X	X	X	X	X	X	X	X				-	-	-
	Northern gannet		COMMON		X	X	X	X	X			X	X	X	X		-	-	-
118	Bonaparte's gull				X	X	X	X	X					X	X		-	-	-
	Brown pelican				X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Common loon				X	X	X	X	X			X	X	X	X		-	-	-
	Double-crested cormorant				X	X	X					X	X	X	X		-	-	-
	Herring gull				X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Laughing gull				X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Osprey	P			X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Red-breasted merganser				X	X	X					X	X	X			-	-	-
	Ring-billed gull				X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Royal tern				X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Surf scoter				X	X								X	X		-	-	-
	White-winged scoter				X	X								X	X		-	-	-
125	Least tern					X	X	X	X	X	X						MAY-JUL	-	-
	Piping plover	P	T		X	X	X				X	X	X	X	X		-	-	-
	Wilson's plover	P				X	X	X	X	X	X	X	X				MAR-JUN	-	-
127	American white pelican	P			X	X	X	X				X	X	X			-	-	-
	Bonaparte's gull				X	X	X	X	X			X	X				-	-	-
	Brown pelican				X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Bufflehead				X	X	X					X	X				-	-	-
	Canvasback				X	X	X					X	X				-	-	-
	Common goldeneye				X	X	X					X	X				-	-	-
	Common loon				X	X	X	X	X			X	X	X	X		-	-	-
	Double-crested cormorant				X	X	X					X	X	X	X		-	-	-
	Forster's tern				X	X	X	X				X	X				-	-	-
	Greater scaup				X	X	X					X	X				-	-	-
	Herring gull				X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Hooded merganser				X	X	X	X				X	X	X			-	-	-
	Horned grebe				X	X	X	X			X	X	X	X			-	-	-
	Laughing gull				X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Lesser scaup				X	X	X					X	X				-	-	-
	Osprey	P			X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Red-breasted merganser				X	X	X					X	X	X			-	-	-
	Redhead				X	X	X					X	X				-	-	-
	Ring-billed gull				X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Royal tern				X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Ruddy duck				X	X	X					X	X				-	-	-
128	American oystercatcher	P		2 PAIRS	X	X	X	X	X	X	X	X	X	X	X		MAR-JUN	-	-
	Black skimmer			200 PAIRS	X	X	X	X	X	X	X	X	X	X	X		MAY-JUL	-	-
	Common tern			25-50 PAIRS		X	X	X	X	X	X						MAY-JUL	-	-
	Double-crested cormorant			10000 BIRDS	X	X	X					X	X	X	X		-	-	-
	Gull-billed tern	P		25-50 PAIRS		X	X	X	X	X	X	X	X				MAY-JUL	-	-
	Piping plover	P	T		X	X	X				X	X	X	X	X		-	-	-
	Shorebirds					X	X	X				X	X	X			-	-	-
	Snowy plover	P			X	X	X	X	X	X	X	X	X	X	X		MAY-AUG	-	-
	Wilson's plover	P		1 PAIR		X	X	X	X	X	X	X	X				MAR-JUN	-	-
129	Piping plover	P	T		X	X	X				X	X	X	X	X		-	-	-
	Snowy plover	P			X	X	X					X	X				-	-	-
130	American oystercatcher	P			X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Black tern				X	X	X	X				X	X	X			-	-	-
	Black-bellied plover				X	X	X	X	X			X	X				-	-	-
	Dunlin				X	X	X	X				X	X	X			-	-	-
	Greater yellowlegs				X	X	X	X				X	X	X			-	-	-
	Least sandpiper				X	X	X	X				X	X	X			-	-	-
	Lesser yellowlegs				X	X	X	X	X			X	X	X	X		-	-	-
	Red knot				X	X	X					X					-	-	-
	Ruddy turnstone				X	X	X					X	X				-	-	-
	Sanderling				X	X	X	X	X		X	X	X	X	X		-	-	-
	Semipalmated plover				X	X	X	X				X	X	X			-	-	-
	Semipalmated sandpiper				X	X	X	X				X	X	X			-	-	-
	Short-billed dowitcher				X	X	X	X				X	X	X			-	-	-
	Spotted sandpiper				X	X	X	X			X	X	X	X	X		-	-	-
	Western sandpiper				X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Whimbrel				X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Willet				X	X	X	X	X	X	X	X	X	X	X		-	-	-
132	Least tern				X	X	X	X			X	X	X	X	X		-	-	-
	Snowy plover	P			X	X	X					X	X				-	-	-
133	Black-necked stilt					X	X	X	X	X	X	X	X	X			-	-	-
134	Caspian tern				X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Clapper rail				X	X	X	X	X	X	X	X	X	X	X		MAY-AUG	-	-
	Great blue heron				X	X	X	X	X	X	X	X	X	X	X		FEB-JUL	-	-
	Great egret				X	X	X	X	X	X	X	X	X	X	X		MAR-JUN	-	-
	Killdeer				X	X	X	X	X	X	X	X	X	X	X		APR-AUG	-	-
	Mottled duck				X	X	X	X	X	X	X	X	X	X	X		APR-JUL	-	-
	Snowy egret				X	X	X	X	X	X	X	X	X	X	X		APR-JUN	-	-
	Tricolored heron				X	X	X	X	X	X	X	X	X	X	X		MAY-JUN	-	-
	Willet				X	X	X	X	X	X	X	X	X	X	X		MAY-AUG	-	-
135	Reddish egret	P				X	X	X	X	X							-	-	-
136	Solitary sandpiper					X	X	X	X			X	X	X			-	-	-
	Spotted sandpiper				X	X	X	X			X	X	X	X	X		-	-	-
	Stilt sandpiper					X	X	X			X	X	X	X			-	-	-
137	Northern gannet				X	X								X			-	-	-
142	Bufflehead			HIGH	X	X	X							X	X		-	-	-
	Greater scaup			HIGH	X	X	X							X	X		-	-	-
	Lesser scaup			HIGH	X	X	X							X	X		-	-	-

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Alabama: ESIMAP 8 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
			-	-	-	-	-	-	-	-	-	-	-	-					
105	Atlantic croaker		4	4	4	4	4	4	4	4	4	4	3	3	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	3	3	3	3	3	3	3	3	2	-	-	DEC-APR	JAN-DEC	-
	Blue catfish		1	2	2	2	1	1						1	1	-	-	-	NOV-JUL
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish						1	1	2	2	1	2	1	1	-	-	-	-	MAY-DEC
	Gray snapper						2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden		2	4	4	4	4	3	3	3	3	4	3	4	-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	3	3	3	3	3	3	3	3	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT
	Sand seatrout		2	2	4	4	4	4	4	3	3	3	2	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC
	Silver perch		2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-AUG	JAN-DEC	JAN-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Southern hake		1	1	2	2	2					1	1		-	-	-	-	OCT-OCT
																			DEC-MAY
	Spot		4	4	4	4	4	4	4	3	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1				1	2	2	2	2	2	2	1	-	-	-	-	MAY-JAN
113	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAR-OCT
	Skipjack herring		1	1	1	1	1	1	1					1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern kingfish		2	2	2	2	3	3	3	2	2	2	2	2	-	-	-	-	JAN-DEC
	Star drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
119	Atlantic croaker		4	4	4	4	4	4	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC
	Atlantic sharpnose shark					2	2	2	2	2	2	2	2		-	-	-	-	MAR-OCT
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		3	3	3	4	4	4	4	4	4	4	4	4	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bighead searobin			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-DEC
	Blacktip shark				2	2	2	2	2	2	2	2			-	-	-	-	MAR-OCT
	Blue runner											2	2		-	-	-	-	SEP-OCT
	Bonnethead shark												1		-	-	-	-	OCT-OCT
	Broad flounder		1	1	1	1	1	1							-	-	-	-	JAN-JUN
	Bull shark			2	2	2	2	2	2	2	2	2			-	-	-	-	MAR-OCT
	Cobia								1	1	1				-	-	-	-	JUL-SEP
	Crested cusk-eel		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Dolphin									2					-	-	-	-	SEP-SEP
	Finetooth shark		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Florida pompano			1	2	3	3	3	2	2	1			1	MAY-JUL	MAY-JUL	MAY-JUL	MAY-NOV	MAR-SEP
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish						1	2	2	2	1				-	-	-	-	JUN-OCT
	Gray snapper						1	1	1	1	1	1	1	1	-	-	-	-	MAY-DEC
	Gulf flounder		2	2	2	2	2	2	2	2	2	2	2	2	NOV-FEB	NOV-FEB	NOV-FEB	JAN-DEC	JAN-DEC
	Gulf killifish		2	2	2	2	3	3	3	3	3	3	3	2	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gulf menhaden		4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Gulf toadfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Inshore lizardfish		1	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	4	4	4	4	4	3	3	NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	SEP-NOV	SEP-FEB	SEP-FEB	JAN-DEC	JAN-DEC
	Red snapper						1	2	1	2	2				-	-	-	-	JUN-OCT
	Rough scad						2	1			1	1			-	-	-	-	MAY-JUN
																			SEP-OCT
	Sand seatrout		4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC
	Silver perch		3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Silver seatrout			2		2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-FEB
																			MAY-SEP
	Skilletfish		2	2	2	2	2	2	2	2	1	1	1	1	-	-	-	-	JAN-NOV
	Skipjack herring		1	1	1	1	1	1	1		1			1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern flounder		3	3	3	3	3	3	3	3	2	3	3	3	SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC
	Southern hake			1	1	1	1					1			-	-	-	-	FEB-MAY
																			OCT-OCT
	Southern kingfish		2	2	3	3	3	3	3	3	3	3	3	3	-	-	-	-	JAN-DEC
	Spanish sardine				1		1	1							-	-	-	-	APR-APR
																			JUN-JUL
	Speckled worm eel		2	2	2	2	1	1			1	1	1	1	-	-	-	-	SEP-JUN
	Spinner shark			1	1	1	1	1	1	1	1	1			-	-	-	-	MAR-OCT
	Spot		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAR	NOV-APR	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra					1	2	2	2	1	1	1			-	-	-	-	MAY-NOV
	Spotted hake			1	1	1	1							1	-	-	-	-	FEB-MAY
																			NOV-NOV
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Star drum		1	1	2	2	2	2	2	2	2	2	1	1	-	-	-	-	JAN-DEC
	Striped anchovy				1	1	1	1	1	1	1	1	1	1	-	-	-	-	APR-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	1	1	1	1	1	1	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
122	Gulf kingfish		2		2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-JAN
	Halfbeak				1	1	2	2	2	1	1				-	-	-	-	APR-OCT
	Inland silverside		3	3	3	3	3	4	4	4	4	4	4	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	2	1	1	1	1	1	1	1	JUN-JUL	-	-	-	JAN-DEC
	Marsh killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Northern kingfish			1	1	2	2	2	1	1	1	1	1	1	-	-	-	-	MAR-DEC
	Rough silverside		3	3	3	3	3	4	4	4	4	4	4	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
123	Atlantic spadefish				2	2	2	3	3	3	3	2	1		-	-	JUN-SEP	-	APR-DEC
	Atlantic thread herring				2	2	2	2	2	2	2	2	1		-	-	-	-	MAR-NOV
	Banded drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-NOV
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish				2	2	2	2	2</										

Alabama: ESIMAP 8 (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
123	Spanish mackerel		1	1	1	3	3	3	3	3	3	1	1	1	JUN-SEP	JUN-SEP	JUN-SEP	APR-SEP	JAN-DEC
138	Atlantic croaker		4	4	4	4	4	4	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC
	Atlantic sharpnose shark			2	2	2	2	2	2	2	2				-	-	-	-	MAR-OCT
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2		-	-	-	JAN-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	JAN-DEC	-
	Bighead searobin			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-DEC
	Blacktip shark			2	2	2	2	2	2	2	2				-	-	-	-	MAR-OCT
	Blue runner											2	2		-	-	-	-	SEP-OCT
	Bonnethead shark												1		-	-	-	-	OCT-OCT
	Broad flounder		1	1	1	1	1	1							-	-	-	-	JAN-JUN
	Bull shark			2	2	2	2	2	2	2	2				-	-	-	-	MAR-OCT
	Cobia								1	1	1				-	-	-	-	JUL-SEP
	Crested cusk-eel		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Dolphin											2			-	-	-	-	SEP-SEP
	Florida pompano				2	2	2	2	2	2	2				APR-SEP	APR-SEP	APR-SEP	APR-OCT	APR-OCT
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	2	2	2	2					-	-	-	-	JUN-OCT
	Gag					1									-	-	-	-	MAY-MAY
	Gray snapper					1	1	1	1	1	1	1	1	1	-	-	-	-	MAY-DEC
	Gulf flounder		2	2	2	2	2	2	2	2	2	2	2	2	NOV-FEB	NOV-FEB	NOV-FEB	JAN-DEC	JAN-DEC
	Gulf menhaden		4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Hardhead catfish		2	2	2	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Highfin goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Inshore lizardfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Lane snapper						1	2	2	2	1	1			-	-	-	JUL-DEC	-
	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Little tunny					1	1	1	1	1					-	-	-	-	MAY-SEP
	Longnose anchovy			2	2	2	2	2	2	2	2	2			-	-	-	-	FEB-NOV
	Pigfish		1			1	1	1	1	1	1	1	1	1	-	-	-	-	MAY-JAN
	Pinfish		3	3	3	3	3	4	4	4	4	4	3	3	NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC
	Red snapper								1	1	1	1	1		-	-	-	JUL-NOV	-
	Rough scad					2	1				1	1			-	-	-	-	MAY-JUN
																			SEP-OCT
	Sand seatrout		4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC
	Silver perch		3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Skipjack herring		1	1	1	1	1	1		1				1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern flounder		3	3	3	3	3	3	3	3	2	3	3	3	SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC
	Southern hake		1	1	1	1	1						1	1	-	-	-	-	NOV-JUN
	Southern kingfish		1	2	3	3	3	3	3	3	3	3	3	1	-	-	-	-	JAN-DEC
	Speckled worm eel		2	2	2	2	1	1		1	1	1	1		-	-	-	-	SEP-JUN
	Spinner shark			1	1	1	1	1	1	1	1				-	-	-	-	MAR-OCT
	Spot		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAR	NOV-APR	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	2	2	2	2	2	1	1	1	-	-	-	-	JAN-DEC
139	Atlantic bumper							3	3	3	2	2	2	2	-	-	-	-	JUN-DEC
	Atlantic thread herring			2	2	2	2	2	2	2	2	1			-	-	-	-	MAR-NOV
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish				2	2	2	2	2	2	2				APR-OCT	-	-	-	APR-OCT
	Gulf butterfish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Harvestfish		1	1		2	2	2	2	2	2	2	2	2	-	-	-	-	MAY-FEB
	King mackerel					1	2	2	2	2	2	1			-	-	-	-	MAY-NOV
	Ladyfish			1	1	1	1	1	1	1	1	1	1		-	-	-	-	MAR-NOV
	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Scaled sardine				2	2	2	2	2	2	2	2			-	-	-	-	APR-NOV
	Silver seatrout		1			1	1	1	1	1	1	1	1	1	-	-	-	-	FEB-FEB
																			MAY-DEC
	Spanish mackerel		1	1	1	3	3	3	3	3	3	1	1	1	JUN-SEP	JUN-SEP	JUN-SEP	APR-SEP	JAN-DEC
140	Gulf kingfish		2		2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-JAN
	Halfbeak			1	1	2	2	2	1	1					-	-	-	-	APR-OCT
	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Northern kingfish			1	1	2	2	2	1	1	1	1	1	1	-	-	-	-	MAR-DEC
	Rough silverside		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	APR-OCT	APR-OCT	APR-NOV	DEC-MAR	JAN-DEC
141	Atlantic spadefish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf butterfish		2	2	2	3	3	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	-
	Ladyfish			1	1	2	2	1	1	1	1	1			-	-	-	-	MAR-NOV
	Scaled sardine				2	2	2	2	2	2	2	2			-	-	-	-	APR-NOV
	Sheepshead		2	2	3	3	3	2	3	3	2	2	2	2	FEB-MAR	FEB-APR	MAR-AUG	JAN-DEC	JAN-DEC
	Silver seatrout		1	1		1	1	1	1	2	2	2	1		-	-	-	-	MAY-FEB
	Spanish mackerel				2	2	2	2	2	2	2				-	-	-	APR-OCT	AUG-OCT

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
158	Slenderleaf clammy-weed		X	X	X	X	X	X	X	X	X	X	X	X
170	Night-flowering wild-petunia		X	X	X	X	X	X	X	X	X	X	X	X
195	Coastal-sand frostweed		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
119	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
122	Five-slotted sand dollar		1						1	2	2	2	2		-	-	-	-	FEB-FEB JUL-NOV
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
138	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Mantis shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	Shark eye		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-

Alabama: ESIMAP 8 (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
138	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
140	Five-slotted sand dollar		1						1	2	2	2	2		-	-	-	-	FEB-FEB
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JUL-NOV
	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
143	Atlantic seabob shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-
	Mantis shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Roughback shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-

MARINE MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW					X	X	X	X	X	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
117	Green sea turtle	P T				X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E				X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
	Loggerhead sea turtle	P T				X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
151	Green sea turtle	P T				X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E				X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E				X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T				X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
131	Alabama beach mouse	P E	X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
4	FORT MORGAN AIRPORT (HISTORICAL)		

BOAT RAMP:

HUN#	Name	Contact	Phone
10	BOAT RAMP		

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
18	ALABAMA BEACH MOUSE CRITICAL HABITAT	USFWS	
20	PIPING PLOVER CRITICAL HABITAT	USFWS	251/441-5181

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
80	BON SECOUR NATIONAL WILDLIFE REFUGE	USFWS	251/540-7720

Alabama: 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
-----	-----	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----
2	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Canvasback		X	X	X							X	X		-	-	-
	Common goldeneye		X	X	X							X	X		-	-	-
	Common loon		X	X	X	X	X			X	X	X	X		-	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Horned grebe		X	X	X	X	X			X	X	X	X		-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least tern		X	X	X	X				X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Magnificent frigatebird					X	X	X	X	X	X	X	X	X	-	-	-
	Northern gannet		X	X	X	X	X			X	X	X	X		-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
3	Double-crested cormorant		X	X	X							X	X	X	-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Reddish egret	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		X	X	X							X	X		-	-	-
98	Bufflehead		X	X	X							X	X		-	-	-
	Common goldeneye		X	X	X							X	X		-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
107	Black-crowned night-heron				X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal		X	X								X			-	-	-
	Cattle egret				X	X	X	X	X	X	X	X			MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule				X	X	X	X	X	X					MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
110	American bittern		X	X	X							X			-	-	-
	American coot		X	X	X	X						X	X	X	-	-	-
	American wigeon		X	X	X	X						X	X	X	-	-	-
	Canada goose		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gadwall		X	X	X	X						X	X	X	-	-	-
	Green-backed heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Least bittern				X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Mallard		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Northern harrier		X	X								X	X	X	-	-	-
	Pied-billed grebe		X	X	X	X	X					X	X	X	-	-	-
	Snow goose		X	X	X							X	X		-	-	-
	Solitary sandpiper				X	X	X	X				X	X	X	-	-	-
	Sora		X	X	X	X	X					X	X	X	X	-	-
	Spotted sandpiper		X	X	X	X						X	X	X	X	-	-
	Virginia rail		X	X	X	X						X	X	X	X	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
111	Black-necked stilt				X	X	X	X	X						-	-	-
	Caspian tern		X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Green heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Nelson's sharp-tailed sparrow		X	X	X	X	X					X	X	X	X	-	-
	Pectoral sandpiper				X	X	X					X	X	X	-	-	-
	Spotted sandpiper		X	X	X	X						X	X	X	X	-	-
127	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Canvasback		X	X	X							X	X		-	-	-
	Common goldeneye		X	X	X							X	X		-	-	-
	Common loon		X	X	X	X	X			X	X	X	X		-	-	-
	Double-crested cormorant		X	X	X							X	X	X	X	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Horned grebe		X	X	X	X	X					X	X	X	-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		X	X	X							X	X		-	-	-
137	Northern gannet		X	X								X			-	-	-
144	American oystercatcher	P	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
145	Louisiana seaside sparrow		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
148	Black tern		X	X	X	X						X	X	X	-	-	-
	Black-bellied plover		X	X	X	X	X					X	X	X	-	-	-
	Dowitchers		X	X								X	X		-	-	-
	Dunlin		X	X	X	X						X	X	X	-	-	-
	Greater yellowlegs		X	X	X	X						X	X	X	-	-	-
	Least sandpiper		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least tern		X	X	X	X						X	X	X	X	-	-
	Lesser yellowlegs		X	X	X	X	X					X	X	X	X	-	-
	Marbled godwit				X	X						X	X	X	-	-	-
	Red knot		X	X	X							X			-	-	-
	Reddish egret	P			X	X	X	X	X	X					-	-	-
	Sanderling		X	X	X	X	X					X	X	X	X	-	-
	Semipalmated plover		X	X	X	X	X					X	X	X	X	-	-
	Snowy plover	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Western sandpiper		X	X	X	X						X	X	X	X	-	-
	Willet		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.

Alabama: ESIMAP 9 (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	Wilson's plover	P		X	X	X	X	X	X	X	X	X	X		FEB-NOV	-	-
149	Black-necked stilt					X	X								-	-	-
	Caspian tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Green heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Solitary sandpiper			X	X	X	X			X	X	X			-	-	-
	Stilt sandpiper				X	X	X			X	X	X	X		-	-	-
150	Piping plover	P T HIGH	X	X	X					X	X	X	X	X	-	-	-

FISH:

[illegible]

HABITAT:

[illegible]

Alabama: ESIMAP 9 (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
5	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
6	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
104	Hooked mussel		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
112	Eastern oyster		4	4	4	4	4	4	4	4	4	4	4	4	APR-NOV	-	APR-NOV	APR-NOV	JAN-DEC
114	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	MAR-NOV	JUN-AUG
	Pink shrimp		2	2	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
143	Atlantic seabob shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-
	Mantis shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Roughback shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-
147	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW					X	X	X	X	X	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
93	Mississippi diamondback terrapin	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
111	Gulf salt marsh snake	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Mississippi diamondback terrapin	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
144	Gulf salt marsh snake	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
151	Green sea turtle	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
10	BOAT RAMP		

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
20	PIPING PLOVER CRITICAL HABITAT	USFWS	251/441-5181

MARINA:

HUN#	Name	Contact	Phone
37	COLONY COVE YACHT CLUB		
38	DAUPHIN ISLAND MARINA		
39	DEEP SEA FISHING RODEO BASIN		

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
80	BON SECOUR NATIONAL WILDLIFE REFUGE	USFWS	251/540-7720

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.

Alabama: 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
11	American oystercatcher	P	X	X	X								X	X	-	-	-
	Black skimmer		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Black tern		X	X	X	X						X	X	X	-	-	-
	Black-crowned night-heron	25 PAIRS		X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Black-necked stilt		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Brown pelican	4000-5000 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Caspian tern	200-600 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Cattle egret	200 PAIRS		X	X	X	X	X	X	X	X				MAY-JUN	-	-
	Common tern			X	X	X	X	X	X						MAY-JUN	-	-
	Gull-billed tern	P 25 PAIRS		X	X	X	X	X	X	X	X				MAY-JUL	-	-
	Laughing gull	4000-5000 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Royal tern	2000-3000 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Sandwich tern	200-300 PAIRS		X	X	X	X	X	X	X	X	X			JUN-JUL	-	-
	Snowy egret	25 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron	10 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
12	American bittern		X	X	X								X		-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Greater yellowlegs			X	X	X	X	X	X	X					-	-	-
	Least bittern			X	X	X	X	X	X	X	X	X			MAY-JUL	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
13	King rail		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
98	Bufflehead		X	X	X								X	X	-	-	-
	Common goldeneye		X	X	X								X	X	-	-	-
	Greater scaup		X	X	X								X	X	-	-	-
	Lesser scaup		X	X	X								X	X	-	-	-
	Red-breasted merganser		X	X	X								X	X	X	-	-
102	Bald eagle	P T	X	X	X								X	X	-	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal			X	X								X		-	-	-
	Cattle egret			X	X	X	X	X	X	X	X				MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X								X	X	X	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X							MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
127	American white pelican	P	X	X	X	X							X	X	X	-	-
	Bonaparte's gull		X	X	X	X	X						X	X	-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X								X	X	-	-	-
	Canvasback		X	X	X								X	X	-	-	-
	Common goldeneye		X	X	X								X	X	-	-	-
	Common loon		X	X	X	X							X	X	X	-	-
	Double-crested cormorant		X	X	X								X	X	X	-	-
	Forster's tern		X	X	X	X							X	X	-	-	-
	Greater scaup		X	X	X								X	X	-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Hooded merganser		X	X	X	X							X	X	X	-	-
	Horned grebe		X	X	X	X							X	X	X	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X								X	X	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X								X	X	X	-	-
	Redhead		X	X	X								X	X	-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		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
105	Atlantic croaker		4	4	4	4	4	4	4	4	4	4	3	3	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	3	3	3	3	3	3	3	3	2		-	-	DEC-APR	JAN-DEC	-
	Blue catfish		1	2	2	2	2	1	1				1	1	-	-	-	-	NOV-JUL
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	1	2	2	1	2	1	2	1	-	-	-	-	MAY-DEC
	Gray snapper					2	2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden		2	4	4	4	3	3	3	3	4	3	4	4	-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	3	3	3	3	3	3	3	3	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT
	Sand seatrout		2	2	4	4	4	4	4	3	3	3	2	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC
	Silver perch		2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-AUG	JAN-DEC	JAN-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Southern hake		1	1	2	2	2					1	1	1	-	-	-	-	OCT-OCT
																			DEC-MAY
	Spot		4	4	4	4	4	4	4	3	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1			1	2	2	2	2	2	2	2	1	-	-	-	-	MAY-JAN
113	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAR-OCT
	Skipjack herring		1	1	1	1	1	1	1	1				1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern kingfish		2	2	2	2	3	3	3	2	2	2	2	2	-	-	-	-	JAN-DEC
	Star drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
114	Pigfish			1	1	1	1	1	1	1	2	1			-	-	-	-	MAR-NOV
	Spotted hake		2	2	2	1							1		-	-	-	-	FEB-MAY
																			NOV-NOV
141	Atlantic spadefish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf butterfish		2	2	3	3	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	-
	Ladyfish			1	1	2	2	1	1	1	1	1			-	-	-	-	MAR-NOV
	Scaled sardine					2	2	2	2	2	2	2			-	-	-	-	APR-NOV
	Sheepshead		2	2	3	3	3	2	3	3	2	2	2	2	FEB-MAR	FEB-APR	MAR-AUG	JAN-DEC	JAN-DEC
	Silver seatrout		1	1			1	1	1	1	2	2	2	1	-	-	-	-	MAY-FEB
	Spanish mackerel					2	2	2	2	2	2	2			-	-	-	APR-OCT	AUG-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.

Alabama: 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
146	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
	Rough silverside		1	1		2	2	2	2	2	2	2	1	1	-	-	-	-	APR-FEB

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
162	Beardgrass		X	X	X	X	X	X	X	X	X	X	X	X
170	Night-flowering wild-petunia		X	X	X	X	X	X	X	X	X	X	X	X
184	Bluethreads		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
112	Eastern oyster		4	4	4	4	4	4	4	4	4	4	4	4	APR-NOV	-	APR-NOV	APR-NOV	JAN-DEC
114	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	MAR-NOV	JUN-AUG
	Pink shrimp		2	2	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
143	Atlantic seabob shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-
	Mantis shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Roughback shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-
147	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW				X	X	X	X	X	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
18	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
10	BOAT RAMP		

MARINA:

HUN#	Name	Contact	Phone
46	FOWL RIVER MARINA		

Alabama: 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
----	-----	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----
2	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Bonaparte's gull		X	X	X	X	X						X	X	-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X								X	X	-	-	-
	Canvasback		X	X	X								X	X	-	-	-
	Common goldeneye		X	X	X								X	X	-	-	-
	Common loon		X	X	X	X	X			X	X	X	X		-	-	-
	Forster's tern		X	X	X	X							X	X	-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Horned grebe		X	X	X	X	X			X	X	X	X		-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least tern		X	X	X	X				X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X								X	X	-	-	-
	Magnificent frigatebird					X	X	X	X	X	X	X	X	X	-	-	-
	Northern gannet		X	X	X	X	X			X	X	X	X		-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Redhead		X	X	X								X	X	-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
3	Double-crested cormorant		X	X	X							X	X	X	-	-	-
	Greater scaup		X	X	X								X	X	-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Reddish egret	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		X	X	X								X	X	-	-	-
12	American bittern		X	X	X								X		-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Greater yellowlegs					X	X	X	X	X	X	X	X		-	-	-
	Least bittern					X	X	X	X	X	X	X	X		MAY-JUL	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
14	Bald eagle	P T 1 NEST	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	-	-
	Osprey	P 5 NESTS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
15	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
16	Pied-billed grebe		X	X	X	X						X	X	X	-	-	-
	Ring-necked duck		X	X	X							X	X		-	-	-
	Solitary sandpiper			X	X	X	X			X	X	X			-	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
102	Bald eagle	P T	X	X	X								X	X	-	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X		APR-JUN	-	-
	Blue-winged teal			X	X							X			-	-	-
	Cattle egret			X	X	X	X	X	X	X	X				MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X	X						MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
----	-----	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----	-----	-----
5	Atlantic croaker		4	4	4	4	4	4	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		3	3	3	4	4	4	4	4	4	4	4	4	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	2	2	2	1					-	-	-	-	JUN-OCT
	Gray snapper					1	1	1	1	1	1	1	1	1	-	-	-	-	MAY-DEC
	Gulf killifish		2	2	2	2	3	3	3	3	3	3	3	2	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gulf menhaden		4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Gulf toadfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pigfish			1	1	1	1	1	1	1	2	1			-	-	-	-	MAR-NOV
	Pinfish		3	3	3	3	3	4	4	4	4	4	3	3	NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	SEP-NOV	SEP-FEB	SEP-FEB	JAN-DEC	JAN-DEC
	Sand seatrout		4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC
	Silver perch		3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Southern flounder		3	3	3	3	3	3	3	3	2	3	3	3	SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC
	Southern kingfish		2	2	3	3	3	3	3	3	3	3	3	3	-	-	-	-	JAN-DEC
	Spot		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAR	NOV-APR	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra					1	2	2	2	1	1	1			-	-	-	-	MAY-NOV
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Star drum		1	1	2	2	2	2	2	2	2	1	1		-	-	-	-	JAN-DEC
	Striped anchovy					1	1	1	1	1	1	1	1	1	-	-	-	-	APR-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	1	1	1	1	1	1	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
6	Inland silverside		3	3	3	3	3	4	4	4	4	4	4	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	2	1	1	1	1	1	1	1	JUN-JUL	-	-	-	JAN-DEC
	Marsh killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Northern kingfish			1	1	2	2	1	1	1	1	1	1		-	-	-	-	MAR-DEC
	Rough silverside		3	3	3	3	3	4	4	4	4	4	4	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
8	Atlantic spadefish					2	2	3	3	3	3	2	1		-	-	JUN-SEP	-	APR-DEC
	Atlantic sturgeon		1	1	1	1						1	1	1	-	-	-	-	OCT-MAY
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish					2	2	2	2	2	2				APR-OCT	-	-	-	APR-OCT
	Florida pompano					1	2	3	3	2	2	1			MAY-JUL	MAY-JUL	MAY-JUL	MAY-NOV	MAR-SEP
	Gulf butterflyfish		2	2	2	3	3	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf flounder		2	2	2	2	2	2	2	2	2	2	2	2	NOV-FEB	NOV-FEB	NOV-FEB	JAN-DEC	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	1	1	-	-	-	JAN-DEC	-
	Ladyfish			1	1	2	2	1	1	1	1				-	-	-	-	MAR-OCT
	Scaled sardine					1	1	1	1	2	2	2			-	-	-	-	APR-OCT
	Sheepshead		2	2	2	2	2	2	2	2	2	2	2	2	FEB-MAR	FEB-APR	FEB-MAY	JAN-DEC	JAN-DEC
	Silver seatrout		1	1	1	1	1	1	1	2	2	1	1	1	-	-	-	-	JAN-DEC
	Southern hake			1	1	1	1					1			-	-	-	-	FEB-MAY
																			OCT-OCT
	Spanish mackerel		1	1	1	3	3	3	3	3	3	1	1	1	JUN-SEP	JUN-SEP	JUN-SEP	APR-SEP	JAN-DEC
	Spotted hake		1	1	1	1	1	1							-	-	-	-	JAN-JUN
	Tarpon		2	2	2	2	2	2	2	2	2	2	2	2	APR-SEP	APR-SEP	MAY-SEP	JAN-DEC	JAN-DEC
10	Gulf sturgeon	P T	X	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.

Alabama: ESIMAP 11 (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
105	Atlantic croaker		4	4	4	4	4	4	4	4	4	4	3	3	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	3	3	3	3	3	3	3	3	2	-	-	DEC-APR	JAN-DEC	-
	Blue catfish		1	2	2	2	1	1	-	-	-	-	-	1	-	-	-	-	NOV-JUL
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish		-	-	-	-	1	1	2	2	1	2	1	1	-	-	-	-	MAY-DEC
	Gray snapper		-	-	-	-	2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden		2	4	4	4	4	3	3	3	3	4	3	4	-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	3	3	3	3	3	3	3	3	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT
	Sand seatrout		2	2	4	4	4	4	4	3	3	3	2	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC
	Silver perch		2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-AUG	JAN-DEC	JAN-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Southern hake		1	1	2	2	2	-	-	-	-	-	1	1	-	-	-	-	OCT-OCT
																			DEC-MAY
	Spot		4	4	4	4	4	4	4	3	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1	-	-	-	1	2	2	2	2	2	2	1	-	-	-	-	MAY-JAN
113	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAR-OCT
	Skipjack herring		1	1	1	1	1	1	1	-	-	-	-	1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern kingfish		2	2	2	2	3	3	3	2	2	2	2	2	-	-	-	-	JAN-DEC
	Star drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
146	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
	Rough silverside		1	1	-	2	2	2	2	2	2	1	1	1	-	-	-	-	APR-FEB

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
170	Night-flowering wild-petunia		X	X	X	X	X	X	X	X	X	X	X	X
171	Flax-leaf false-foxglove		X	X	X	X	X	X	X	X	X	X	X	X
	Giant spiral ladies'-tresses		X	X	X	X	X	X	X	X	X	X	X	X
	Night-flowering wild-petunia		X	X	X	X	X	X	X	X	X	X	X	X
	Snowy orchis		X	X	X	X	X	X	X	X	X	X	X	X
172	Tiny-leaved buckthorn		X	X	X	X	X	X	X	X	X	X	X	X
178	Giant spiral ladies'-tresses		X	X	X	X	X	X	X	X	X	X	X	X
184	Bluethreads		X	X	X	X	X	X	X	X	X	X	X	X
193	Chapman aster		X	X	X	X	X	X	X	X	X	X	X	X
	Christmas berry		X	X	X	X	X	X	X	X	X	X	X	X
	Thin-stemmed false-foxglove		X	X	X	X	X	X	X	X	X	X	X	X
	Yellow fringeless orchid		X	X	X	X	X	X	X	X	X	X	X	X
196	Brilliant hibiscus		X	X	X	X	X	X	X	X	X	X	X	X
198	Crenate milkwort		X	X	X	X	X	X	X	X	X	X	X	X
	Flax		X	X	X	X	X	X	X	X	X	X	X	X
	Harper's yellow-eyed grass		X	X	X	X	X	X	X	X	X	X	X	X
	Pineland bogbutton		X	X	X	X	X	X	X	X	X	X	X	X
	Serviceberry holly		X	X	X	X	X	X	X	X	X	X	X	X
	Thin-stemmed false-foxglove		X	X	X	X	X	X	X	X	X	X	X	X
205	Flame flower		X	X	X	X	X	X	X	X	X	X	X	X
206	Naked-stemmed panic grass		X	X	X	X	X	X	X	X	X	X	X	X
207	Spoon-flower		X	X	X	X	X	X	X	X	X	X	X	X
209	Bluethreads		X	X	X	X	X	X	X	X	X	X	X	X
	Flame flower		X	X	X	X	X	X	X	X	X	X	X	X
	Large white fringed orchid		X	X	X	X	X	X	X	X	X	X	X	X
	Spoon-flower		X	X	X	X	X	X	X	X	X	X	X	X
	Walter's sedge		X	X	X	X	X	X	X	X	X	X	X	X
215	Large white fringed orchid		X	X	X	X	X	X	X	X	X	X	X	X
216	Large white fringed orchid		X	X	X	X	X	X	X	X	X	X	X	X
	Spoon-flower		X	X	X	X	X	X	X	X	X	X	X	X
217	Flax-leaf false-foxglove		X	X	X	X	X	X	X	X	X	X	X	X
	Lattice jointgrass		X	X	X	X	X	X	X	X	X	X	X	X
	Yellow fringeless orchid		X	X	X	X	X	X	X	X	X	X	X	X
219	Yellow fringeless orchid		X	X	X	X	X	X	X	X	X	X	X	X
221	Atlantic St. John's-wort		X	X	X	X	X	X	X	X	X	X	X	X
	Beaked spikerush		X	X	X	X	X	X	X	X	X	X	X	X
	Beardgrass		X	X	X	X	X	X	X	X	X	X	X	X
	Eastern bishop-weed		X	X	X	X	X	X	X	X	X	X	X	X
	Leafless false-foxglove		X	X	X	X	X	X	X	X	X	X	X	X
	Night-flowering wild-petunia		X	X	X	X	X	X	X	X	X	X	X	X
	Shiny spikegrass		X	X	X	X	X	X	X	X	X	X	X	X
	Snowy orchis		X	X	X	X	X	X	X	X	X	X	X	X
	Southern white beak rush		X	X	X	X	X	X	X	X	X	X	X	X
	Tracy's beak rush		X	X	X	X	X	X	X	X	X	X	X	X
	Twig rush		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
5	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
6	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
147	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW					X	X	X	X	X	X	X		-	-	-	-

REPTILE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Interne	Juveniles	Adults
15	Alligator snapping turtle	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	JAN-DEC	JAN-DEC
18	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
93	Mississippi diamondback terrapin	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-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.

Alabama: ESIMAP 11 (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
151	Green sea turtle	P T			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
6	ROY E RAY AIRPORT		

Alabama: ESIMAP 12

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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11	American oystercatcher	P	X	X	X								X	X	-	-	-
	Black skimmer		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Black tern		X	X	X	X						X	X	X	-	-	-
	Black-crowned night-heron	25 PAIRS		X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Black-necked stilt		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Brown pelican	4000-5000 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Caspian tern	200-600 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Cattle egret	200 PAIRS		X	X	X	X	X	X	X	X				MAY-JUN	-	-
	Common tern			X	X	X	X	X	X						MAY-JUN	-	-
	Gull-billed tern	P 25 PAIRS		X	X	X	X	X	X	X	X				MAY-JUL	-	-
	Laughing gull	4000-5000 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Royal tern	2000-3000 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	-	-
	Sandwich tern	200-300 PAIRS		X	X	X	X	X	X	X	X	X			JUN-JUL	-	-
	Snowy egret	25 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron	10 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
19	American black duck	RARE	X	X	X	X							X	X	X	-	-
	American coot		X	X	X	X							X	X	X	-	-
	American wigeon		X	X									X	X	-	-	-
	Blue-winged teal			X	X						X				-	-	-
	Bufflehead		X	X	X								X	X	-	-	-
	Canvasback		X	X	X								X	X	-	-	-
	Gadwall		X	X	X	X							X	X	X	-	-
	Greater scaup		X	X	X								X	X	-	-	-
	Green-winged teal		X	X	X								X	X	X	-	-
	Hooded merganser		X	X	X	X							X	X	X	-	-
	Lesser scaup		X	X	X								X	X	-	-	-
	Mallard		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	-	-	-
	Northern pintail		X	X	X								X	X	-	-	-
	Northern shoveler		X	X	X	X					X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X								X	X	X	-	-
	Redhead		X	X	X								X	X	-	-	-
	Ring-necked duck		X	X	X								X	X	-	-	-
	Ruddy duck		X	X	X								X	X	-	-	-
	Waterfowl	VERY HIGH	X	X	X								X	X	-	-	-
20	American white pelican	P	X	X	X	X							X	X	X	-	-
	Anhinga		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	-	-	-
	Double-crested cormorant		X	X	X						X	X	X	X	-	-	-
	Forster's tern		X	X	X	X							X	X	-	-	-
	Herring gull		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	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Ring-billed gull		X	X	X	X	X						X	X	X	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
21	Common goldeneye		X	X	X	X							X	X	X	-	-
24	American bittern		X	X	X								X	X	-	-	-
	American coot		X	X	X	X							X	X	X	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Greater yellowlegs			X	X	X	X	X	X	X					-	-	-
	Green-backed heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Mallard		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Wood duck		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
28	Bufflehead	HIGH	X	X	X								X	X	-	-	-
	Canvasback		X	X	X								X	X	-	-	-
	Gadwall		X	X	X	X							X	X	X	-	-
	Greater scaup	HIGH	X	X	X								X	X	-	-	-
	Lesser scaup	HIGH	X	X	X								X	X	-	-	-
	Redhead		X	X	X								X	X	-	-	-
	Ruddy duck	HIGH	X	X	X								X	X	-	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal			X	X								X		-	-	-
	Cattle egret			X	X	X	X	X	X	X	X				MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X								X	X	X	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X							MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults	
22	American eel				1	1	1	1	1	1	1	1			-	-	-	-	MAR-OCT	
	Black crappie				1	1	1	1	1	1					-	-	-	-	APR-SEP	
	Bluegill		1	1	1	1	1							1	-	-	-	-	DEC-MAY	
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
	Gizzard shad		2	2	2	2	2	2	2	2	2	2	2	2	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC	
	Largemouth bass		1		2	2	2	2	2	2	2	2	2	2	-	-	-	-	-	
	Rainwater killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
	Redear sunfish		1	1	1	1	1	2	2	2	2	1	1	1	-	-	-	-	-	
	Spotted sunfish		1		1	1		1							-	-	-	-	-	
23	Bluefish							1					1		-	-	-	JUN-JUN	JUN-JUN	
																			NOV-NOV	
105	Atlantic croaker		4	4	4	4	4	4	4	4	4	4	4	3	3	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC	
	Bay whiff		2	2	2	3	3	3	3	3	3	3	3	2	-	-	DEC-APR	JAN-DEC	-	
	Blue catfish		1	2	2	2	2	1	1					1	1	-	-	-	-	NOV-JUL
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP	
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
	Gafftopsail catfish						1	1	2	2	1	2	1	1	-	-	-	-	MAY-DEC	
	Gray snapper						2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC	
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC	
	Gulf menhaden		2	4	4	4	4	3	3	3	3	4	3	4	-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT	
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC	
	Hardhead catfish		2	2	2	3	3	3	3	3	3	3	3	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC	
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT	
	Sand seatrout		2	2	4	4	4	4	4	3	3	3	2	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC	
	Silver perch		2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-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.

Alabama: 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
105	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Southern hake		1	1	2	2	2					1	1		-	-	-	-	OCT-OCT
	Spot		4	4	4	4	4	4	4	3	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1			1	2	2	2	2	2	2	1		-	-	-	-	MAY-JAN
113	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAR-OCT
	Skipjack herring		1	1	1	1	1	1		1			1		-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern kingfish		2	2	2	2	3	3	3	2	2	2	2	2	-	-	-	-	JAN-DEC
	Star drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
114	Pigfish			1	1	1	1	1	1	1	1	2	1		-	-	-	-	MAR-NOV
	Spotted hake		2	2	2	1							1		-	-	-	-	FEB-MAY
																			NOV-NOV
141	Atlantic spadefish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf butterflyfish		2	2	2	3	3	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	-
	Ladyfish			1	1	2	2	1	1	1	1	1	1		-	-	-	-	MAR-NOV
	Scaled sardine				2	2	2	2	2	2	2	2	2		-	-	-	-	APR-NOV
	Sheepshead		2	2	3	3	3	2	3	3	2	2	2	2	FEB-MAR	FEB-APR	MAR-AUG	JAN-DEC	JAN-DEC
	Silver seatrout		1	1		1	1	1	1	2	2	2	1		-	-	-	-	MAY-FEB
	Spanish mackerel				2	2	2	2	2	2	2	2			-	-	-	APR-OCT	AUG-OCT
146	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
	Rough silverside		1	1		2	2	2	2	2	2	1	1	1	-	-	-	-	APR-FEB

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
154	Flax-leaf false-foxglove		X	X	X	X	X	X	X	X	X	X	X	X
162	Beardgrass		X	X	X	X	X	X	X	X	X	X	X	X
174	Chaffseed		X	X	X	X	X	X	X	X	X	X	X	X
196	Brilliant hibiscus		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
112	Eastern oyster		4	4	4	4	4	4	4	4	4	4	4	4	APR-NOV	-	APR-NOV	APR-NOV	JAN-DEC
114	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	MAR-NOV	JUN-AUG
	Pink shrimp		2	2	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
143	Atlantic seabob shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-
	Mantis shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Roughback shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-
147	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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
			-	-	-	-	-	-	-	-	-	-	-	-				
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW				X	X	X	X	X	X	X	X		-	-	-	-
17	West Indian manatee	E HIGH				X	X	X	X	X	X	X	X		-	-	-	-
27	West Indian manatee	E				X	X	X	X	X	X	X	X		-	-	-	-

REPTILE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Interneeting	Juveniles	Adults
25	Gopher tortoise	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
29	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Alligator snapping turtle	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
9	ALBA CLUB BOAT LAUNCH		
10	BOAT RAMP		
16	SOUTHERN MARINE BOAT LANDING		

MARINA:

HUN#	Name	Contact	Phone
31	ALBA CLUB MARINA		
32	BAY YACHTING CENTER		
33	BEACHCOMBER DRY DOCK AND MARINA		
35	BUCCANEER YACHT CLUB		
40	DOG RIVER MARINA		
48	GRAND MARINER		
55	MOBILE YACHT CLUB		
56	MORGAN'S MARINA		
63	RIVER YACHT BASIN		
70	SOUTHERN MARINA		
72	TURNER MARINE		

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.

Alabama: 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
30	American bittern		X	X	X									X	-	-	-
	Canada goose		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Greater yellowlegs			X	X	X	X	X	X	X	X				-	-	-
	Green heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Least bittern			X	X	X	X	X	X	X	X				MAY-JUL	-	-
	Mallard		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Pied-billed grebe		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Spotted sandpiper		X	X	X	X			X	X	X	X	X		-	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Wood duck		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
31	Forster's tern		X	X	X	X							X	X	-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Hooded merganser		X	X	X	X							X	X	-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Mallard		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X				APR-JUN	-	-
	Blue-winged teal		X	X					X						-	-	-
	Cattle egret			X	X	X	X	X	X	X	X				MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X							MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
22	American eel			1	1	1	1	1	1	1	1				-	-	-	-	MAR-OCT
	Black crappie			1	1	1	1	1	1						-	-	-	-	APR-SEP
	Bluegill		1	1	1	1	1							1	-	-	-	-	DEC-MAY
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gizzard shad		2	2	2	2	2	2	2	2	2	2	2	2	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Largemouth bass		1	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-
	Rainwater killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Redear sunfish		1	1	1	1	1	1	2	2	2	1	1	1	-	-	-	-	-
	Spotted sunfish		1	1	1				1						-	-	-	-	-
23	Bluefish						1						1		-	-	-	JUN-JUN	JUN-JUN NOV-NOV
105	Atlantic croaker		4	4	4	4	4	4	4	4	4	4	3	3	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	3	3	3	3	3	3	3	3	2	-	-	DEC-APR	JAN-DEC	-
	Blue catfish		1	2	2	2	1	1					1	1	-	-	-	-	NOV-JUL
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	1	2	2	1	2	1	1	1	-	-	-	-	MAY-DEC
	Gray snapper					2	2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden		2	4	4	4	4	3	3	3	3	4	3	4	-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	3	3	3	3	3	3	3	3	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT
	Sand seatrout		2	2	4	4	4	4	4	3	3	3	2	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC
	Silver perch		2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-AUG	JAN-DEC	JAN-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Southern hake		1	1	2	2	2					1	1		-	-	-	-	OCT-OCT DEC-MAY
	Spot		4	4	4	4	4	4	4	3	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1			1	2	2	2	2	2	2	2	1	-	-	-	-	MAY-JAN
113	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAR-OCT
	Skipjack herring		1	1	1	1	1	1		1			1		-	-	-	-	AUG-AUG DEC-JUN
	Southern kingfish		2	2	2	2	3	3	3	2	2	2	2	2	-	-	-	-	JAN-DEC
	Star drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
146	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
	Rough silverside		1	1		2	2	2	2	2	2	1	1	1	-	-	-	-	APR-FEB

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
154	Flax-leaf false-foxglove		X	X	X	X	X	X	X	X	X	X	X	X
162	Beardgrass		X	X	X	X	X	X	X	X	X	X	X	X
192	Texas pipewort		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
147	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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
17	West Indian manatee	E HIGH					X	X	X	X	X	X	X		-	-	-	-
27	West Indian manatee	E					X	X	X	X	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
25	Gopher tortoise	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
29	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Alligator snapping turtle	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	JAN-DEC	JAN-DEC
32	Delta map turtle	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC

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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.

Alabama: 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
----	-----	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----
19	American black duck	RARE	X	X	X	X						X	X	X	-	-	-
	American coot		X	X	X	X						X	X	X	-	-	-
	American wigeon		X	X								X	X		-	-	-
	Blue-winged teal			X	X					X					-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Canvasback		X	X	X							X	X		-	-	-
	Gadwall		X	X	X	X						X	X	X	-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Mallard		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	-	-	-
	Northern pintail		X	X	X							X	X		-	-	-
	Northern shoveler		X	X	X	X	X				X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-necked duck		X	X	X							X	X		-	-	-
	Ruddy duck		X	X	X							X	X		-	-	-
	Waterfowl	VERY HIGH	X	X	X							X	X		-	-	-
20	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Anhinga		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	-	-	-
	Double-crested cormorant		X	X	X						X	X	X	X	-	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Herring gull		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	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Ring-billed gull		X	X	X	X	X					X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
21	Common goldeneye		X	X	X	X						X	X	X	-	-	-
33	Bald eagle	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Black-necked stilt		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Shorebirds			X	X	X						X	X	X	-	-	-
	Terns						X	X	X	X					-	-	-
	Waterfowl		X	X	X							X	X		-	-	-
34	Cattle egret	200 PAIRS			X	X	X	X	X	X	X	X			MAY-JUN	-	-
	Great egret	25 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Little blue heron	200 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron	200 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	White ibis	25 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Yellow-crowned night-heron	15 PAIRS		X	X	X	X	X	X	X					APR-JUL	-	-
35	Bonaparte's gull		X	X	X							X	X		-	-	-
	Horned grebe		X	X	X	X						X	X	X	-	-	-
37	American avocet	HIGH	X	X	X	X				X	X	X	X	X	-	-	-
	American bittern		X	X	X							X			-	-	-
	American black duck	RARE	X	X	X	X						X	X	X	-	-	-
	American coot		X	X	X	X						X	X	X	-	-	-
	American wigeon		X	X								X	X		-	-	-
	Black skimmer		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Canada goose		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Caspian tern			X	X	X	X	X							-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gadwall		X	X	X	X						X	X	X	-	-	-
	Glossy ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Greater yellowlegs			X	X	X	X	X	X	X	X				-	-	-
	Green heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gull-billed tern	P		X	X	X	X	X	X	X					-	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Least bittern			X	X	X	X	X	X	X	X				MAY-JUL	-	-
	Mallard		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Northern harrier		X	X	X	X	X					X	X	X	-	-	-
	Pied-billed grebe		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Snow goose		X	X	X							X	X		-	-	-
	Sora		X	X	X	X	X			X	X	X	X	X	-	-	-
	Swallow-tailed kite			X	X	X	X	X	X	X					MAY-JUN	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Wood duck		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Wood stork	P E		X	X	X	X	X	X						-	-	-
38	Black-bellied plover		X	X	X	X	X			X	X	X	X	X	-	-	-
	Black-necked stilt		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Dunlin		X	X	X	X						X	X	X	-	-	-
	Least sandpiper		X	X	X	X						X	X	X	-	-	-
	Lesser yellowlegs		X	X	X	X	X					X	X	X	-	-	-
	Long-billed curlew			X	X							X	X		-	-	-
	Marbled godwit			X	X					X	X	X			-	-	-
	Short-billed dowitcher		X	X	X	X						X	X	X	-	-	-
	Solitary sandpiper			X	X	X	X			X	X	X			-	-	-
	Stilt sandpiper			X	X	X				X	X	X	X	X	-	-	-
	Western sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	White-rumped sandpiper			X	X	X									-	-	-
	Wilson's snipe		X	X	X					X	X	X	X		-	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal		X	X								X			-	-	-
	Cattle egret			X	X	X	X	X	X	X					MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X	X						MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
----	-----	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----	-----	-----
22	American eel				1	1	1	1	1	1	1	1			-	-	-	-	MAR-OCT
	Black crappie				1	1	1	1	1	1					-	-	-	-	APR-SEP
	Bluegill		1	1	1	1	1							1	-	-	-	-	DEC-MAY
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gizzard shad		2	2	2	2	2	2	2	2	2	2	2	2	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Largemouth bass		1		2	2	2	2	2	2	2	2	2	2	-	-	-	-	-

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.

Alabama: ESIMAP 14 (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
22	Rainwater killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Redear sunfish		1	1	1	1	1	1	2	2	2	1	1	1	-	-	-	-	-
	Spotted sunfish		1	1	1		1								-	-	-	-	-
35	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	APR-OCT	APR-OCT	APR-NOV	DEC-MAR	JAN-DEC
	Shiners		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
36	Black crappie					1	1	1	1	1	1				-	-	-	-	APR-SEP
	Bluegill		1	1	1	1								1	-	-	-	-	DEC-MAY
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf sturgeon	P T	1	1	1	1									FEB-APR	-	FEB-MAY	FEB-MAY	-
	Largemouth bass		X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-	-	JAN-DEC
	Longear sunfish		X	X	X	X	X	X	X	X	X				MAY-JUN	-	-	-	FEB-SEP
	Peamouth		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Rainwater killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	APR-OCT	APR-OCT	APR-NOV	DEC-MAR	JAN-DEC
	Shiners		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Spotted sunfish		1	1	1	1									-	-	-	-	-
	Striped bass					X	X	X							APR-JUN	-	-	-	APR-JUN
	Yellow bass		X	X	X	X	X							X	-	-	-	-	DEC-MAY
105	Atlantic croaker		4	4	4	4	4	4	4	4	4	4	3	3	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	3	3	3	3	3	3	3	3	2	-	-	DEC-APR	JAN-DEC	-
	Blue catfish		1	2	2	2	2	1	1				1	1	-	-	-	-	NOV-JUL
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	1	2	2	1	2	1	2	1	-	-	-	-	MAY-DEC
	Gray snapper					2	2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden		2	4	4	4	4	3	3	3	4	3	4	4	-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	3	3	3	3	3	3	3	3	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT
	Sand seatrout		2	2	4	4	4	4	4	3	3	3	2	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC
	Silver perch		2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-AUG	JAN-DEC	JAN-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Southern hake		1	1	2	2	2					1	1	1	-	-	-	-	OCT-OCT
																		DEC-MAY	
	Spot		4	4	4	4	4	4	4	3	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1			1	2	2	2	2	2	2	2	1	-	-	-	-	MAY-JAN
114	Pigfish			1	1	1	1	1	1	1	1	2	1	1	-	-	-	-	MAR-NOV
	Spotted hake		2	2	2	1								1	-	-	-	-	FEB-MAY
																		NOV-NOV	
146	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
	Rough silverside		1	1	2	2	2	2	2	2	1	1	1	1	-	-	-	-	APR-FEB

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
204	Nodding clubmoss		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
26	Brown shrimp		2	4	4	4	4	4	4	4	4	4	4	2	-	-	FEB-NOV	MAR-NOV	JUN-AUG
	Pink shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	AUG-OCT	MAY-JAN	JAN-DEC
	White shrimp		2	2	2	2	3	3	4	4	4	4	3	2	-	-	-	JAN-DEC	JAN-MAY
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
114	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	MAR-NOV	JUN-AUG
	Pink shrimp		2	2	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
143	Atlantic seabob shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-
	Mantis shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Roughback shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-

MARINE MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting
27	West Indian manatee	E				X	X	X	X	X	X	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
29	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Alligator snapping turtle	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
1	BROOKLEY AIRPORT		

BOAT RAMP:

HUN#	Name	Contact	Phone
10	BOAT RAMP		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
29	WL HOLLAND WMA	CARL FERRARO; ADCNR-SLD	251/929-0900

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.

Alabama: 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
			-	-	-	-	-	-	-	-	-	-	-	-			
20	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Anhinga		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	-	-	-
	Double-crested cormorant		X	X	X					X	X	X	X		-	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Herring gull		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	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Ring-billed gull		X	X	X	X	X			X	X	X			-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
37	American avocet	HIGH	X	X	X	X				X	X	X	X	X	-	-	-
	American bittern		X	X	X							X			-	-	-
	American black duck	RARE	X	X	X	X						X	X	X	-	-	-
	American coot		X	X	X	X						X	X	X	-	-	-
	American wigeon		X	X								X	X		-	-	-
	Black skimmer		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Canada goose		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Caspian tern				X	X	X	X	X						-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gadwall		X	X	X	X						X	X	X	-	-	-
	Glossy ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Greater yellowlegs				X	X	X	X	X	X	X	X			-	-	-
	Green heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gull-billed tern	P			X	X	X	X	X	X	X				-	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Least bittern				X	X	X	X	X	X	X	X	X		MAY-JUL	-	-
	Mallard		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Northern harrier		X	X	X	X				X	X	X	X		-	-	-
	Pied-billed grebe		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Snow goose		X	X	X							X	X		-	-	-
	Sora		X	X	X	X				X	X	X	X	X	-	-	-
	Swallow-tailed kite				X	X	X	X	X	X	X	X			MAY-JUN	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Wood duck		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Wood stork	P E			X	X	X	X	X	X					-	-	-
38	Black-bellied plover		X	X	X	X				X	X	X	X	X	-	-	-
	Black-necked stilt		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Dunlin		X	X	X	X						X	X	X	-	-	-
	Least sandpiper		X	X	X	X						X	X	X	-	-	-
	Lesser yellowlegs		X	X	X	X	X					X	X	X	-	-	-
	Long-billed curlew				X	X						X	X		-	-	-
	Marbled godwit				X	X				X	X	X			-	-	-
	Short-billed dowitcher		X	X	X	X						X	X	X	-	-	-
	Solitary sandpiper				X	X	X	X		X	X	X			-	-	-
	Stilt sandpiper				X	X	X			X	X	X	X	X	-	-	-
	Western sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	White-rumped sandpiper				X	X	X								-	-	-
	Wilson's snipe		X	X	X					X	X	X	X		-	-	-
107	Black-crowned night-heron				X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal				X	X				X					-	-	-
	Cattle egret				X	X	X	X	X	X	X	X			MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X					X	X	X			-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule				X	X	X	X	X						MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
			-	-	-	-	-	-	-	-	-	-	-	-					
36	Black crappie					1	1	1	1	1	1				-	-	-	-	APR-SEP
	Bluegill		1	1	1	1	1							1	-	-	-	-	DEC-MAY
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf sturgeon	P T	1	1	1	1									FEB-APR	-	FEB-MAY	FEB-MAY	-
	Largemouth bass		X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-	-	JAN-DEC
	Longear sunfish				X	X	X	X	X	X					MAY-JUN	-	-	-	FEB-SEP
	Peamouth		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Rainwater killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	APR-OCT	APR-OCT	APR-NOV	DEC-MAR	JAN-DEC
	Shiners		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Spotted sunfish		1		1	1									-	-	-	-	-
	Striped bass					X	X	X							APR-JUN	-	-	-	APR-JUN
	Yellow bass		X	X	X	X	X						X		-	-	-	-	DEC-MAY

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
			-	-	-	-	-	-	-	-	-	-	-	-
167	Bottomland-post oak		X	X	X	X	X	X	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
			-	-	-	-	-	-	-	-	-	-	-	-				
27	West Indian manatee	E				X	X	X	X	X	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
			-	-	-	-	-	-	-	-	-	-	-	-					
29	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Alligator snapping turtle	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	JAN-DEC	JAN-DEC
39	Delta map turtle	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
10	BOAT RAMP		
12	FISHERMEN'S LANDING		

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.

Alabama: ESIMAP 15 (cont.)

HUMAN USE RESOURCES: (cont.)

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
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25	MOBILE-TENSAW DELTA WMA	CARL FERRARO; ADCNR-SLD	251/929-0900
29	WL HOLLAND WMA	CARL FERRARO; ADCNR-SLD	251/929-0900
30	WL HOLLAND WMA BAYOU CANOT FW 17	CARL FERRARO; ADCNR-SLD	251/929-0900

MARINA:

HUN#	Name	Contact	Phone
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36	CHICKASAW MARINA		
45	FISHERMEN'S MARINA		
69	SATSUMA CITY MARINA		
74	WINTERS MARINA		

Alabama: 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
-----	-----	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----
20	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Anhinga		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	-	-	-
	Double-crested cormorant		X	X	X						X	X	X	X	-	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Herring gull		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	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Ring-billed gull		X	X	X	X	X				X	X	X		-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
37	American avocet	HIGH	X	X	X	X				X	X	X	X	X	-	-	-
	American bittern		X	X	X							X			-	-	-
	American black duck	RARE	X	X	X	X						X	X	X	-	-	-
	American coot		X	X	X	X						X	X	X	-	-	-
	American wigeon		X	X								X	X		-	-	-
	Black skimmer		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Canada goose		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Caspian tern				X	X	X	X	X						-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gadwall		X	X	X	X						X	X	X	-	-	-
	Glossy ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Greater yellowlegs			X	X	X	X	X	X	X	X				-	-	-
	Green heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gull-billed tern	P		X	X	X	X	X	X	X	X				-	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Least bittern			X	X	X	X	X	X	X	X	X			MAY-JUL	-	-
	Mallard		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Northern harrier		X	X	X	X				X	X	X	X		-	-	-
	Pied-billed grebe		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Snow goose		X	X	X							X	X		-	-	-
	Sora		X	X	X	X				X	X	X	X	X	-	-	-
	Swallow-tailed kite			X	X	X	X	X	X	X	X				MAY-JUN	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Wood duck		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Wood stork	P E		X	X	X	X	X	X						-	-	-
38	Black-bellied plover		X	X	X	X				X	X	X	X	X	-	-	-
	Black-necked stilt		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Dunlin		X	X	X	X						X	X	X	-	-	-
	Least sandpiper		X	X	X	X						X	X	X	-	-	-
	Lesser yellowlegs		X	X	X	X	X					X	X	X	-	-	-
	Long-billed curlew			X	X							X	X		-	-	-
	Marbled godwit			X	X					X	X	X			-	-	-
	Short-billed dowitcher		X	X	X	X						X	X	X	-	-	-
	Solitary sandpiper		X	X	X	X				X	X	X			-	-	-
	Stilt sandpiper			X	X	X				X	X	X	X	X	-	-	-
	Western sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	White-rumped sandpiper			X	X	X									-	-	-
	Wilson's snipe		X	X	X					X	X	X	X		-	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal		X	X						X					-	-	-
	Cattle egret			X	X	X	X	X	X	X	X				MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X	X						MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
-----	-----	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----	-----	-----
36	Black crappie				1	1	1	1	1	1	1				-	-	-	-	APR-SEP
	Bluegill		1	1	1	1	1						1		-	-	-	-	DEC-MAY
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf sturgeon	P T	1	1	1	1									FEB-APR	-	FEB-MAY	FEB-MAY	-
	Largemouth bass		X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-	-	JAN-DEC
	Longear sunfish		X	X	X	X	X	X	X	X					MAY-JUN	-	-	-	FEB-SEP
	Peamouth		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Rainwater killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	APR-OCT	APR-OCT	APR-NOV	DEC-MAR	JAN-DEC
	Shiners		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Spotted sunfish		1	1	1	1									-	-	-	-	-
	Striped bass				X	X	X								APR-JUN	-	-	-	APR-JUN
	Yellow bass		X	X	X	X	X						X		-	-	-	-	DEC-MAY
41	Saltmarsh topminnow						1								-	-	-	-	JUN-JUN
42	Silverside shiner		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
44	Chain pickerel					1									-	-	-	-	MAY-MAY
	Marsh killifish		2			2	2	2	2	2	2	2	2	2	-	-	-	-	MAY-JAN
	Paddlefish	P	1												-	-	-	-	JAN-JAN
	Striped bass			1											-	-	-	-	MAR-MAR
	Yellow bass					1									-	-	-	-	MAY-MAY

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
-----	-----	-----	-	-	-	-	-	-	-	-	-	-	-	-
164	Swamp cottonwood		X	X	X	X	X	X	X	X	X	X	X	X
166	Crestless eulophia		X	X	X	X	X	X	X	X	X	X	X	X
	Michaux orchid		X	X	X	X	X	X	X	X	X	X	X	X
176	Swamp buckthorn		X	X	X	X	X	X	X	X	X	X	X	X
180	Swollen bladderwort		X	X	X	X	X	X	X	X	X	X	X	X
191	Green-fly orchid		X	X	X	X	X	X	X	X	X	X	X	X
201	Bog spicebush		X	X	X	X	X	X	X	X	X	X	X	X
218	Godfrey's golden-aster		X	X	X	X	X	X	X	X	X	X	X	X
	Southern rein orchid		X	X	X	X	X	X	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
-----	-----	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----	-----
27	West Indian manatee	E				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.

Alabama: ESIMAP 16 (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
29	Alabama red-bellied turtle	P E	X X X X X X X X X X X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Alligator snapping turtle	P	X X X X X X X X X X X	APR-MAY	-	-	JAN-DEC	JAN-DEC
39	Delta map turtle	P	X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
40	Alabama red-bellied turtle	P E HIGH	X X X X X X X X X X X	APR-AUG	-	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
10	BOAT RAMP		
11	CLOVERLEAF LANDING		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
25	MOBILE-TENSAW DELTA WMA	CARL FERRARO; ADCNR-SLD	251/929-0900
29	WL HOLLAND WMA	CARL FERRARO; ADCNR-SLD	251/929-0900
30	WL HOLLAND WMA BAYOU CANOT FW 17	CARL FERRARO; ADCNR-SLD	251/929-0900

PARK:

HUN#	Name	Contact	Phone
78	HISTORIC BLAKELEY STATE PARK	CARL FERRARO; ADCNR-SLD	251/929-0900

Alabama: 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
19	American black duck	RARE	X	X	X	X						X	X	X	-	-	-
	American coot		X	X	X	X						X	X	X	-	-	-
	American wigeon		X	X								X	X		-	-	-
	Blue-winged teal			X	X					X					-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Canvasback		X	X	X							X	X		-	-	-
	Gadwall		X	X	X	X						X	X	X	-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Mallard		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	-	-	-
	Northern pintail		X	X	X							X	X		-	-	-
	Northern shoveler		X	X	X	X	X					X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-necked duck		X	X	X							X	X		-	-	-
	Ruddy duck		X	X	X							X	X		-	-	-
	Waterfowl	VERY HIGH	X	X	X							X	X		-	-	-
20	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Anhinga		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	-	-	-
	Double-crested cormorant		X	X	X							X	X	X	-	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Herring gull		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	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Ring-billed gull		X	X	X	X	X					X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
35	Bonaparte's gull		X	X	X							X	X		-	-	-
	Horned grebe		X	X	X	X						X	X	X	-	-	-
37	American avocet	HIGH	X	X	X	X						X	X	X	-	-	-
	American bittern		X	X	X							X			-	-	-
	American black duck	RARE	X	X	X	X						X	X	X	-	-	-
	American coot		X	X	X	X						X	X	X	-	-	-
	American wigeon		X	X								X	X		-	-	-
	Black skimmer		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Canada goose		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Caspian tern			X	X	X	X	X							-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gadwall		X	X	X	X						X	X	X	-	-	-
	Glossy ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Greater yellowlegs			X	X	X	X	X	X	X	X				-	-	-
	Green heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gull-billed tern	P		X	X	X	X	X	X	X					-	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Least bittern			X	X	X	X	X	X	X	X				MAY-JUL	-	-
	Mallard		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Northern harrier		X	X	X	X	X					X	X	X	-	-	-
	Pied-billed grebe		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Snow goose		X	X	X							X	X		-	-	-
	Sora		X	X	X	X	X					X	X	X	-	-	-
	Swallow-tailed kite			X	X	X	X	X	X	X					MAY-JUN	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Wood duck		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Wood stork	P E			X	X	X	X	X	X					-	-	-
38	Black-bellied plover		X	X	X	X	X					X	X	X	-	-	-
	Black-necked stilt		X	X	X	X	X	X	X	X	X	X	X		-	-	-
	Dunlin		X	X	X	X						X	X	X	-	-	-
	Least sandpiper		X	X	X	X						X	X	X	-	-	-
	Lesser yellowlegs		X	X	X	X	X					X	X	X	-	-	-
	Long-billed curlew			X	X							X	X		-	-	-
	Marbled godwit			X	X							X	X	X	-	-	-
	Short-billed dowitcher		X	X	X	X						X	X	X	-	-	-
	Solitary sandpiper			X	X	X	X					X	X	X	-	-	-
	Stilt sandpiper			X	X	X						X	X	X	-	-	-
	Western sandpiper		X	X	X	X						X	X	X	-	-	-
	White-rumped sandpiper			X	X	X									-	-	-
	Wilson's snipe		X	X	X							X	X	X	-	-	-
43	Bald eagle	P T	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	-	-
45	Common goldeneye		X	X	X							X	X		-	-	-
	Common loon		X	X	X	X	X					X	X		-	-	-
46	Bald eagle	P T	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X		APR-JUN	-	-
	Blue-winged teal			X	X							X			-	-	-
	Cattle egret			X	X	X	X	X	X	X	X				MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X							MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
22	American eel				1	1	1	1	1	1	1	1	1		-	-	-	-	MAR-OCT
	Black crappie					1	1	1	1	1					-	-	-	-	APR-SEP
	Bluegill		1	1	1	1	1							1	-	-	-	-	DEC-MAY
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gizzard shad		2	2	2	2	2	2	2	2	2	2	2	2	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Largemouth bass		1		2	2	2	2	2	2	2	2	2		-	-	-	-	-
	Rainwater killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Redear sunfish		1	1	1	1	1	1	2	2	2	1	1	1	-	-	-	-	-
	Spotted sunfish		1		1	1									-	-	-	-	-
35	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	APR-OCT	APR-OCT	APR-NOV	DEC-MAR	JAN-DEC
	Shiners		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
36	Black crappie				1	1	1	1	1	1					-	-	-	-	APR-SEP
	Bluegill		1	1	1	1	1							1	-	-	-	-	DEC-MAY
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf sturgeon	P T		1	1	1	1								FEB-APR	-	FEB-MAY	FEB-MAY	-
	Largemouth bass		X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	-	-	-	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.

Alabama: 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
			-	-	-	-	-	-	-	-	-	-	-	-					
36	Longear sunfish			X	X	X	X	X	X	X	X				MAY-JUN	-	-	-	FEB-SEP
	Peamouth		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Rainwater killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	APR-OCT	APR-OCT	APR-NOV	DEC-MAR	JAN-DEC
	Shiners		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Spotted sunfish		1		1	1									-	-	-	-	-
	Striped bass					X	X	X							APR-JUN	-	-	-	APR-JUN
	Yellow bass		X	X	X	X	X						X		-	-	-	-	DEC-MAY
44	Chain pickerel						1								-	-	-	-	MAY-MAY
	Marsh killifish		2			2	2	2	2	2	2	2	2	2	-	-	-	-	MAY-JAN
	Paddlefish	P	1												-	-	-	-	JAN-JAN
	Striped bass				1										-	-	-	-	MAR-MAR
	Yellow bass						1								-	-	-	-	MAY-MAY
105	Atlantic croaker		4	4	4	4	4	4	4	4	4	4	3	3	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	3	3	3	3	3	3	3	3	2	-	-	DEC-APR	JAN-DEC	-
	Blue catfish		1	2	2	2	2	1	1				1	1	-	-	-	-	NOV-JUL
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	1	2	2	1	2	1	1		-	-	-	-	MAY-DEC
	Gray snapper					2	2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden		2	4	4	4	4	3	3	3	3	4	3	4	-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	3	3	3	3	3	3	3	3	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT
	Sand seatrout		2	2	4	4	4	4	4	3	3	3	2	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC
	Silver perch		2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-AUG	JAN-DEC	JAN-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Southern hake		1	1	2	2	2				1	1			-	-	-	-	OCT-OCT
																			DEC-MAY
	Spot		4	4	4	4	4	4	4	4	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1			1	2	2	2	2	2	2	1		-	-	-	-	MAY-JAN
146	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
	Rough silverside		1	1		2	2	2	2	2	2	1	1	1	-	-	-	-	APR-FEB

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
			-	-	-	-	-	-	-	-	-	-	-	-
153	Sweetflag		X	X	X	X	X	X	X	X	X	X	X	X
165	Florida pondweed		X	X	X	X	X	X	X	X	X	X	X	X
166	Crestless eulophia		X	X	X	X	X	X	X	X	X	X	X	X
	Michaux orchid		X	X	X	X	X	X	X	X	X	X	X	X
168	Hairy-peduncled beakrush		X	X	X	X	X	X	X	X	X	X	X	X
169	Brown beakrush		X	X	X	X	X	X	X	X	X	X	X	X
173	Shadow-witch orchid		X	X	X	X	X	X	X	X	X	X	X	X
	Tiny-leaved buckthorn		X	X	X	X	X	X	X	X	X	X	X	X
177	Loblolly bay		X	X	X	X	X	X	X	X	X	X	X	X
	Nodding nixie		X	X	X	X	X	X	X	X	X	X	X	X
	Spoon-flower		X	X	X	X	X	X	X	X	X	X	X	X
183	Broad-leaf signalgrass		X	X	X	X	X	X	X	X	X	X	X	X
201	Bog spicebush		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
			-	-	-	-	-	-	-	-	-	-	-	-					
26	Brown shrimp		2	4	4	4	4	4	4	4	4	4	4	2	-	-	FEB-NOV	MAR-NOV	JUN-AUG
	Pink shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	AUG-OCT	MAY-JAN	JAN-DEC
	White shrimp		2	2	2	3	3	4	4	4	4	3	2		-	-	-	JAN-DEC	JAN-MAY
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-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
			-	-	-	-	-	-	-	-	-	-	-	-				
27	West Indian manatee	E				X	X	X	X	X	X	X	X		-	-	-	-

REPTILE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Interneeting	Juveniles	Adults
			-	-	-	-	-	-	-	-	-	-	-	-					
18	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
29	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Alligator snapping turtle	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	JAN-DEC	JAN-DEC
40	Alabama red-bellied turtle	P E HIGH	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
10	BOAT RAMP		
13	MEAHER STATE PARK BOAT RAMP		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
25	MOBILE-TENSAW DELTA WMA	CARL FERRARO; ADCNR-SLD	251/929-0900
29	WL HOLLAND WMA	CARL FERRARO; ADCNR-SLD	251/929-0900

MARINA:

HUN#	Name	Contact	Phone
53	LAKE FOREST YACHT CLUB		

PARK:

HUN#	Name	Contact	Phone
76	BLAKELEY ADDITION FW 8	CARL FERRARO; ADCNR-SLD	251/929-0900
78	HISTORIC BLAKELEY STATE PARK	CARL FERRARO; ADCNR-SLD	251/929-0900
79	MEAHER STATE PARK	CARL FERRARO; ADCNR-SLD	251/929-0900

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.

Alabama: 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
----	-----	- - -	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----
19	American black duck	RARE	X	X	X	X						X	X	X	-	-	-
	American coot		X	X	X	X						X	X	X	-	-	-
	American wigeon		X	X								X	X		-	-	-
	Blue-winged teal			X	X					X					-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Canvasback		X	X	X							X	X		-	-	-
	Gadwall		X	X	X	X						X	X	X	-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Mallard		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	-	-	-
	Northern pintail		X	X	X							X	X		-	-	-
	Northern shoveler		X	X	X	X	X				X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-necked duck		X	X	X							X	X		-	-	-
	Ruddy duck		X	X	X							X	X		-	-	-
	Waterfowl		X	X	X							X	X		-	-	-
20	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Anhinga		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	-	-	-
	Double-crested cormorant		X	X	X						X	X	X	X	-	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Herring gull		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	-	-	-
	Osprey		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Ring-billed gull		X	X	X	X	X					X	X	X	-	-	-
	Royal tern		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	-	-	-
	Black-necked stilt		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Dunlin		X	X	X	X						X	X	X	-	-	-
	Least sandpiper		X	X	X	X						X	X	X	-	-	-
	Lesser yellowlegs		X	X	X	X	X					X	X	X	-	-	-
	Long-billed curlew			X	X							X	X		-	-	-
	Marbled godwit			X	X					X	X	X			-	-	-
	Short-billed dowitcher		X	X	X	X						X	X	X	-	-	-
	Solitary sandpiper			X	X	X	X			X	X	X			-	-	-
	Stilt sandpiper			X	X	X				X	X	X	X	X	-	-	-
	Western sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	White-rumped sandpiper					X	X	X							-	-	-
	Wilson's snipe		X	X	X						X	X	X	X	-	-	-
47	Bufflehead		X	X	X							X	X		-	-	-
	Gadwall		X	X								X	X		-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Ruddy duck		X	X	X							X	X		-	-	-
49	American bittern		X	X	X								X		-	-	-
	Caspian tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Least bittern			X	X	X	X	X	X	X	X	X			-	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Pied-billed grebe		X	X	X	X						X	X	X	-	-	-
	White ibis					X	X	X	X						-	-	-
50	Whooping crane					X	X	X	X	X	X				-	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X		APR-JUN	-	-
	Blue-winged teal		X	X								X			-	-	-
	Cattle egret			X	X	X	X	X	X	X	X				MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X	X						MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
----	-----	- - -	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----	-----	-----
22	American eel				1	1	1	1	1	1	1	1	1		-	-	-	-	MAR-OCT
	Black crappie					1	1	1	1	1	1	1			-	-	-	-	APR-SEP
	Bluegill		1	1	1	1	1							1	-	-	-	-	DEC-MAY
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gizzard shad		2	2	2	2	2	2	2	2	2	2	2	2	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Largemouth bass		1		2	2	2	2	2	2	2	2	2	2	-	-	-	-	-
	Rainwater killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Redear sunfish		1	1	1	1	1	2	2	2	1	1	1		-	-	-	-	-
	Spotted sunfish		1		1	1		1							-	-	-	-	-
48	Atlantic bumper								2	2	3	3	1		-	-	-	-	JUL-NOV
	Bighead searobin		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-NOV
105	Atlantic croaker		4	4	4	4	4	4	4	4	4	4	3	3	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	3	3	3	3	3	3	3	2		-	-	DEC-APR	JAN-DEC	-
	Blue catfish		1	2	2	2	2	1	1				1	1	-	-	-	-	NOV-JUL
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	1	2	2	1	2	1			-	-	-	-	MAY-DEC
	Gray snapper					2	2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden		2	4	4	4	4	3	3	3	3	4	3	4	-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT
	Gulf sturgeon		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	3	3	3	3	3	3	3	2	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT
	Sand seatrout		2	2	4	4	4	4	4	3	3	3	2	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC
	Silver perch		2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-AUG	JAN-DEC	JAN-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Southern hake		1	1	2	2	2					1	1		-	-	-	-	OCT-OCT
																			DEC-MAY
	Spot		4	4	4	4	4	4	4	4	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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.

Alabama: ESIMAP 18 (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
			-	-	-	-	-	-	-	-	-	-	-	-					
105	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1			1	2	2	2	2	2	2	2	1	-	-	-	-	MAY-JAN
113	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAR-OCT
	Skipjack herring		1	1	1	1	1	1		1				1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern kingfish		2	2	2	2	3	3	3	2	2	2	2	2	-	-	-	-	JAN-DEC
	Star drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
141	Atlantic spadefish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf butterfish		2	2	2	3	3	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	-
	Ladyfish			1	1	2	2	1	1	1	1	1	1		-	-	-	-	MAR-NOV
	Scaled sardine				2	2	2	2	2	2	2	2	2		-	-	-	-	APR-NOV
	Sheepshead		2	2	3	3	3	2	3	3	2	2	2	2	FEB-MAR	FEB-APR	MAR-AUG	JAN-DEC	JAN-DEC
	Silver seatrout		1	1			1	1	1	1	2	2	2	1	-	-	-	-	MAY-FEB
	Spanish mackerel					2	2	2	2	2	2	2	2		-	-	-	APR-OCT	AUG-OCT
146	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
	Rough silverside		1	1		2	2	2	2	2	2	1	1	1	-	-	-	-	APR-FEB

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
			-	-	-	-	-	-	-	-	-	-	-	-					
26	Brown shrimp		2	4	4	4	4	4	4	4	4	4	4	2	-	-	FEB-NOV	MAR-NOV	JUN-AUG
	Pink shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	AUG-OCT	MAY-JAN	JAN-DEC
	White shrimp		2	2	2	2	3	3	4	4	4	4	3	2	-	-	-	JAN-DEC	JAN-MAY
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-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
			-	-	-	-	-	-	-	-	-	-	-	-				
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW				X	X	X	X	X	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
			-	-	-	-	-	-	-	-	-	-	-	-					
18	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
10	BOAT RAMP		

MARINA:

HUN#	Name	Contact	Phone
41	EASTERN SHORE MARINA		
42	FAIR HARBOR MARINA		
43	FAIRHOPE PIER		
44	FAIRHOPE YACHT CLUB		

Alabama: ESIMAP 19

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
47	Bufflehead		X	X	X								X	X	-	-	-
	Gadwall		X	X									X	X	-	-	-
	Greater scaup		X	X	X								X	X	-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Lesser scaup		X	X	X								X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Ruddy duck		X	X	X								X	X	-	-	-
52	American bittern		X	X	X									X	-	-	-
	Canada goose		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Caspian tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Green heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Least bittern			X	X	X	X	X	X	X	X	X	X		-	-	-
	Mallard		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X		APR-JUN	-	-
	Blue-winged teal			X	X							X			-	-	-
	Cattle egret				X	X	X	X	X	X	X	X			MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X	X						MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
127	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Canvasback		X	X	X							X	X		-	-	-
	Common goldeneye		X	X	X							X	X		-	-	-
	Common loon		X	X	X	X	X				X	X	X	X	-	-	-
	Double-crested cormorant		X	X	X						X	X	X	X	-	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Horned grebe		X	X	X	X	X				X	X	X	X	-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		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
48	Atlantic bumper									2	2	3	3	1	-	-	-	-	JUL-NOV
	Bighead searobin		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-NOV
105	Atlantic croaker		4	4	4	4	4	4	4	4	4	4	3	3	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	3	3	3	3	3	3	3	3	2		-	-	DEC-APR	JAN-DEC	-
	Blue catfish		1	2	2	2	2	1	1				1	1	-	-	-	-	NOV-JUL
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	1	2	2	1	2	1	1	1	-	-	-	-	MAY-DEC
	Gray snapper					2	2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden		2	4	4	4	4	3	3	3	3	4	3	4	-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	3	3	3	3	3	3	3	3	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT
	Sand seatrout		2	2	4	4	4	4	4	4	3	3	3	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC
	Silver perch		2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-AUG	JAN-DEC	JAN-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Southern hake		1	1	2	2	2					1	1		-	-	-	-	OCT-OCT
																			DEC-MAY
	Spot		4	4	4	4	4	4	4	3	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1			1	2	2	2	2	2	2	2	1	-	-	-	-	MAY-JAN
113	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAR-OCT
	Skipjack herring		1	1	1	1	1	1	1		1			1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern kingfish		2	2	2	2	3	3	3	2	2	2	2	2	-	-	-	-	JAN-DEC
	Star drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
141	Atlantic spadefish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf butterflyfish		2	2	2	3	3	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	-
	Ladyfish					1	1	2	2	1	1	1	1	1	-	-	-	-	MAR-NOV
	Scaled sardine					2	2	2	2	2	2	2	2	2	-	-	-	-	APR-NOV
	Sheepshead		2	2	3	3	3	2	3	3	2	2	2	2	FEB-MAR	FEB-APR	MAR-AUG	JAN-DEC	JAN-DEC
	Silver seatrout		1	1		1	1	1	1	2	2	2	2	1	-	-	-	-	MAY-FEB
	Spanish mackerel					2	2	2	2	2	2	2	2		-	-	-	APR-OCT	AUG-OCT
146	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
	Rough silverside		1	1		2	2	2	2	2	2	1	1	1	-	-	-	-	APR-FEB

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
161	Incised groovebur		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
26	Brown shrimp		2	4	4	4	4	4	4	4	4	4	4	2	-	-	FEB-NOV	MAR-NOV	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.

Alabama: ESIMAP 19 (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
26	Pink shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	AUG-OCT	MAY-JAN	JAN-DEC
	White shrimp		2	2	2	2	3	3	4	4	4	4	3	2	-	-	-	JAN-DEC	JAN-MAY
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
112	Eastern oyster		4	4	4	4	4	4	4	4	4	4	4	4	APR-NOV	-	APR-NOV	APR-NOV	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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW					X	X	X	X	X	X	X		-	-	-	-
53	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E HIGH					X	X	X	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
18	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
3	FAIRHOPE MUNICIPAL AIRPORT		

BOAT RAMP:

HUN#	Name	Contact	Phone
10	BOAT RAMP		
14	MULLET POINT PARK		

MARINA:

HUN#	Name	Contact	Phone
47	GRAND HOTEL		

Alabama: ESIMAP 20

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
52	American bittern		X	X	X								X		-	-	-
	Canada goose		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Caspian tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Green heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Least bittern			X	X	X	X	X	X	X	X	X	X		-	-	-
	Mallard		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
54	Wood duck		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
55	Bald eagle	P T	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
56	American white pelican	P	X	X	X					X	X	X	X		-	-	-
	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Mallard		X	X	X	X	X			X	X	X	X		-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		X	X	X							X	X		-	-	-
57	American bittern		X	X	X								X		-	-	-
	Caspian tern				X	X	X	X	X						-	-	-
	Cattle egret				X	X	X	X	X	X	X	X			MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Greater yellowlegs		X	X	X	X						X	X	X	-	-	-
	Green-backed heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Least bittern				X	X	X	X	X	X	X	X	X		MAY-JUL	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Northern harrier		X	X	X	X	X					X	X	X	-	-	-
	Pied-billed grebe		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Yellow-crowned night-heron				X	X	X	X	X	X					-	-	-
58	American oystercatcher	P	X	X	X								X	X	-	-	-
	Black-bellied plover		X	X	X	X	X		X	X	X	X	X		-	-	-
	Black-crowned night-heron				X	X	X	X	X	X	X	X	X		APR-JUN	-	-
	Reddish egret	P			X	X	X	X	X	X					-	-	-
	Sanderling		X	X	X	X	X		X	X	X	X	X		-	-	-
	Semipalmated plover		X	X	X	X	X		X	X	X	X	X		-	-	-
59	Bald eagle	P T	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	-	-
127	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Canvasback		X	X	X							X	X		-	-	-
	Common goldeneye		X	X	X							X	X		-	-	-
	Common loon		X	X	X	X	X			X	X	X	X		-	-	-
	Double-crested cormorant		X	X	X					X	X	X	X		-	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Horned grebe		X	X	X	X	X			X	X	X	X		-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		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
56	American eel		1	1	1	1							1		-	-	-	-	JAN-APR OCT-OCT
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	FEB-APR	JAN-DEC	JAN-DEC
	Bluegill		1	1	1	1	1						1		-	-	-	-	DEC-MAY
	Chain pickerel					1									-	-	-	-	MAY-MAY
	Florida pompano					2	2	2	2	2	2	2	2		APR-SEP	APR-SEP	APR-SEP	APR-OCT	APR-OCT
	Gizzard shad		2	2	2	2	2	2	2	2	2	2	2	2	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Lane snapper									1	1	1			-	-	-	-	AUG-OCT
	Largemouth bass					1	1	1	1						-	-	-	-	APR-JUL
	Marsh killifish					1	1	1							-	-	-	-	MAY-JUL
	Rainwater killifish												1		-	-	-	-	DEC-DEC
105	Atlantic croaker		4	4	4	4	4	4	4	4	4	4	3	3	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	3	3	3	3	3	3	3	3	2	-	-	DEC-APR	JAN-DEC	-
	Blue catfish		1	2	2	2	2	1	1				1	1	-	-	-	-	NOV-JUL
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	1	2	2	1	2	1	2	1	-	-	-	-	MAY-DEC
	Gray snapper					2	2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden		2	4	4	4	3	3	3	3	4	3	4		-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	3	3	3	3	3	3	3	3	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT
	Sand seatrout		2	2	4	4	4	4	4	3	3	3	2	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC
	Silver perch		2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-AUG	JAN-DEC	JAN-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Southern hake		1	1	2	2	2					1	1		-	-	-	-	OCT-OCT DEC-MAY
	Spot		4	4	4	4	4	4	4	3	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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.

Alabama: ESIMAP 20 (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
			-	-	-	-	-	-	-	-	-	-	-	-					
105	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1			1	2	2	2	2	2	2	2	1	-	-	-	-	MAY-JAN
113	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAR-OCT
	Skipjack herring		1	1	1	1	1	1		1				1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern kingfish		2	2	2	2	3	3	3	2	2	2	2	2	-	-	-	-	JAN-DEC
	Star drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
141	Atlantic spadefish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf butterfish		2	2	2	3	3	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	-
	Ladyfish			1	1	2	2	1	1	1	1	1	1		-	-	-	-	MAR-NOV
	Scaled sardine					2	2	2	2	2	2	2	2		-	-	-	-	APR-NOV
	Sheepshead		2	2	3	3	3	2	3	3	2	2	2	2	FEB-MAR	FEB-APR	MAR-AUG	JAN-DEC	JAN-DEC
	Silver seatrout		1	1			1	1	1	1	2	2	2	1	-	-	-	-	MAY-FEB
	Spanish mackerel					2	2	2	2	2	2	2	2		-	-	-	APR-OCT	AUG-OCT
146	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
	Rough silverside		1	1		2	2	2	2	2	2	1	1	1	-	-	-	-	APR-FEB

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
			-	-	-	-	-	-	-	-	-	-	-	-
175	Gulf spike-moss		X	X	X	X	X	X	X	X	X	X	X	X
179	Powdery thalia		X	X	X	X	X	X	X	X	X	X	X	X
220	Flax-leaf false-foxglove		X	X	X	X	X	X	X	X	X	X	X	X
	Yellow fringeless orchid		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
			-	-	-	-	-	-	-	-	-	-	-	-					
26	Brown shrimp		2	4	4	4	4	4	4	4	4	4	4	2	-	-	FEB-NOV	MAR-NOV	JUN-AUG
	Pink shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	AUG-OCT	MAY-JAN	JAN-DEC
	White shrimp		2	2	2	2	3	3	4	4	4	4	3	2	-	-	-	JAN-DEC	JAN-MAY
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-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
			-	-	-	-	-	-	-	-	-	-	-	-				
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW				X	X	X	X	X	X	X	X		-	-	-	-

REPTILE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Interne	Juveniles	Adults
			-	-	-	-	-	-	-	-	-	-	-	-					
18	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
54	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
55	Alligator snapping turtle	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
10	BOAT RAMP		
17	WEEKS BAY BOAT RAMP		

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
26	WEEKS BAY ADD. HARRIS & WORCHESTER FW 33	CARL FERRARO; ADCNR-SLD	251/929-0900
27	WEEKS BAY RESERVE	CARL FERRARO; ADCNR-SLD	251/929-0900
28	WEEKS BAY TRACT FW 23	CARL FERRARO; ADCNR-SLD	251/929-0900

MARINA:

HUN#	Name	Contact	Phone
62	RIVER PARK MARINA		
68	SAND ISLAND MARINA		

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Alabama: 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
61	Black scoter		X	X									X	X	-	-	-
	White-winged scoter		X	X									X	X	-	-	-
65	American bittern		X	X	X								X		-	-	-
	American coot		X	X	X	X						X	X	X	-	-	-
	American wigeon		X	X									X	X	-	-	-
	Canada goose		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Caspian tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gadwall		X	X	X	X						X	X	X	-	-	-
	Green-backed heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least bittern				X	X	X	X	X	X	X	X	X		-	-	-
	Mallard		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	APR-JUL	-	-
	Northern harrier		X	X	X	X	X					X	X	X	-	-	-
	Sora		X	X	X	X	X				X	X	X	X	-	-	-
	Spotted sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	Virginia rail		X	X	X								X	X	-	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Wilson's snipe		X	X	X							X	X	X	-	-	-
	Wood duck		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
66	Black skimmer	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Reddish egret			X	X	X	X	X	X						-	-	-
67	Anhinga		X	X	X	X							X	X	X	-	-
	Bufflehead		X	X	X								X	X	-	-	-
	Greater scaup		X	X	X								X	X	-	-	-
	Lesser scaup		X	X	X								X	X	-	-	-
	Pied-billed grebe		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X								X	X	X	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal			X	X								X		-	-	-
	Cattle egret				X	X	X	X	X	X	X	X			MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X								X	X	X	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X							MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
127	American white pelican	P	X	X	X	X							X	X	X	-	-
	Bonaparte's gull		X	X	X	X	X						X	X	-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X								X	X	-	-	-
	Canvasback		X	X	X								X	X	-	-	-
	Common goldeneye		X	X	X								X	X	-	-	-
	Common loon		X	X	X	X	X					X	X	X	X	-	-
	Double-crested cormorant		X	X	X							X	X	X	X	-	-
	Forster's tern		X	X	X	X							X	X	-	-	-
	Greater scaup		X	X	X								X	X	-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Hooded merganser		X	X	X	X							X	X	X	-	-
	Horned grebe		X	X	X	X	X					X	X	X	X	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X								X	X	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X								X	X	X	-	-
	Redhead		X	X	X								X	X	-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		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
61	Atlantic bumper							3	3	3	3	2	2	2	-	-	-	-	JUN-DEC
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bighead searobin		2	2	2	2	1	1	1	1	1	1	1	2	-	-	-	-	-
	Florida pompano				2	2	2	2	2	2	2	2	2	2	APR-SEP	APR-SEP	APR-SEP	APR-OCT	APR-OCT
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf flounder			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-OCT
	Highfin goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Inshore lizardfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Lane snapper							1	2	2	2	1	1	1	-	-	-	-	JUL-DEC
	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Longnose anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-
	Pigfish		1			1	1	1	1	1	1	1	1	1	-	-	-	-	MAY-JAN
	Speckled worm eel		2	2	2	2	1	1			1	1	1	1	-	-	-	-	SEP-JUN
62	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Marsh killifish			1											-	-	-	-	MAR-MAR
	Rough silverside		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
105	Atlantic croaker		4	4	4	4	4	4	4	4	4	4	3	3	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	3	3	3	3	3	3	3	3	2	-	-	DEC-APR	JAN-DEC	-
	Blue catfish		1	2	2	2	1	1					1	1	-	-	-	-	NOV-JUL
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	1	2	2	1	2	1	1	1	-	-	-	-	MAY-DEC
	Gray snapper					2	2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden		2	4	4	4	4	3	3	3	3	4	3	4	-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	3	3	3	3	3	3	3	3	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT
	Sand seatrout		2	2	4	4	4	4	4	3	3	3	2	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC
	Silver perch		2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-AUG	JAN-DEC	JAN-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Southern hake		1	1	2	2	2					1	1		-	-	-	-	OCT-OCT
																			DEC-MAY
	Spot		4	4	4	4	4	4	4	3	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1			1	2	2	2	2	2	2	1		-	-	-	-	MAY-JAN

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.

Alabama: ESIMAP 21 (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
113	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAR-OCT
	Skipjack herring		1	1	1	1	1	1		1				1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern kingfish		2	2	2	2	3	3	3	2	2	2	2	2	-	-	-	-	JAN-DEC
	Star drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
138	Atlantic croaker		4	4	4	4	4	4	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC
	Atlantic sharpnose shark				2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-OCT
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	JAN-DEC	-
	Bighead searobin			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-DEC
	Blacktip shark			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-OCT
	Blue runner													2	-	-	-	-	SEP-OCT
	Bonnethead shark													1	-	-	-	-	OCT-OCT
	Broad flounder		1	1	1	1	1	1							-	-	-	-	JAN-JUN
	Bull shark			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-OCT
	Cobia							1	1	1					-	-	-	-	JUL-SEP
	Crested cusk-eel		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Dolphin													2	-	-	-	-	SEP-SEP
	Florida pompano				2	2	2	2	2	2	2	2	2	2	APR-SEP	APR-SEP	APR-SEP	APR-OCT	APR-OCT
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish							1	2	2	2	2	2	2	-	-	-	-	JUN-OCT
	Gag							1							-	-	-	-	MAY-MAY
	Gray snapper						1	1	1	1	1	1	1	1	-	-	-	-	MAY-DEC
	Gulf flounder		2	2	2	2	2	2	2	2	2	2	2	2	NOV-FEB	NOV-FEB	NOV-FEB	JAN-DEC	JAN-DEC
	Gulf menhaden		4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Hardhead catfish		2	2	2	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Highfin goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Inshore lizardfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Lane snapper							1	2	2	2	1	1	1	-	-	-	JUL-DEC	-
	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Little tunny						1	1	1	1	1	1	1	1	-	-	-	-	MAY-SEP
	Longnose anchovy			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-NOV
	Pigfish		1			1	1	1	1	1	1	1	1	1	-	-	-	-	MAY-JAN
	Pinfish		3	3	3	3	3	4	4	4	4	4	3	3	NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC
	Red snapper							1	1	1	1	1	1	1	-	-	-	JUL-NOV	-
	Rough scad					2	1				1	1			-	-	-	-	MAY-JUN
																			SEP-OCT
	Sand seatrout		4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC
	Silver perch		3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Skipjack herring		1	1	1	1	1	1		1				1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern flounder		3	3	3	3	3	3	3	3	2	3	3	3	SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC
	Southern hake		1	1	1	1	1	1					1	1	-	-	-	-	NOV-JUN
	Southern kingfish		1	2	3	3	3	3	3	3	3	3	3	1	-	-	-	-	JAN-DEC
	Speckled worm eel		2	2	2	2	1	1		1	1	1	1	1	-	-	-	-	SEP-JUN
	Spinner shark			1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	MAR-OCT
	Spot		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAR	NOV-APR	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	2	2	2	2	2	2	1	1	-	-	-	-	JAN-DEC
141	Atlantic spadefish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf butterflyfish		2	2	2	3	3	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	-
	Ladyfish			1	1	2	2	1	1	1	1	1	1	1	-	-	-	-	MAR-NOV
	Scaled sardine				2	2	2	2	2	2	2	2	2	2	-	-	-	-	APR-NOV
	Sheepshead		2	2	3	3	3	2	3	3	2	2	2	2	FEB-MAR	FEB-APR	MAR-AUG	JAN-DEC	JAN-DEC
	Silver seatrout		1	1		1	1	1	2	2	2	2	1	3	-	-	-	-	MAY-FEB
	Spanish mackerel				2	2	2	2	2	2	2	2	2	2	-	-	-	APR-OCT	AUG-OCT

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
212	Bandana-of-the-everglades		X	X	X	X	X	X	X	X	X	X	X	X
	Large-leaved jointweed		X	X	X	X	X	X	X	X	X	X	X	X
	Sand pine		X	X	X	X	X	X	X	X	X	X	X	X
213	Large-leaved jointweed		X	X	X	X	X	X	X	X	X	X	X	X
	Sand pine		X	X	X	X	X	X	X	X	X	X	X	X
	Slenderleaf clammy-weed		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
61	Brown shrimp		2	4	4	4	4	4	4	4	4	4	4	2	-	-	FEB-NOV	MAR-NOV	JUN-AUG
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	JAN-JUN
62	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
112	Eastern oyster		4	4	4	4	4	4	4	4	4	4	4	4	APR-NOV	-	APR-NOV	APR-NOV	JAN-DEC
138	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Mantis shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	Shark eye		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW				X	X	X	X	X	X	X	X	X	-	-	-	-
27	West Indian manatee	E				X	X	X	X	X	X	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
18	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
151	Green sea turtle	P T				X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E				X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E				X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T				X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP

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Alabama: ESIMAP 21 (cont.)

HUMAN USE RESOURCES:

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
80	BON SECOUR NATIONAL WILDLIFE REFUGE	USFWS	251/540-7720

Alabama: ESIMAP 22

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
-----	-----	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----
60	Bald eagle	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
61	Black scoter		X	X									X	X	-	-	-
	White-winged scoter		X	X									X	X	-	-	-
63	American bittern		X	X	X									X	-	-	-
	Caspian tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Green heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least bittern			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	APR-JUL	-	-
	White ibis			X	X	X	X								-	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal		X	X						X					-	-	-
	Cattle egret			X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X					X	X	X			-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X							MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
127	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Bonaparte's gull		X	X	X	X	X						X	X	-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X								X	X	-	-	-
	Canvasback		X	X	X								X	X	-	-	-
	Common goldeneye		X	X	X								X	X	-	-	-
	Common loon		X	X	X	X	X				X	X	X	X	-	-	-
	Double-crested cormorant		X	X	X						X	X	X	X	-	-	-
	Forster's tern		X	X	X	X						X	X	X	-	-	-
	Greater scaup		X	X	X								X	X	-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Horned grebe		X	X	X	X	X				X	X	X	X	-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X								X	X	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		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
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61	Atlantic bumper							3	3	3	3	2	2	2	-	-	-	-	JUN-DEC
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bighead searobin		2	2	2	2	1	1	1	1	1	1	1	2	-	-	-	-	-
	Florida pompano					2	2	2	2	2	2	2			APR-SEP	APR-SEP	APR-SEP	APR-OCT	APR-OCT
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf flounder			2	2	2	2	2	2	2	2	2	2		-	-	-	-	FEB-OCT
	Highfin goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Inshore lizardfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Lane snapper								1	2	2	2	1	1	-	-	-	-	JUL-DEC
	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Longnose anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-
	Pigfish		1				1	1	1	1	1	1	1	1	-	-	-	-	MAY-JAN
	Speckled worm eel			2	2	2	2	1			1	1	1	1	-	-	-	-	SEP-JUN
62	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Marsh killifish			1											-	-	-	-	MAR-MAR
	Rough silverside		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
105	Atlantic croaker		4	4	4	4	4	4	4	4	4	4	4	3	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	3	3	3	3	3	3	3	3	2	-	-	DEC-APR	JAN-DEC	-
	Blue catfish		1	2	2	2	2	1						1	-	-	-	-	NOV-JUL
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish						1	1	2	2	1	2	1	1	-	-	-	-	MAY-DEC
	Gray snapper						2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden		2	4	4	4	4	3	3	3	3	4	3	4	-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	3	3	3	3	3	3	3	3	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT
	Sand seatrout		2	2	4	4	4	4	4	3	3	3	2	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC
	Silver perch		2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-AUG	JAN-DEC	JAN-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Southern hake		1	1	2	2	2					1	1		-	-	-	-	OCT-OCT
																			DEC-MAY
	Spot		4	4	4	4	4	4	4	3	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1			1	2	2	2	2	2	2	2	1	-	-	-	-	MAY-JAN
113	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAR-OCT
	Skipjack herring		1	1	1	1	1	1		1				1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern kingfish		2	2	2	2	3	3	3	2	2	2	2	2	-	-	-	-	JAN-DEC
	Star drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
141	Atlantic spadefish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf butterflyfish		2	2	2	3	3	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Harvestfish		1	1	1	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	-
	Ladyfish					1	1	2	2	1	1	1	1	1	-	-	-	-	MAR-NOV
	Scaled sardine					2	2	2	2	2	2	2	2		-	-	-	-	APR-NOV
	Sheepshead		2	2	3	3	3	2	3	3	2	2	2	2	FEB-MAR	FEB-APR	MAR-AUG	JAN-DEC	JAN-DEC
	Silver seatrout		1	1			1	1	1	2	2	2	2	1	-	-	-	-	MAY-FEB
	Spanish mackerel					2	2	2	2	2	2	2	2		-	-	-	APR-OCT	AUG-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.

Alabama: ESIMAP 22 (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
61	Brown shrimp		2	4	4	4	4	4	4	4	4	4	4	2	-	-	FEB-NOV	MAR-NOV	JUN-AUG
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	JAN-JUN
62	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW					X	X	X	X	X	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
151	Green sea turtle	P T						X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E						X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E						X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T						X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP

HUMAN USE RESOURCES:

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
80	BON SECOUR NATIONAL WILDLIFE REFUGE	USFWS	251/540-7720

Alabama: 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
60	Bald eagle	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
61	Black scoter		X	X									X	X	-	-	-
	White-winged scoter		X	X									X	X	-	-	-
63	American bittern		X	X	X									X	-	-	-
	Caspian tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Green heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least bittern			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	APR-JUL	-	-
	White ibis			X	X	X	X								-	-	-
64	Sandwich tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal		X	X						X					-	-	-
	Cattle egret			X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X	X						MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
115	Magnificent frigatebird			X	X	X	X	X	X	X					-	-	-
	Northern gannet	COMMON	X	X	X	X				X	X	X	X		-	-	-
118	Bonaparte's gull		X	X	X	X					X	X			-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common loon		X	X	X	X				X	X	X	X		-	-	-
	Double-crested cormorant		X	X	X					X	X	X	X		-	-	-
	Herring gull		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	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X					X	X	X			-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Surf scoter		X	X								X	X		-	-	-
	White-winged scoter		X	X								X	X		-	-	-
127	American white pelican	P	X	X	X	X					X	X	X		-	-	-
	Bonaparte's gull		X	X	X	X					X	X			-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Canvasback		X	X	X							X	X		-	-	-
	Common goldeneye		X	X	X							X	X		-	-	-
	Common loon		X	X	X	X				X	X	X	X		-	-	-
	Double-crested cormorant		X	X	X					X	X	X	X		-	-	-
	Forster's tern		X	X	X	X					X	X			-	-	-
	Greater scaup		X	X	X						X	X			-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Hooded merganser		X	X	X	X				X	X	X			-	-	-
	Horned grebe		X	X	X	X				X	X	X	X		-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X						X	X			-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X						X	X	X		-	-	-
	Redhead		X	X	X						X	X			-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		X	X	X						X	X			-	-	-
130	American oystercatcher	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Black tern		X	X	X	X					X	X	X		-	-	-
	Black-bellied plover		X	X	X	X					X	X			-	-	-
	Dunlin		X	X	X	X					X	X	X		-	-	-
	Greater yellowlegs		X	X	X	X					X	X	X		-	-	-
	Least sandpiper		X	X	X	X					X	X	X		-	-	-
	Lesser yellowlegs		X	X	X	X				X	X	X	X		-	-	-
	Red knot		X	X	X							X			-	-	-
	Ruddy turnstone		X	X	X							X	X		-	-	-
	Sanderling		X	X	X	X				X	X	X	X	X	-	-	-
	Semipalmated plover		X	X	X	X					X	X	X		-	-	-
	Semipalmated sandpiper		X	X	X	X					X	X	X		-	-	-
	Short-billed dowitcher		X	X	X	X					X	X	X		-	-	-
	Spotted sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	Western sandpiper		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Whimbrel		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
134	Caspian tern		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	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
135	Reddish egret	P		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
61	Atlantic bumper							3	3	3	3	2	2	2	-	-	-	-	JUN-DEC
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bighead searobin		2	2	2	2	1	1	1	1	1	1	2		-	-	-	-	-
	Florida pompano				2	2	2	2	2	2					APR-SEP	APR-SEP	APR-SEP	APR-OCT	APR-OCT
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf flounder			2	2	2	2	2	2	2	2	2			-	-	-	-	FEB-OCT
	Highfin goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Inshore lizardfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Lane snapper							1	2	2	2	1	1		-	-	-	-	JUL-DEC
	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Longnose anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-
	Pigfish		1			1	1	1	1	1	1	1	1	1	-	-	-	-	MAY-JAN
	Speckled worm eel		2	2	2	2	1			1	1	1	1		-	-	-	-	SEP-JUN
62	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Marsh killifish				1										-	-	-	-	MAR-MAR
	Rough silverside		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	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.

Alabama: ESIMAP 23 (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
			-	-	-	-	-	-	-	-	-	-	-	-					
105	Atlantic croaker		4	4	4	4	4	4	4	4	4	4	3	3	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	3	3	3	3	3	3	3	3	2	-	-	DEC-APR	JAN-DEC	-
	Blue catfish		1	2	2	2	1	1						1	1	-	-	-	NOV-JUL
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish						1	1	2	2	1	2	1	1	-	-	-	-	MAY-DEC
	Gray snapper						2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden		2	4	4	4	4	3	3	3	3	4	3	4	-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	3	3	3	3	3	3	3	3	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT
	Sand seatrout		2	2	4	4	4	4	4	3	3	3	2	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC
	Silver perch		2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-AUG	JAN-DEC	JAN-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Southern hake		1	1	2	2	2						1	1	-	-	-	-	OCT-OCT
																			DEC-MAY
	Spot		4	4	4	4	4	4	4	3	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1				1	2	2	2	2	2	2	1	-	-	-	-	MAY-JAN
113	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAR-OCT
	Skipjack herring		1	1	1	1	1	1						1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern kingfish		2	2	2	2	3	3	3	2	2	2	2	2	-	-	-	-	JAN-DEC
	Star drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
138	Atlantic croaker		4	4	4	4	4	4	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC
	Atlantic sharpnose shark					2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-OCT
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	JAN-DEC	-
	Bighead searobin			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-DEC
	Blacktip shark				2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-OCT
	Blue runner												2	2	-	-	-	-	SEP-OCT
	Bonnethead shark													1	-	-	-	-	OCT-OCT
	Broad flounder		1	1	1	1	1	1							-	-	-	-	JAN-JUN
	Bull shark			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-OCT
	Cobia							1	1	1					-	-	-	-	JUL-SEP
	Crested cusk-eel		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Dolphin									2					-	-	-	-	SEP-SEP
	Florida pompano					2	2	2	2	2	2	2	2	2	APR-SEP	APR-SEP	APR-SEP	APR-OCT	APR-OCT
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish						1	2	2	2	2				-	-	-	-	JUN-OCT
	Gag						1								-	-	-	-	MAY-MAY
	Gray snapper						1	1	1	1	1	1	1	1	-	-	-	-	MAY-DEC
	Gulf flounder		2	2	2	2	2	2	2	2	2	2	2	2	NOV-FEB	NOV-FEB	NOV-FEB	JAN-DEC	JAN-DEC
	Gulf menhaden		4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Hardhead catfish		2	2	2	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Highfin goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Inshore lizardfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Lane snapper						1	2	2	2	1	1			-	-	-	JUL-DEC	-
	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Little tunny						1	1	1	1	1				-	-	-	-	MAY-SEP
	Longnose anchovy			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-NOV
	Pigfish		1				1	1	1	1	1	1	1	1	-	-	-	-	MAY-JAN
	Pinfish		3	3	3	3	3	4	4	4	4	4	3	3	NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC
	Red snapper								1	1	1	1	1		-	-	-	JUL-NOV	-
	Rough scad						2	1				1	1		-	-	-	-	MAY-JUN
																			SEP-OCT
	Sand seatrout		4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC
	Silver perch		3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Skipjack herring		1	1	1	1	1	1						1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern flounder		3	3	3	3	3	3	3	2	3	3	3	3	SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC
	Southern hake		1	1	1	1	1	1						1	-	-	-	-	NOV-JUN
	Southern kingfish		1	2	3	3	3	3	3	3	3	3	3	1	-	-	-	-	JAN-DEC
	Speckled worm eel		2	2	2	2	1	1			1	1	1	1	-	-	-	-	SEP-JUN
	Spinner shark				1	1	1	1	1	1	1	1	1		-	-	-	-	MAR-OCT
	Spot		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAR	NOV-APR	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	2	2	2	2	2	1	1	1	-	-	-	-	JAN-DEC
139	Atlantic bumper							3	3	3	2	2	2	2	-	-	-	-	JUN-DEC
	Atlantic thread herring					2	2	2	2	2	2	2	2	1	-	-	-	-	MAR-NOV
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish					2	2	2	2	2	2	2			APR-OCT	-	-	-	APR-OCT
	Gulf butterfish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Harvestfish		1	1			2	2	2	2	2	2	2	2	-	-	-	-	MAY-FEB
	King mackerel						1	2	2	2	2	2	1		-	-	-	-	MAY-NOV
	Ladyfish					1	1	1	1	1	1	1	1	1	-	-	-	-	MAR-NOV
	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Scaled sardine						2	2	2	2	2	2	2	2	-	-	-	-	APR-NOV
	Silver seatrout					1		1	1	1	1	1	1	1	-	-	-	-	FEB-FEB
																			MAY-DEC
	Spanish mackerel		1	1	1	3	3	3	3	3	3	1	1	1	JUN-SEP	JUN-SEP	JUN-SEP	APR-SEP	JAN-DEC
140	Gulf kingfish		2		2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-JAN
	Halfbeak					1	1	2	2	2	1				-	-	-	-	APR-OCT
	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Northern kingfish				1	1	2	2	2	1	1	1	1	1	-	-	-	-	MAR-DEC
	Rough silverside		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
</																			

Alabama: ESIMAP 23 (cont.)

BIOLOGICAL RESOURCES: (cont.)

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
158	Slenderleaf clammy-weed		X	X	X	X	X	X	X	X	X	X	X	X
160	Large-leaved jointweed		X	X	X	X	X	X	X	X	X	X	X	X
195	Coastal-sand frostweed		X	X	X	X	X	X	X	X	X	X	X	X
197	Atlantic St. John's-wort		X	X	X	X	X	X	X	X	X	X	X	X
214	Sand pine		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
61	Brown shrimp		2	4	4	4	4	4	4	4	4	4	4	2	-	-	FEB-NOV	MAR-NOV	JUN-AUG
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	JAN-JUN
62	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
138	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Mantis shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	Shark eye		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
140	Five-slotted sand dollar		1						1	2	2	2	2		-	-	-	-	FEB-FEB
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JUL-NOV
	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW				X	X	X	X	X	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
117	Green sea turtle	P T			X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E			X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
	Loggerhead sea turtle	P T			X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
151	Green sea turtle	P T			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
131	Alabama beach mouse	P E	X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
15	PINES PUBLIC ACCESS BOAT RAMP		

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
18	ALABAMA BEACH MOUSE CRITICAL HABITAT	USFWS	

MARINA:

HUN#	Name	Contact	Phone
50	HOOK, LINE, & SINKER		

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
80	BON SECOUR NATIONAL WILDLIFE REFUGE	USFWS	251/540-7720

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.

Alabama: 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
61	Black scoter		X	X									X	X	-	-	-
	White-winged scoter		X	X									X	X	-	-	-
65	American bittern		X	X	X								X		-	-	-
	American coot		X	X	X	X						X	X	X	-	-	-
	American wigeon		X	X									X	X	-	-	-
	Canada goose		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Caspian tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gadwall		X	X	X	X						X	X	X	-	-	-
	Green-backed heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least bittern				X	X	X	X	X	X	X	X	X	X	-	-	-
	Mallard		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	APR-JUL	-	-
	Northern harrier		X	X	X	X	X					X	X	X	-	-	-
	Sora		X	X	X	X	X				X	X	X	X	-	-	-
	Spotted sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	Virginia rail		X	X	X								X	X	-	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Wilson's snipe		X	X	X							X	X	X	-	-	-
	Wood duck		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
66	Black skimmer		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Reddish egret	P		X	X	X	X	X	X						-	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal		X	X								X			-	-	-
	Cattle egret			X	X	X	X	X	X	X	X	X			MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X	X						MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
115	Magnificent frigatebird			X	X	X	X	X	X	X					-	-	-
	Northern gannet	COMMON	X	X	X	X	X					X	X	X	-	-	-
118	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common loon		X	X	X	X	X					X	X	X	-	-	-
	Double-crested cormorant		X	X	X							X	X	X	-	-	-
	Herring gull		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	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Surf scoter		X	X									X	X	-	-	-
	White-winged scoter		X	X									X	X	-	-	-
127	American white pelican	P	X	X	X	X						X	X	X	-	-	-
	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Canvasback		X	X	X							X	X		-	-	-
	Common goldeneye		X	X	X							X	X		-	-	-
	Common loon		X	X	X	X	X					X	X	X	-	-	-
	Double-crested cormorant		X	X	X							X	X	X	-	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Horned grebe		X	X	X	X	X					X	X	X	-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		X	X	X							X	X		-	-	-
130	American oystercatcher	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Black tern		X	X	X	X						X	X	X	-	-	-
	Black-bellied plover		X	X	X	X	X					X	X		-	-	-
	Dunlin		X	X	X	X						X	X	X	-	-	-
	Greater yellowlegs		X	X	X	X						X	X	X	-	-	-
	Least sandpiper		X	X	X	X						X	X	X	-	-	-
	Lesser yellowlegs		X	X	X	X	X					X	X	X	-	-	-
	Red knot		X	X	X							X			-	-	-
	Ruddy turnstone		X	X	X							X	X		-	-	-
	Sanderling		X	X	X	X	X					X	X	X	-	-	-
	Semipalmated plover		X	X	X	X						X	X	X	-	-	-
	Semipalmated sandpiper		X	X	X	X						X	X	X	-	-	-
	Short-billed dowitcher		X	X	X	X						X	X	X	-	-	-
	Spotted sandpiper		X	X	X	X						X	X	X	-	-	-
	Western sandpiper		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Whimbrel		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
132	Least tern		X	X	X	X						X	X	X	-	-	-
	Snowy plover	P	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
61	Atlantic bumper							3	3	3	3	2	2	2	-	-	-	-	JUN-DEC
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bighead searobin		2	2	2	2	2	1	1	1	1	1	1	2	-	-	-	-	-
	Florida pompano					2	2	2	2	2	2	2	2		APR-SEP	APR-SEP	APR-SEP	APR-OCT	APR-OCT
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gulf flounder			2	2	2	2	2	2	2	2	2	2		-	-	-	-	FEB-OCT
	Highfin goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Inshore lizardfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Lane snapper							1	2	2	2	1	1		-	-	-	-	JUL-DEC
	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Longnose anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-
	Pigfish		1			1	1	1	1	1	1	1	1	1	-	-	-	-	MAY-JAN
	Speckled worm eel		2	2	2	2	1	1			1	1	1	1	-	-	-	-	SEP-JUN
62	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	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.

Alabama: ESIMAP 24 (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
			-	-	-	-	-	-	-	-	-	-	-	-					
62	Longnose killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Marsh killifish			1											-	-	-	-	MAR-MAR
	Rough silverside		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
105	Atlantic croaker		4	4	4	4	4	4	4	4	4	4	4	3	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	3	3	3	3	3	3	3	3	2	-	-	DEC-APR	JAN-DEC	-
	Blue catfish		1	2	2	2	1	1						1	-	-	-	-	NOV-JUL
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	1	2	2	1	2	1	2	1	-	-	-	-	MAY-DEC
	Gray snapper					2	2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden		2	4	4	4	4	3	3	3	3	4	3	4	-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		2	2	2	3	3	3	3	3	3	3	3	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT
	Sand seatrout		2	2	4	4	4	4	4	4	3	3	3	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC
	Silver perch		2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-AUG	JAN-DEC	JAN-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Southern hake		1	1	2	2	2						1	1	-	-	-	-	OCT-OCT
																			DEC-MAY
	Spot		4	4	4	4	4	4	4	4	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1			1	2	2	2	2	2	2	2	1	-	-	-	-	MAY-JAN
113	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pinfish		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAR-OCT
	Skipjack herring		1	1	1	1	1	1						1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern kingfish		2	2	2	2	3	3	3	2	2	2	2	2	-	-	-	-	JAN-DEC
	Star drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
138	Atlantic croaker		4	4	4	4	4	4	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC
	Atlantic sharpnose shark			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-OCT
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	JAN-DEC	-
	Bighead searobin			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-DEC
	Blacktip shark			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-OCT
	Blue runner												2	2	-	-	-	-	SEP-OCT
	Bonnethead shark												1		-	-	-	-	OCT-OCT
	Broad flounder		1	1	1	1	1	1							-	-	-	-	JAN-JUN
	Bull shark			2	2	2	2	2	2	2	2	2	2		-	-	-	-	MAR-OCT
	Cobia									1	1	1			-	-	-	-	JUL-SEP
	Crested cusk-eel		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Dolphin												2		-	-	-	-	SEP-SEP
	Florida pompano				2	2	2	2	2	2	2	2	2	2	APR-SEP	APR-SEP	APR-SEP	APR-OCT	APR-OCT
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	2	2	2	2					-	-	-	-	JUN-OCT
	Gag					1									-	-	-	-	MAY-MAY
	Gray snapper					1	1	1	1	1	1	1	1	1	-	-	-	-	MAY-DEC
	Gulf flounder		2	2	2	2	2	2	2	2	2	2	2	2	NOV-FEB	NOV-FEB	NOV-FEB	JAN-DEC	JAN-DEC
	Gulf menhaden		4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Hardhead catfish		2	2	2	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Highfin goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Inshore lizardfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Lane snapper							1	2	2	2	1	1		-	-	-	JUL-DEC	-
	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Little tunny					1	1	1	1	1					-	-	-	-	MAY-SEP
	Longnose anchovy			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-NOV
	Pigfish		1			1	1	1	1	1	1	1	1	1	-	-	-	-	MAY-JAN
	Pinfish		3	3	3	3	3	4	4	4	4	4	4	3	NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC
	Red snapper							1	1	1	1	1			-	-	-	JUL-NOV	-
	Rough scad					2	1				1	1			-	-	-	-	MAY-JUN
																			SEP-OCT
	Sand seatrout		4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC
	Silver perch		3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Skipjack herring		1	1	1	1	1	1						1	-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern flounder		3	3	3	3	3	3	3	3	2	3	3	3	SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC
	Southern hake		1	1	1	1	1	1					1	1	-	-	-	-	NOV-JUN
	Southern kingfish		1	2	3	3	3	3	3	3	3	3	3	1	-	-	-	-	JAN-DEC
	Speckled worm eel		2	2	2	2	1	1			1	1	1	1	-	-	-	-	SEP-JUN
	Spinner shark			1	1	1	1	1	1	1	1	1			-	-	-	-	MAR-OCT
	Spot		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAR	NOV-APR	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	2	2	2	2	2	1	1	1	-	-	-	-	JAN-DEC
139	Atlantic bumper							3	3	3	2	2	2	2	-	-	-	-	JUN-DEC
	Atlantic thread herring				2	2	2	2	2	2	2	2	1		-	-	-	-	MAR-NOV
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish				2	2	2	2	2	2	2				APR-OCT	-	-	-	APR-OCT
	Gulf butterfish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Harvestfish		1	1			2	2	2	2	2	2	2	2	-	-	-	-	MAY-FEB
	King mackerel						1	2	2	2	2	2	1		-	-	-	-	MAY-NOV
	Ladyfish				1	1	1	1	1	1	1	1	1	1	-	-	-	-	MAR-NOV
	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Scaled sardine				2	2	2	2	2	2	2	2	2	2	-	-	-	-	APR-NOV
	Silver seatrout			1			1	1	1	1	1	1	1	1	-	-	-	-	FEB-FEB
																			MAY-DEC
140	Spanish mackerel		1	1	1	3	3	3	3	3	3	1	1	1	JUN-SEP	JUN-SEP	JUN-SEP	APR-SEP	JAN-DEC
	Gulf kingfish			2		2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-JAN
	Halfbeak				1	1	2	2	2	1	1				-	-	-	-	APR-OCT
	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-

Alabama: ESIMAP 24 (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
141	Sheepshead		2	2	3	3	3	2	3	3	2	2	2	2	FEB-MAR	FEB-APR	MAR-AUG	JAN-DEC	JAN-DEC
	Silver seatrout		1	1			1	1	1	1	2	2	2	1	-	-	-	-	MAY-FEB
	Spanish mackerel				2	2	2	2	2	2	2	2			-	-	-	APR-OCT	AUG-OCT

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
160	Large-leaved jointweed		X	X	X	X	X	X	X	X	X	X	X	X
163	Large-leaved jointweed		X	X	X	X	X	X	X	X	X	X	X	X
	Sand pine		X	X	X	X	X	X	X	X	X	X	X	X
212	Bandana-of-the-everglades		X	X	X	X	X	X	X	X	X	X	X	X
	Large-leaved jointweed		X	X	X	X	X	X	X	X	X	X	X	X
	Sand pine		X	X	X	X	X	X	X	X	X	X	X	X
213	Large-leaved jointweed		X	X	X	X	X	X	X	X	X	X	X	X
	Sand pine		X	X	X	X	X	X	X	X	X	X	X	X
	Slenderleaf clammy-weed		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
61	Brown shrimp		2	4	4	4	4	4	4	4	4	4	4	2	-	-	FEB-NOV	MAR-NOV	JUN-AUG
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	White shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	JAN-JUN
62	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
138	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Mantis shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	Shark eye		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
140	Five-slotted sand dollar		1					1	2	2	2	2			-	-	-	-	FEB-FEB
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW			X	X	X	X	X	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
117	Green sea turtle	P T			X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E			X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
	Loggerhead sea turtle	P T			X	X	X	X	X	X	X	X	X	X	APR-SEP	-	-	MAR-NOV	APR-SEP
151	Green sea turtle	P T			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T			X	X	X	X	X	X	X	X	X	X	-	-	-	MAR-NOV	APR-SEP

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
131	Alabama beach mouse	P E	X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
18	ALABAMA BEACH MOUSE CRITICAL HABITAT	USFWS	

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
80	BON SECOUR NATIONAL WILDLIFE REFUGE	USFWS	251/540-7720

Alabama: 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
65	American bittern		X	X	X								X		-	-	-
	American coot		X	X	X	X						X	X	X	-	-	-
	American wigeon		X	X								X	X		-	-	-
	Canada goose		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Caspian tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gadwall		X	X	X	X						X	X	X	-	-	-
	Green-backed heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least bittern			X	X	X	X	X	X	X	X	X	X		-	-	-
	Mallard		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	APR-JUL	-	-
	Northern harrier		X	X	X	X	X				X	X	X	X	-	-	-
	Sora		X	X	X	X	X			X	X	X	X	X	-	-	-
	Spotted sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	Virginia rail		X	X	X							X	X		-	-	-
	White ibis		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Wilson's snipe		X	X	X					X	X	X	X		-	-	-
	Wood duck		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
66	Black skimmer		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Reddish egret	P		X	X	X	X	X	X						-	-	-
67	Anhinga		X	X	X	X						X	X	X	-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Pied-billed grebe		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
68	Blue-winged teal			X	X						X				-	-	-
69	Red-cockaded woodpecker	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
70	Mississippi sandhill crane	P E	X	X	X								X		-	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X		APR-JUN	-	-
	Blue-winged teal			X	X							X			-	-	-
	Cattle egret			X	X	X	X	X	X	X	X	X			MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X	X						MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
115	Magnificent frigatebird			X	X	X	X	X	X	X					-	-	-
	Northern gannet	COMMON	X	X	X	X	X				X	X	X	X	-	-	-
118	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common loon		X	X	X	X	X				X	X	X	X	-	-	-
	Double-crested cormorant		X	X	X						X	X	X	X	-	-	-
	Herring gull		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	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X						X	X	X		-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Surf scoter		X	X								X	X		-	-	-
	White-winged scoter		X	X								X	X		-	-	-
127	American white pelican	P	X	X	X	X					X	X	X		-	-	-
	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Canvasback		X	X	X							X	X		-	-	-
	Common goldeneye		X	X	X							X	X		-	-	-
	Common loon		X	X	X	X	X				X	X	X	X	-	-	-
	Double-crested cormorant		X	X	X						X	X	X	X	-	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Hooded merganser		X	X	X	X					X	X	X		-	-	-
	Horned grebe		X	X	X	X	X				X	X	X	X	-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X						X	X	X		-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		X	X	X							X	X		-	-	-
130	American oystercatcher	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Black tern		X	X	X	X					X	X	X		-	-	-
	Black-bellied plover		X	X	X	X	X					X	X		-	-	-
	Dunlin		X	X	X	X						X	X	X	-	-	-
	Greater yellowlegs		X	X	X	X						X	X	X	-	-	-
	Least sandpiper		X	X	X	X						X	X	X	-	-	-
	Lesser yellowlegs		X	X	X	X	X				X	X	X	X	-	-	-
	Red knot		X	X	X							X			-	-	-
	Ruddy turnstone		X	X	X							X	X		-	-	-
	Sanderling		X	X	X	X	X			X	X	X	X	X	-	-	-
	Semipalmated plover		X	X	X	X					X	X	X		-	-	-
	Semipalmated sandpiper		X	X	X	X					X	X	X		-	-	-
	Short-billed dowitcher		X	X	X	X					X	X	X		-	-	-
	Spotted sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	Western sandpiper		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Whimbrel		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Willet		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
74	Atlantic croaker		2	4	4	4	4	4	3	3	3	2	2	2	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		3	3	3	4	4	4	3	3	4	3	4	3	FEB-SEP	FEB-OCT	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	2	3	3	3	2	2	2	2	2	-	DEC-APR	-	JAN-DEC	-
	Bighead searobin		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blackcheek tonguefish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bluegill		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Crevalle jack							2	2	2	2	2	2	2	-	-	-	-	JUN-NOV
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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.

Alabama: ESIMAP 25 (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	
			-	-	-	-	-	-	-	-	-	-	-	-						
74	Fringed flounder	P T	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
	Gafftopsail catfish						1	2	2	2	2	2			-	-	-	-	MAY-OCT	
	Gray snapper										1	1	1	1	1	-	-	-	-	AUG-DEC
	Gulf killifish		2	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Gulf menhaden		2	2	2	3	3	3	3	2	2	2	2	2	2	-	SEP-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Gulf sturgeon		X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		3	3	3	3	3	3	3	3	3	3	3	3	3	MAY-AUG	MAY-AUG	MAY-SEP	JAN-DEC	JAN-DEC
	Inshore lizardfish		1	1	1	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Largemouth bass					1	1	1	1	1	1	1	1	1		-	-	-	-	APR-NOV
	Least puffer		1	1	1	2	2	2	2	1	1	2	2	2	1	-	-	-	-	JAN-DEC
	Longnose gar	1	1		1	2				2	2	1			-	-	-	-	MAY-MAY	
																			AUG-SEP	
	Pinfish		2	2	2	3	3	3	3	3	3	3	3	2	2	-	-	DEC-APR	JAN-DEC	JAN-DEC
	Red drum	2	2	2	2	2	2	2	2	2	2	2	2	2	2	SEP-NOV	SEP-NOV	SEP-NOV	JAN-DEC	JAN-DEC
	Redear sunfish	1							1					1	1	-	-	-	-	JUL-JUL
																			NOV-JAN	
	Sand seatrout		2	2	2	2	2	2	2	2	2	2	2	2	2	MAR-AUG	MAR-OCT	MAR-OCT	JAN-DEC	JAN-DEC
	Silver perch			2	2	2	2	2	2	2	2	2	2	2	2	-	APR-JUL	APR-AUG	APR-JUL	FEB-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra		2	1	1	1	1	3	3	3	3	3	3	3	3	-	-	-	-	JAN-DEC
Spotted seatrout		2	2	2	2	2	2	2	2	2	2	2	2	2	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC	
Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	NOV-MAR	JAN-DEC	MAY-DEC	
Threadfin shad		1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC	
White mullet			1				1		1	1	1	1			-	-	-	-	MAR-MAR	
																			JUN-JUN	
84	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC	
	Longnose killifish		1						1						-	-	-	-	FEB-FEB	
																			JUL-JUL	
Marsh killifish		1	1	1	1				1	1				1	-	-	-	-	JUL-AUG	
																			DEC-APR	
Rainwater killifish		1	1	1	1	1	1						1	1	-	-	-	-	NOV-JUN	
Rough silverside							2	2	1						-	-	-	-	JUN-AUG	
Sailfin molly		2	2	1	1	1	1	1		1	1	1	2		-	-	-	-	SEP-JUL	
Sheepshead minnow		2	2	2	2	2	2	2	2	2	2	2	2	2	APR-OCT	APR-OCT	APR-NOV	JAN-DEC	JAN-DEC	
105	Atlantic croaker	P T	4	4	4	4	4	4	4	4	4	4	4	3	-	-	AUG-APR	JAN-DEC	MAY-DEC	
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC	
	Bay whiff		2	2	2	3	3	3	3	3	3	3	3	2	-	-	DEC-APR	JAN-DEC	-	
	Blue catfish		1	2	2	2	2	1	1				1	1	-	-	-	-	NOV-JUL	
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP	
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish						1	1	2	2	1	2	1	1	-	-	-	-	MAY-DEC	
	Gray snapper							2	2	2	2	2	2	2	2	-	-	-	MAY-DEC	MAY-DEC
	Gulf killifish		3	3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Gulf menhaden		2	4	4	4	4	3	3	3	3	4	3	4	-	SEP-FEB	OCT-MAY	FEB-DEC	FEB-OCT	
	Gulf sturgeon	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC	
	Hardhead catfish	2	2	2	3	3	3	3	3	3	3	3	3	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC	
	Red drum	2	2	2	2	2	2	2	2	2	2	2	2	2	-	SEP-DEC	SEP-DEC	JAN-DEC	JUN-OCT	
	Sand seatrout	2	2	4	4	4	4	4	3	3	3	2	2	2	FEB-SEP	FEB-SEP	FEB-SEP	JAN-DEC	JAN-DEC	
	Silver perch	2	2	2	2	2	2	2	2	2	2	2	2	2	APR-AUG	APR-AUG	APR-AUG	JAN-DEC	JAN-DEC	
	Southern flounder	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC	
	Southern hake	1	1	2	2	2					1	1			-	-	-	-	OCT-OCT	
																			DEC-MAY	
	Spot		4	4	4	4	4	4	4	3	3	3	3	3	-	-	NOV-APR	JAN-DEC	JAN-DEC	
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	APR-AUG	APR-AUG	APR-OCT	JAN-DEC	JAN-DEC	
Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC		
Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAY-DEC		
Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC		
White mullet		1			1	2	2	2	2	2	2	1		-	-	-	-	MAY-JAN		
113	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
	Pinfish	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	DEC-APR	JAN-DEC	MAR-OCT	
Skipjack herring		1	1	1	1	1	1		1				1	-	-	-	-	AUG-AUG		
																			DEC-JUN	
Southern kingfish		2	2	2	2	3	3	3	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
Star drum		2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
138	Atlantic croaker		4	4	4	4	4	4	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC	
	Atlantic sharpnose shark			2	2	2	2	2	2	2	2				-	-	-	-	MAR-OCT	
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC	
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC	
	Bay whiff		3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	JAN-DEC	-	
	Bighead searobin			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-DEC	
	Blacktip shark			2	2	2	2	2	2	2	2	2			-	-	-	-	MAR-OCT	
	Blue runner											2	2		-	-	-	-	SEP-OCT	
	Bonnethead shark																			

Alabama: ESIMAP 25 (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
138	Spotfin mojarra		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	2	2	2	2	2	1	1	1	-	-	-	-	JAN-DEC
139	Atlantic bumper						3	3	3	3	2	2	2	2	-	-	-	-	JUN-DEC
	Atlantic thread herring				2	2	2	2	2	2	2	2	1		-	-	-	-	MAR-NOV
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish				2	2	2	2	2	2	2	2			APR-OCT	-	-	-	APR-OCT
	Gulf butterfish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Harvestfish		1	1			2	2	2	2	2	2	2	2	-	-	-	-	MAY-FEB
	King mackerel					1	2	2	2	2	2	2	1		-	-	-	-	MAY-NOV
	Ladyfish				1	1	1	1	1	1	1	1	1		-	-	-	-	MAR-NOV
	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Scaled sardine					2	2	2	2	2	2	2	2		-	-	-	-	APR-NOV
	Silver seatrout		1			1	1	1	1	1	1	1	1	1	-	-	-	-	FEB-FEB
																			MAY-DEC
	Spanish mackerel		1	1	1	3	3	3	3	3	3	1	1	1	JUN-SEP	JUN-SEP	JUN-SEP	APR-SEP	JAN-DEC
140	Gulf kingfish		2		2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-JAN
	Halfbeak				1	1	2	2	2	1	1				-	-	-	-	APR-OCT
	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Northern kingfish			1	1	2	2	2	1	1	1	1	1	1	-	-	-	-	MAR-DEC
	Rough silverside		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	APR-OCT	APR-OCT	APR-NOV	DEC-MAR	JAN-DEC

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
155	Rush false-asphodel		X	X	X	X	X	X	X	X	X	X	X	X
156	Bluethreads		X	X	X	X	X	X	X	X	X	X	X	X
	Crenate milkwort		X	X	X	X	X	X	X	X	X	X	X	X
	Rush false-asphodel		X	X	X	X	X	X	X	X	X	X	X	X
	Twig rush		X	X	X	X	X	X	X	X	X	X	X	X
157	Large-leaved jointweed		X	X	X	X	X	X	X	X	X	X	X	X
	Slenderleaf clammy-weed		X	X	X	X	X	X	X	X	X	X	X	X
160	Large-leaved jointweed		X	X	X	X	X	X	X	X	X	X	X	X
182	Southern three-awned grass		X	X	X	X	X	X	X	X	X	X	X	X
208	Bandana-of-the-everglades		X	X	X	X	X	X	X	X	X	X	X	X
	Godfrey's golden-aster		X	X	X	X	X	X	X	X	X	X	X	X
	Large-leaved jointweed		X	X	X	X	X	X	X	X	X	X	X	X
	Spoon-flower		X	X	X	X	X	X	X	X	X	X	X	X
211	Chapman's butterwort		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
74	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		3	3	3	3	3	3	3	3	3	3	3	3	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		1	1	3	3	4	4	4	4	4	4	2		-	-	FEB-NOV	JAN-NOV	JUL-SEP
	Flatclaw hermit		2	2	2	2				2	2	2	2	2	-	-	-	-	AUG-APR
	Pink shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	JAN-DEC
	White shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	JAN-JUN
84	Five-slotted sand dollar		1	1	2	2	2	2	2	1	1				-	-	-	-	JAN-SEP
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	2		-	-	-	JAN-DEC	JAN-DEC
	Lined sea star		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
105	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	4	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
138	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Mantis shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	Shark eye		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
140	Five-slotted sand dollar		1					1	2	2	2	2			-	-	-	-	FEB-FEB
																			JUL-NOV
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW				X	X	X	X	X	X	X			-	-	-	-
27	West Indian manatee	E				X	X	X	X	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
25	Gopher tortoise	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
68	Alabama red-bellied turtle	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-	JAN-DEC	JAN-DEC
	Alligator snapping turtle	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	JAN-DEC	JAN-DEC
117	Green sea turtle	P T			X	X	X	X	X	X	X				APR-SEP	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E			X	X	X	X	X	X	X	X			APR-SEP	-	-	MAR-NOV	APR-SEP
	Loggerhead sea turtle	P T			X	X	X	X	X	X	X	X			APR-SEP	-	-	MAR-NOV	APR-SEP
151	Green sea turtle	P T			X	X	X	X	X	X	X	X			-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E			X	X	X	X	X	X	X	X			-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E			X	X	X	X	X	X	X	X			-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T			X	X	X	X	X	X	X	X			-	-	-	MAR-NOV	APR-SEP

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
131	Alabama beach mouse	P E	X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

AIRPORT:

HUN#	Name	Contact	Phone
5	JACK EDWARDS AIRPORT		

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.

Alabama: ESIMAP 25 (cont.)

HUMAN USE RESOURCES: (cont.)

BOAT RAMP:

HUN#	Name	Contact	Phone
10	BOAT RAMP		

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
18	ALABAMA BEACH MOUSE CRITICAL HABITAT	USFWS	

MARINA:

HUN#	Name	Contact	Phone
66	SAFE HARBOUR		
67	SAILBOAT BAY		

PARK:

HUN#	Name	Contact	Phone
77	GULF STATE PARK	CARL FERRARO; ADCNR-SLD	251/929-0900

WILDLIFE REFUGE:

HUN#	Name	Contact	Phone
80	BON SECOUR NATIONAL WILDLIFE REFUGE	USFWS	251/540-7720

Alabama: 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
43	Bald eagle	P T	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	-	-
69	Red-cockaded woodpecker	P E	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
71	Common goldeneye		X	X	X	X						X	X	X	-	-	-
	Pied-billed grebe		X	X	X	X						X	X	X	-	-	-
72	Osprey	P HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
73	Common tern				X	X	X	X	X	X					-	-	-
75	American bittern		X	X	X									X	-	-	-
	American coot		X	X	X	X					X	X	X		-	-	-
	American wigeon		X	X	X	X					X	X	X		-	-	-
	Canada goose		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Caspian tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gadwall		X	X	X	X					X	X	X		-	-	-
	Greater yellowlegs				X	X	X	X	X	X	X	X	X		-	-	-
	Green-backed heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least bittern				X	X	X	X	X	X	X	X	X		-	-	-
	Mallard		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Reddish egret	P			X	X	X	X	X	X					-	-	-
	Snow goose		X	X	X							X	X		-	-	-
	Sora		X	X	X	X	X			X	X	X	X	X	-	-	-
	Spotted sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	Virginia rail		X	X	X							X	X		-	-	-
	White ibis				X	X	X	X							-	-	-
	Wilson's snipe		X	X	X						X	X	X	X	-	-	-
	Wood duck		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
76	American coot		X	X	X	X					X	X	X		-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Canvasback		X	X	X							X	X		-	-	-
	Double-crested cormorant		X	X	X						X	X	X	X	-	-	-
	Forster's tern		X	X	X	X					X	X			-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Hooded merganser		X	X	X	X					X	X	X		-	-	-
	Horned grebe		X	X	X	X					X	X	X		-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
77	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		X	X	X							X	X		-	-	-
87	Black skimmer		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
88	Least tern	25-50 PAIRS			X	X	X	X	X	X					MAY-JUL	-	-
89	Great blue heron	12 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-
	Snowy egret	15 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron	15 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
90	Cattle egret	25 PAIRS			X	X	X	X	X	X	X	X			MAY-JUN	-	-
	Snowy egret	25 PAIRS	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
91	Least tern	HIGH	X	X	X	X					X	X	X	X	-	-	-
	Snowy plover		X	X	X							X	X		-	-	-
107	Black-crowned night-heron	P			X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal		X	X							X				-	-	-
	Cattle egret				X	X	X	X	X	X	X	X			MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule				X	X	X	X	X						MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
115	Magnificent frigatebird				X	X	X	X	X	X	X				-	-	-
	Northern gannet	COMMON	X	X	X	X	X				X	X	X	X	-	-	-
118	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common loon		X	X	X	X	X				X	X	X	X	-	-	-
	Double-crested cormorant		X	X	X						X	X	X	X	-	-	-
	Herring gull		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	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Surf scoter		X	X								X	X		-	-	-
	White-winged scoter		X	X								X	X		-	-	-
130	American oystercatcher	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Black tern		X	X	X	X						X	X	X	-	-	-
	Black-bellied plover		X	X	X	X	X					X	X		-	-	-
	Dunlin		X	X	X	X						X	X	X	-	-	-
	Greater yellowlegs		X	X	X	X						X	X	X	-	-	-
	Least sandpiper		X	X	X	X						X	X	X	-	-	-
	Lesser yellowlegs		X	X	X	X	X					X	X	X	-	-	-
	Red knot		X	X	X							X			-	-	-
	Ruddy turnstone		X	X	X							X	X		-	-	-
	Sanderling		X	X	X	X	X				X	X	X	X	-	-	-
	Semipalmated plover		X	X	X	X						X	X	X	-	-	-
	Semipalmated sandpiper		X	X	X	X						X	X	X	-	-	-
	Short-billed dowitcher		X	X	X	X						X	X	X	-	-	-
	Spotted sandpiper		X	X	X	X					X	X	X	X	-	-	-
	Western sandpiper		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Whimbrel		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Willet		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
74	Atlantic croaker		2	4	4	4	4	4	3	3	3	2	2	2	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		3	3	3	4	4	4	4	3	3	4	4	3	FEB-SEP	FEB-OCT	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	2	3	3	3	2	2	2	2	2	-	DEC-APR	-	JAN-DEC	-
	Bighead searobin		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blackcheek tonguefish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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.

Alabama: 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
74	Bluegill		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Crevalle jack									2	2	2	2	2	-	-	-	-	JUN-NOV
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	2	2	2	2	2				-	-	-	-	MAY-OCT
	Gray snapper									1	1	1	1	1	-	-	-	-	AUG-DEC
	Gulf killifish		2	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Gulf menhaden		2	2	2	3	3	3	3	2	2	2	2	2	-	SEP-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		3	3	3	3	3	3	3	3	3	3	3	3	MAY-AUG	MAY-AUG	MAY-SEP	JAN-DEC	JAN-DEC
	Inshore lizardfish		1	1	1	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Largemouth bass					1	1	1	1	1	1	1	1		-	-	-	-	APR-NOV
	Least puffer		1	1	1	2	2	2	2	1	1	2	2	1	-	-	-	-	JAN-DEC
	Longnose gar		1	1		1	2			2	2	1			-	-	-	-	MAY-MAY
																			AUG-SEP
	Pinfish		2	2	2	3	3	3	3	3	3	3	2	2	-	-	DEC-APR	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	SEP-NOV	SEP-NOV	SEP-NOV	JAN-DEC	JAN-DEC
	Redear sunfish		1						1					1	-	-	-	-	JUL-JUL
																			NOV-JAN
	Sand seatrout		2	2	2	2	2	2	2	2	2	2	2	2	MAR-AUG	MAR-OCT	MAR-OCT	JAN-DEC	JAN-DEC
	Silver perch			2	2	2	2	2	2	2	2	2	2	2	-	APR-JUL	APR-AUG	APR-JUL	FEB-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra		2	1	1	1	1	3	3	3	3	3	3	3	-	-	-	-	JAN-DEC
	Spotted seatrout		2	2	2	2	2	2	2	2	2	2	2	2	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	NOV-MAR	JAN-DEC	MAY-DEC
	Threadfin shad		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	White mullet			1			1		1	1		1			-	-	-	-	MAR-MAR
																			JUN-JUN
82	Gulf sturgeon	P T HIGH	X	X	X	X	X							X	-	-	-	-	DEC-MAY
84	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Longnose killifish			1					1						-	-	-	-	FEB-FEB
																			JUL-JUL
	Marsh killifish		1	1	1	1			1	1				1	-	-	-	-	JUL-AUG
																			DEC-APR
	Rainwater killifish		1	1	1	1	1	1						1	-	-	-	-	NOV-JUN
	Rough silverside								2	2	1				-	-	-	-	JUN-AUG
	Sailfin molly		2	2	1	1	1	1	1	1		1	1	1	-	-	-	-	SEP-JUL
	Sheepshead minnow		2	2	2	2	2	2	2	2	2	2	2	2	APR-OCT	APR-OCT	APR-NOV	JAN-DEC	JAN-DEC
85	Atlantic bumper					1	1	2	2	1		1			-	-	-	-	MAY-OCT
	Atlantic spadefish					1	1	1	1	1		1			-	-	-	-	JUN-OCT
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish			2	2	2	2	2	2	2	2	2	2	2	-	-	-	MAR-OCT	MAR-DEC
	Florida pompano								2	2	2	2			-	-	-	-	JUN-SEP
	Gulf butterflyfish		2	2	2	2	2	2	2	2	1	1	2	2	-	-	-	-	JAN-DEC
	Gulf flounder			2	2	2	2	2	2	2	2	2			-	-	-	-	FEB-OCT
	Harvestfish					2	2	2	2	2	2	2			-	-	-	-	MAY-OCT
	Ladyfish		1	1	1	1	1							1	-	-	-	-	FEB-JUN
																			NOV-DEC
	Lane snapper									1	1	1			-	-	-	-	JUL-SEP
	Sheepshead		2	2	3	3	3	2	2	2	2	2	2	2	-	-	MAR-JUL	JAN-DEC	JAN-DEC
	Southern hake		1	2	2	2	1							1	-	-	-	-	DEC-MAY
	Spotted hake		1	1	1	1								1	-	-	-	-	DEC-APR
86	Atlantic cutlassfish			2		2	2						2	2	-	-	-	-	MAR-MAR
																			MAY-DEC
	Dwarf sand perch		1	1	1	1	1	1	1	1	1	1	1	2	-	-	-	-	JAN-DEC
	Great barracuda												1		-	-	-	-	SEP-SEP
	Leopard searobin		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Ocellated flounder			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-DEC
	Rock sea bass		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Rough scad			1		1	1								-	-	-	-	MAR-MAR
																			MAY-JUN
	Shelf flounder		1	1	2	2	2	2	2	2	2	1	1		-	-	-	-	JAN-NOV
	Speckled worm eel		1	1	1	1							1	1	-	-	-	-	OCT-APR
	Striped burrfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
138	Atlantic croaker		4	4	4	4	4	4	3	3	3	3	3	3	SEP-APR	SEP-APR	OCT-APR	JAN-DEC	JAN-DEC
	Atlantic sharpnose shark			2	2	2	2	2	2	2	2				-	-	-	-	MAR-OCT
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		4	4	4	4	4	4	4	4	4	4	4	4	FEB-SEP	FEB-NOV	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	-	JAN-DEC
	Bighead searobin			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	FEB-DEC
	Blacktip shark			2	2	2	2	2	2	2	2				-	-	-	-	MAR-OCT
	Blue runner											2	2		-	-	-	-	SEP-OCT
	Bonnethead shark												1		-	-	-	-	OCT-OCT
	Broad flounder		1	1	1	1	1	1							-	-	-	-	JAN-JUN
	Bull shark			2	2	2	2	2	2	2	2	2			-	-	-	-	MAR-OCT
	Cobia									1	1	1			-	-	-	-	JUL-SEP
	Crested cusk-eel		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Crevalle jack		2	2	2	2	2	2	2	2	2	2	2	2	JAN-DEC	MAY-SEP	MAY-SEP	JAN-DEC	MAY-SEP
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Dolphin											2			-	-	-	-	SEP-SEP
	Florida pompano					2	2	2	2	2	2	2			APR-SEP	APR-SEP	APR-SEP	APR-OCT	APR-OCT
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	2	2	2	2					-	-	-	-	JUN-OCT
	Gag					1									-	-	-	-	MAY-MAY
	Gray snapper					1	1	1	1	1	1	1	1	1	-	-	-	-	MAY-DEC
	Gulf flounder		2	2	2	2	2	2	2	2	2	2	2	2	NOV-FEB	NOV-FEB	NOV-FEB	JAN-DEC	JAN-DEC
	Gulf menhaden		4	4	4	4	4	4	4	4	4	4	4	4	OCT-MAR	OCT-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Hardhead catfish		2	2	2	4	4	4	4	4	4	4	4	2	APR-AUG	APR-AUG	APR-SEP	JAN-DEC	JAN-DEC
	Highfin goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Inshore lizardfish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Lane snapper						1	2	2	2	1	1			-	-	-	JUL-DEC	-
	Least puffer		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Little tunny					1	1	1	1	1					-	-	-	-	MAY-SEP
	Longnose anchovy			2	2	2	2	2	2	2	2	2	2		-	-	-	-	FEB-NOV
	Pigfish		1			1	1	1	1	1	1	1	1	1	-	-	-	-	MAY-JAN
	Pinfish		3	3	3	3	3	4	4	4	4	4	3	3	NOV-MAR	NOV-MAR	NOV-APR	JAN-DEC	JAN-DEC
	Red snapper						1	1	1	1	1				-	-	-	-	JUL-NOV
	Rough scad					2	1			1	1				-	-	-	-	MAY-JUN
																			SEP-OCT
	Sand seatrout		4	4	4	4	4	4	4	4	4	4	4	4	MAR-OCT	MAY-OCT	FEB-OCT	JAN-DEC	JAN-DEC
	Silver perch		3	3	3	3	3	3	3	3	3	3	3	3	MAY-SEP	MAY-SEP	MAY-SEP	JAN-DEC	JAN-DEC
	Skipjack herring		1	1	1	1	1	1		1			1		-	-	-	-	AUG-AUG
																			DEC-JUN
	Southern flounder		3	3	3	3	3	3	3	3	2	3	3	3	SEP-JAN	SEP-JAN	SEP-APR	JAN-DEC	JAN-DEC
	Southern hake		1	1	1	1	1	1					1	1	-	-	-	-	

Alabama: 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
138	Spotted seatrout		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		4	4	4	4	4	4	4	4	4	4	4	4	NOV-MAY	NOV-MAY	NOV-MAY	JAN-DEC	JAN-DEC
	Threadfin shad		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	White mullet		1	1	1	1	2	2	2	2	2	1	1	1	-	-	-	-	JAN-DEC
139	Atlantic bumper							3	3	3	3	2	2	2	-	-	-	-	JUN-DEC
	Atlantic thread herring				2	2	2	2	2	2	2	1			-	-	-	-	MAR-NOV
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	FEB-APR	FEB-APR	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish				2	2	2	2	2	2	2				APR-OCT	-	-	-	APR-OCT
	Gulf butterfish		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Harvestfish		1	1		2	2	2	2	2	2	2	2	2	-	-	-	-	MAY-FEB
	King mackerel					1	2	2	2	2	2	1			-	-	-	-	MAY-NOV
	Ladyfish				1	1	1	1	1	1	1	1	1	1	-	-	-	-	MAR-NOV
	Lined seahorse		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Scaled sardine				2	2	2	2	2	2	2	2			-	-	-	-	APR-NOV
	Silver seatrout		1			1	1	1	1	1	1	1	1	1	-	-	-	-	FEB-FEB
																			MAY-DEC
140	Spanish mackerel		1	1	1	3	3	3	3	3	3	1	1	1	JUN-SEP	JUN-SEP	JUN-SEP	APR-SEP	JAN-DEC
	Gulf kingfish		2		2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-JAN
	Halfbeak				1	1	2	2	1	1					-	-	-	-	APR-OCT
	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-AUG	MAR-AUG	MAR-SEP	JAN-DEC	JAN-DEC
	Longnose killifish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Northern kingfish				1	1	2	2	2	1	1	1	1	1	-	-	-	-	MAR-DEC
	Rough silverside		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Sheepshead minnow		3	3	3	3	3	3	3	3	3	3	3	3	APR-OCT	APR-OCT	APR-NOV	DEC-MAR	JAN-DEC

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
160	Large-leaved jointweed		X	X	X	X	X	X	X	X	X	X	X	X
188	Godfrey's golden-aster		X	X	X	X	X	X	X	X	X	X	X	X
189	Southeastern tickseed		X	X	X	X	X	X	X	X	X	X	X	X
194	Chapman's butterwort		X	X	X	X	X	X	X	X	X	X	X	X
	Spring sneezeweed		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
74	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		3	3	3	3	3	3	3	3	3	3	3	3	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		1	1	3	3	4	4	4	4	4	4	2		-	-	FEB-NOV	JAN-NOV	JUL-SEP
	Flatclaw hermit		2	2	2			2	2	2	2	2			-	-	-	-	AUG-APR
	Pink shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	JAN-DEC
	White shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	JAN-JUN
83	Eastern oyster		2	2	2	2	2	2	2	2	2	2	2	2	APR-NOV	-	APR-NOV	APR-NOV	-
84	Five-slotted sand dollar		1	1	2	2	2	2	2	1	1				-	-	-	-	JAN-SEP
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Lined sea star		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
85	Mantis shrimp				2	2	2	2	2	2	2	2	2	2	-	-	-	-	MAR-NOV
138	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		4	4	3	4	4	4	4	4	4	4	4	4	MAR-NOV	MAR-NOV	MAR-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		4	4	4	4	4	4	4	4	4	4	4	4	NOV-APR	NOV-APR	FEB-NOV	JAN-DEC	JAN-DEC
	Mantis shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Pink shrimp		1	1	2	2	2	2	2	2	2	2	2	2	MAR-NOV	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC
	Shark eye		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-
	White shrimp		4	4	3	3	3	4	4	4	4	4	4	4	MAR-OCT	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
140	Five-slotted sand dollar		1					1	2	2	2	2			-	-	-	-	FEB-FEB
																			JUL-NOV
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW				X	X	X	X	X	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
25	Gopher tortoise	P	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
78	Alligator snapping turtle	P	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	-	-	JAN-DEC	JAN-DEC
117	Green sea turtle	P T			X	X	X	X	X	X	X	X			APR-SEP	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E			X	X	X	X	X	X	X				APR-SEP	-	-	MAR-NOV	APR-SEP
	Loggerhead sea turtle	P T			X	X	X	X	X	X	X	X			APR-SEP	-	-	MAR-NOV	APR-SEP
151	Green sea turtle	P T			X	X	X	X	X	X	X	X			-	-	-	MAR-NOV	APR-SEP
	Kemp's ridley sea turtle	P E			X	X	X	X	X	X	X	X			-	-	-	MAR-NOV	APR-SEP
	Leatherback sea turtle	P E			X	X	X	X	X	X	X	X			-	-	-	MAR-NOV	-
	Loggerhead sea turtle	P T			X	X	X	X	X	X	X	X			-	-	-	MAR-NOV	APR-SEP

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
73	Perdido Key beach mouse	P E	X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

BOAT RAMP:

HUN#	Name	Contact	Phone
10	BOAT RAMP		

CRITICAL HABITAT:

HUN#	Name	Contact	Phone
19	PERDIDO KEY BEACH MOUSE CRITICAL HABITAT	USFWS	

MARINA:

HUN#	Name	Contact	Phone
34	BEAR POINT MARINA		
49	GRIFFITH'S MARINA		
51	HUDSON MARINA		
54	MESS ABOUT MARINA		
57	ORANGE BEACH CHARTER BOAT BASIN		
58	ORANGE BEACH 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.

Alabama: ESIMAP 26 (cont.)

HUMAN USE RESOURCES: (cont.)

MARINA: (cont.)

HUN#	Name	Contact	Phone
59	OUTCAST CHARTER MARINA		
60	PERDIDO PASS MARINA		
61	PIRATE'S COVE MARINA		
64	ROMAR HARBOR HO-DRI MARINA		
65	SAFE HARBOR MARINA		
71	SPORTSMAN'S MARINA		
73	WALTER TRENT MARINA		
75	ZEKE'S MARINA		

PARK:

HUN#	Name	Contact	Phone
77	GULF STATE PARK	CARL FERRARO; ADCNR-SLD	251/929-0900

Alabama: 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
72	Osprey	P HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
76	American coot		X	X	X	X						X	X	X	-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X							X	X		-	-	-
	Canvasback		X	X	X							X	X		-	-	-
	Double-crested cormorant		X	X	X					X	X	X	X		-	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Horned grebe		X	X	X	X						X	X	X	-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
77	Bonaparte's gull		X	X	X	X	X					X	X		-	-	-
	Herring gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Ruddy duck		X	X	X							X	X		-	-	-
80	American bittern		X	X	X							X			-	-	-
	American coot		X	X	X	X						X	X	X	-	-	-
	Canada goose		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Caspian tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Gadwall		X	X	X	X						X	X	X	-	-	-
	Greater yellowlegs		X	X	X	X						X	X	X	-	-	-
	Green-backed heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least bittern			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	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Reddish egret	P		X	X	X	X	X	X						-	-	-
	Snow goose		X	X	X							X	X		-	-	-
	Spotted sandpiper		X	X	X	X				X	X	X	X	X	-	-	-
	Virginia rail		X	X	X							X	X		-	-	-
	White ibis				X	X	X	X							-	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Blue-winged teal			X	X				X						-	-	-
	Cattle egret			X	X	X	X	X	X	X	X				MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X							MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
74	Atlantic croaker		2	4	4	4	4	4	3	3	3	2	2	2	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		3	3	3	4	4	4	4	3	3	4	4	3	FEB-SEP	FEB-OCT	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	2	3	3	3	2	2	2	2	2	-	DEC-APR	-	JAN-DEC	-
	Bighead searobin		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blackcheek tonguefish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bluegill		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Crevalle jack						2	2	2	2	2	2	2	2	-	-	-	-	JUN-NOV
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish					1	2	2	2	2	2				-	-	-	-	MAY-OCT
	Gray snapper									1	1	1	1	1	-	-	-	-	AUG-DEC
	Gulf killifish		2	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Gulf menhaden		2	2	2	3	3	3	3	2	2	2	2	2	-	SEP-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		3	3	3	3	3	3	3	3	3	3	3	3	MAY-AUG	MAY-AUG	MAY-SEP	JAN-DEC	JAN-DEC
	Inshore lizardfish		1	1	1	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Largemouth bass					1	1	1	1	1	1	1	1		-	-	-	-	APR-NOV
	Least puffer		1	1	1	2	2	2	2	1	1	2	2	1	-	-	-	-	JAN-DEC
	Longnose gar		1	1		1	2			2	2	1			-	-	-	-	MAY-MAY AUG-SEP
	Pinfish		2	2	2	3	3	3	3	3	3	3	2	2	-	-	DEC-APR	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	SEP-NOV	SEP-NOV	SEP-NOV	JAN-DEC	JAN-DEC
	Redear sunfish		1					1				1	1		-	-	-	-	JUL-JUL NOV-JAN
	Sand seatrout		2	2	2	2	2	2	2	2	2	2	2	2	MAR-AUG	MAR-OCT	MAR-OCT	JAN-DEC	JAN-DEC
	Silver perch			2	2	2	2	2	2	2	2	2	2	2	-	APR-JUL	APR-AUG	APR-JUL	FEB-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra		2	1	1	1	1	3	3	3	3	3	3	3	-	-	-	-	JAN-DEC
	Spotted seatrout		2	2	2	2	2	2	2	2	2	2	2	2	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	NOV-MAR	JAN-DEC	MAY-DEC
	Threadfin shad		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	White mullet			1			1		1	1		1			-	-	-	-	MAR-MAR JUN-JUN
84	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Longnose killifish			1				1							-	-	-	-	FEB-FEB JUL-JUL
	Marsh killifish		1	1	1	1			1	1			1		-	-	-	-	JUL-AUG DEC-APR
	Rainwater killifish		1	1	1	1	1	1					1	1	-	-	-	-	NOV-JUN
	Rough silverside						2	2	1				1	1	-	-	-	-	JUN-AUG
	Sailfin molly		2	2	1	1	1	1	1	1	1	1	1	2	-	-	-	-	SEP-JUL
	Sheepshead minnow		2	2	2	2	2	2	2	2	2	2	2	2	APR-OCT	APR-OCT	APR-NOV	JAN-DEC	JAN-DEC
85	Atlantic bumper					1	1	2	2	1	1				-	-	-	-	MAY-OCT
	Atlantic spadefish					1	1	1	1	1					-	-	-	-	JUN-OCT
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish			2	2	2	2	2	2	2	2	2	2	2	-	-	-	MAR-OCT	MAR-DEC
	Florida pompano						2	2	2	2					-	-	-	-	JUN-SEP
	Gulf butterfish		2	2	2	2	2	2	2	1	1	2	2	2	-	-	-	-	JAN-DEC
	Gulf flounder			2	2	2	2	2	2	2	2	2			-	-	-	-	FEB-OCT
	Harvestfish					2	2	2	2	2	2				-	-	-	-	MAY-OCT
	Ladyfish		1	1	1	1	1					1	1		-	-	-	-	FEB-JUN NOV-DEC
	Lane snapper								1	1	1				-	-	-	-	JUL-SEP
	Sheepshead		2	2	3	3	3	2	2	2	2	2	2	2	-	-	MAR-JUL	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.

Alabama: 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
85	Southern hake		1	2	2	2	1							1	-	-	-	-	DEC-MAY
	Spotted hake		1	1	1	1								1	-	-	-	-	DEC-APR

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
74	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		3	3	3	3	3	3	3	3	3	3	3	3	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		1	1	3	3	4	4	4	4	4	4	4	2	-	-	FEB-NOV	JAN-NOV	JUL-SEP
	Flatclaw hermit		2	2	2	2				2	2	2	2	2	-	-	-	-	AUG-APR
	Pink shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	JAN-DEC
	White shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	JAN-JUN
84	Five-slotted sand dollar		1	1	2	2	2	2	2	1	1				-	-	-	-	JAN-SEP
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Lined sea star		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
85	Mantis shrimp			2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW				X	X	X	X	X	X	X	X		-	-	-	-

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Alabama: 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
46	Bald eagle	P T	X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAY	-	-
72	Osprey	P HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
76	American coot		X	X	X	X						X	X	X	-	-	-
	Brown pelican		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Bufflehead		X	X	X								X	X	-	-	-
	Canvasback		X	X	X								X	X	-	-	-
	Double-crested cormorant		X	X	X					X	X	X	X		-	-	-
	Forster's tern		X	X	X	X						X	X		-	-	-
	Greater scaup		X	X	X							X	X		-	-	-
	Hooded merganser		X	X	X	X						X	X	X	-	-	-
	Horned grebe		X	X	X	X						X	X	X	-	-	-
	Laughing gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Lesser scaup		X	X	X							X	X		-	-	-
	Red-breasted merganser		X	X	X							X	X	X	-	-	-
	Redhead		X	X	X							X	X		-	-	-
	Ring-billed gull		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Royal tern		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
81	American bittern		X	X	X								X		-	-	-
	Common moorhen		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Greater yellowlegs		X	X	X	X						X	X	X	-	-	-
	King rail		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Least bittern			X	X	X	X	X	X	X	X	X	X		-	-	-
	Mottled duck		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
	Osprey	P	X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	-	-
	Reddish egret	P		X	X	X	X	X							-	-	-
	Virginia rail		X	X	X							X	X		-	-	-
	Wading birds	HIGH	x	x	x	x	x	x	x	x	x	x	x	x	-	-	-
	White ibis			X	X	X									-	-	-
	Wood duck		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Wood stork	P E		X	X	X	X	X	X						-	-	-
107	Black-crowned night-heron			X	X	X	X	X	X	X	X				APR-JUN	-	-
	Blue-winged teal		X	X					X						-	-	-
	Cattle egret			X	X	X	X	X	X	X	X				MAY-JUN	-	-
	Clapper rail		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Great blue heron		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Green-winged teal		X	X	X							X	X	X	-	-	-
	Killdeer		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Purple gallinule			X	X	X	X	X							MAY-JUL	-	-
	Snowy egret		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	-
	Tricolored heron		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	-
	Willet		X	X	X	X	X	X	X	X	X	X	X	X	MAY-AUG	-	-
	Yellow-crowned night-heron		X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
74	Atlantic croaker		2	4	4	4	4	4	3	3	3	2	2	2	-	-	AUG-APR	JAN-DEC	MAY-DEC
	Atlantic stingray		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bay anchovy		3	3	3	4	4	4	4	3	3	4	4	3	FEB-SEP	FEB-OCT	FEB-DEC	JAN-DEC	JAN-DEC
	Bay whiff		2	2	2	2	3	3	3	2	2	2	2	2	-	DEC-APR	-	JAN-DEC	-
	Bighead searobin		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blackcheek tonguefish		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Bluegill		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Crevalle jack							2	2	2	2	2	2	2	-	-	-	-	JUN-NOV
	Darter goby		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Fringed flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Gafftopsail catfish						1	2	2	2	2	2			-	-	-	-	MAY-OCT
	Gray snapper									1	1	1	1	1	-	-	-	-	AUG-DEC
	Gulf killifish		2	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	Gulf menhaden		2	2	2	3	3	3	3	2	2	2	2	2	-	SEP-MAR	OCT-MAY	JAN-DEC	JAN-DEC
	Gulf sturgeon	P T	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Hardhead catfish		3	3	3	3	3	3	3	3	3	3	3	3	MAY-AUG	MAY-AUG	MAY-SEP	JAN-DEC	JAN-DEC
	Inshore lizardfish		1	1	1	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Largemouth bass					1	1	1	1	1	1	1	1		-	-	-	-	APR-NOV
	Least puffer		1	1	1	2	2	2	2	1	1	2	2	1	-	-	-	-	JAN-DEC
	Longnose gar		1	1		1	2			2	2	1			-	-	-	-	MAY-MAY AUG-SEP
	Pinfish		2	2	2	3	3	3	3	3	3	3	2	2	-	-	DEC-APR	JAN-DEC	JAN-DEC
	Red drum		2	2	2	2	2	2	2	2	2	2	2	2	SEP-NOV	SEP-NOV	SEP-NOV	JAN-DEC	JAN-DEC
	Redear sunfish		1						1				1	1	-	-	-	-	JUL-JUL NOV-JAN
	Sand seatrout		2	2	2	2	2	2	2	2	2	2	2	2	MAR-AUG	MAR-OCT	MAR-OCT	JAN-DEC	JAN-DEC
	Silver perch			2	2	2	2	2	2	2	2	2	2	2	-	APR-JUL	APR-AUG	APR-JUL	FEB-DEC
	Southern flounder		2	2	2	2	2	2	2	2	2	2	2	2	-	-	NOV-MAR	JAN-DEC	JAN-DEC
	Spotfin mojarra		2	1	1	1	1	3	3	3	3	3	3	3	-	-	-	-	JAN-DEC
	Spotted seatrout		2	2	2	2	2	2	2	2	2	2	2	2	APR-SEP	APR-SEP	APR-OCT	JAN-DEC	JAN-DEC
	Striped anchovy		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Striped mullet		3	3	3	3	3	3	3	3	3	3	3	3	-	-	NOV-MAR	JAN-DEC	MAY-DEC
	Threadfin shad		1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	JAN-DEC
	White mullet			1			1		1	1	1	1	1		-	-	-	-	MAR-MAR JUN-JUN
84	Inland silverside		3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-OCT	JAN-DEC	JAN-DEC
	Longnose killifish		1					1							-	-	-	-	FEB-FEB JUL-JUL
	Marsh killifish		1	1	1	1			1	1				1	-	-	-	-	JUL-AUG DEC-APR
	Rainwater killifish		1	1	1	1	1	1					1	1	-	-	-	-	NOV-JUN
	Rough silverside						2	2	1						-	-	-	-	JUN-AUG
	Sailfin molly		2	2	1	1	1	1	1	1	1	1	1	2	-	-	-	-	SEP-JUL
	Sheepshead minnow		2	2	2	2	2	2	2	2	2	2	2	2	APR-OCT	APR-OCT	APR-NOV	JAN-DEC	JAN-DEC
85	Atlantic bumper				1	1	2	2	1	1					-	-	-	-	MAY-OCT
	Atlantic spadefish					1	1	1	1	1					-	-	-	-	JUN-OCT
	Black drum		2	2	2	2	2	2	2	2	2	2	2	2	-	-	FEB-APR	JAN-DEC	JAN-DEC
	Bluefish			2	2	2	2	2	2	2	2	2	2	2	-	-	-	MAR-OCT	MAR-DEC
	Florida pompano					2	2	2	2						-	-	-	-	JUN-SEP
	Gulf butterflyfish		2	2	2	2	2	2	2	1	1	2	2	2	-	-	-	-	JAN-DEC
	Gulf flounder		2	2	2	2	2	2	2	2	2				-	-	-	-	FEB-OCT
	Harvestfish					2	2	2	2	2	2				-	-	-	-	MAY-OCT
	Ladyfish		1	1	1	1	1						1	1	-	-	-	-	FEB-JUN NOV-DEC
	Lane snapper								1	1	1				-	-	-	-	JUL-SEP
	Sheepshead		2	2	3	3	3	2	2	2	2	2	2	2	-	-	MAR-JUL	JAN-DEC	JAN-DEC
	Southern hake		1	2	2	2	1							1	-	-	-	-	DEC-MAY
	Spotted hake		1	1	1	1								1	-	-	-	-	DEC-APR

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.

Alabama: ESIMAP 28 (cont.)

BIOLOGICAL RESOURCES: (cont.)

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
200	Panhandle lily		X	X	X	X	X	X	X	X	X	X	X	X
206	Naked-stemmed panic grass		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
74	Atlantic brief squid		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Blue crab		3	3	3	3	3	3	3	3	3	3	3	3	MAR-NOV	MAR-NOV	JAN-DEC	JAN-DEC	JAN-DEC
	Brown shrimp		1	1	3	3	4	4	4	4	4	4	2		-	-	FEB-NOV	JAN-NOV	JUL-SEP
	Flatclaw hermit		2	2	2	2				2	2	2	2	2	-	-	-	-	AUG-APR
	Pink shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	JAN-DEC
	White shrimp		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	JAN-JUN
84	Five-slotted sand dollar		1	1	2	2	2	2	2	1	1				-	-	-	-	JAN-SEP
	Grass shrimp		3	3	3	3	3	3	3	3	3	3	3	2	-	-	-	JAN-DEC	JAN-DEC
	Lined sea star		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
	Thinstripe hermit		2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	JAN-DEC
85	Mantis shrimp			2	2	2	2	2	2	2	2	2	2		-	-	-	-	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
1	Bottlenose dolphin		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	MAR-SEP	-	-
	West Indian manatee	E VERY LOW				X	X	X	X	X	X	X	X		-	-	-	-

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Contact	Phone
24	LILLIAN SWAMP FOREVER WILD S. ADDITION	CARL FERRARO; ADCNR-SLD	251/929-0900

MARINA:

HUN#	Name	Contact	Phone
52	KIT'S MARINA		