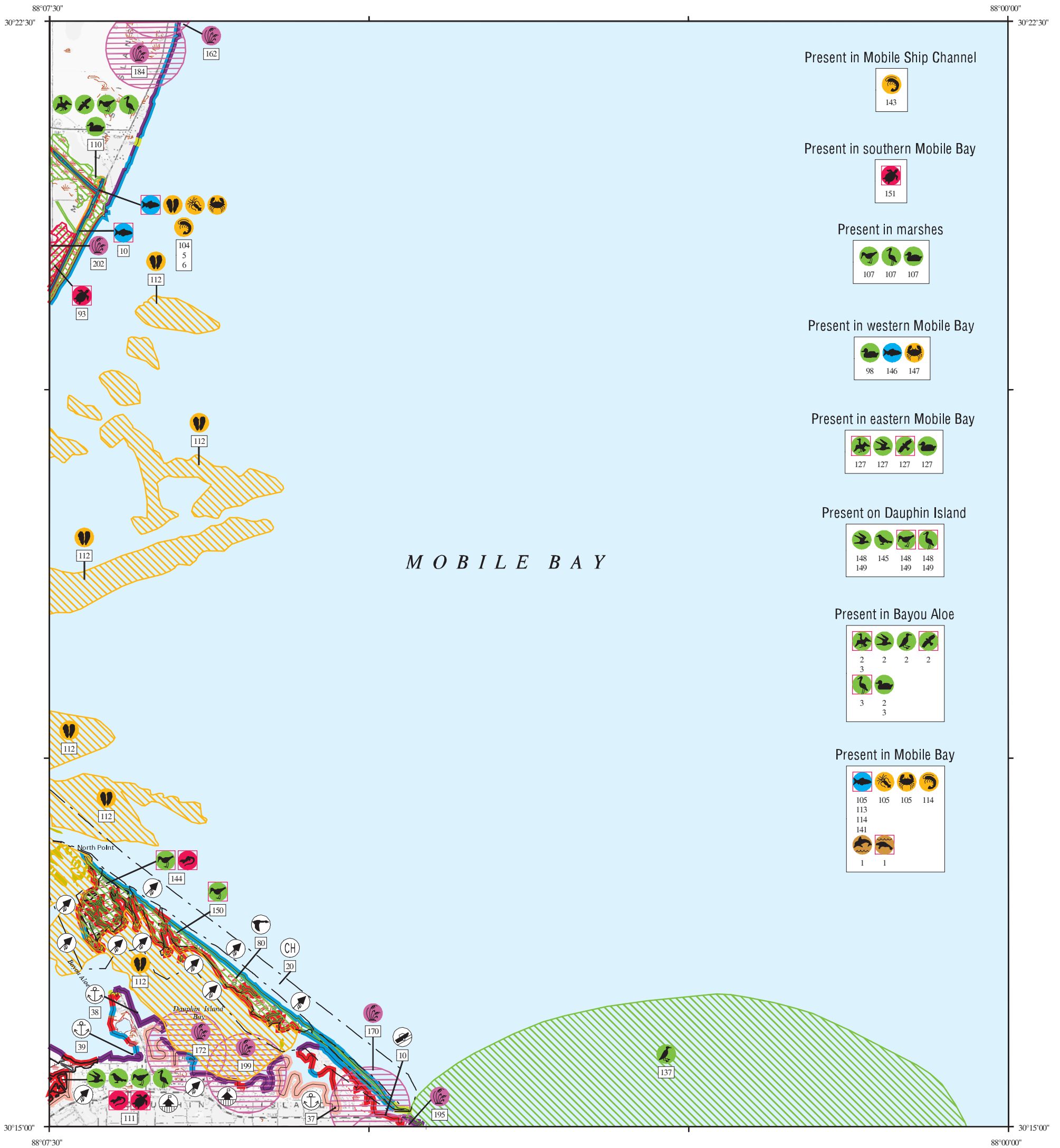


# ENVIRONMENTAL SENSITIVITY INDEX MAP



Present in Mobile Ship Channel



Present in southern Mobile Bay



Present in marshes



Present in western Mobile Bay



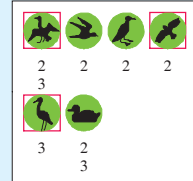
Present in eastern Mobile Bay



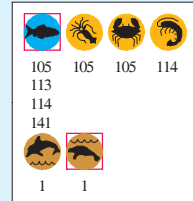
Present on Dauphin Island



Present in Bayou Alee



Present in Mobile Bay



## SHORELINE HABITATS (ESI)

- 1B EXPOSED, SOLID MAN-MADE STRUCTURES
- 2A EXPOSED WAVE-CUT PLATFORMS IN MUD OR CLAY
- 2B EXPOSED SCARPS AND STEEP SLOPES IN CLAY
- 3A FINE-TO MEDIUM-GRAINED SAND BEACHES
- 3B SCARPS AND STEEP SLOPES IN SAND
- 4 COARSE-GRAINED SAND BEACHES
- 5 MIXED SAND AND GRAVEL BEACHES
- 6B RIPRAP
- 7 EXPOSED TIDAL FLATS
- 8A SHELTERED SCARPS IN MUD OR CLAY
- 8B SHELTERED, SOLID MAN-MADE STRUCTURES
- 8C SHELTERED RIPRAP
- 9A SHELTERED TIDAL FLATS
- 9B SHELTERED, VEGETATED LOW BANKS
- 10A SALT-AND BRACKISH-WATER MARSHES
- 10B FRESHWATER MARSHES
- 10C SWAMPS
- 10D SCRUB-SHRUB WETLANDS

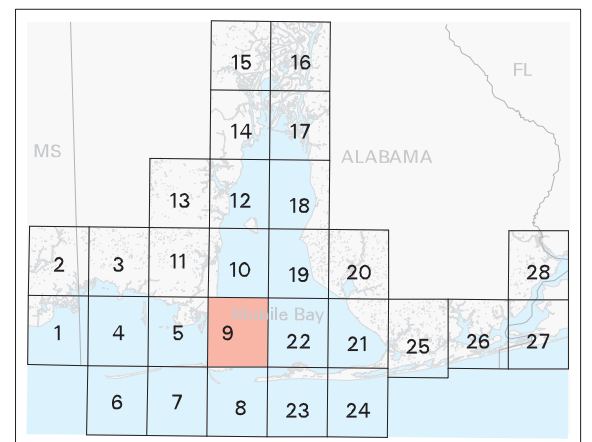


SCALE 1:50000



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National Ocean Service  
Office of Response and Restoration  
Emergency Response Division



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       | -         | -       | - |   |
|      | 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       | -         | -       | - |   |
|      | 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 | X       | -         | -       | - |   |
|      | Greater scaup                 |           | X | X    | X |   |   |   |   |   |   |   | X | X | -       | -         | -       |   |   |
|      | Hooded merganser              |           | 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 | 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 | -         | -       |   |   |
| 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 | 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       | -         | -       | - |   |
|      | 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         | -       | - | - |
|      | 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 |   |   |   |   |   |   |   | -       | -         | -       |   |   |
|      | 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         | -       | - | - |
|      | 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 | -       | -         | -       |   |   |
|      | 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       | -         | -       | - |   |
|      | 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         | 1 | PAIR |   |   |   |   |   |   |   |   | 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       | -         | -       | - |   |
|      | Black-bellied plover          |           | X | X    | X | X |   |   |   |   |   |   | X | X | X       | -         | -       | - |   |
|      | Dowitchers                    |           | 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 | X | X | X | X | X | X | -       | -         | -       |   |   |
|      | Least tern                    |           | X | X    | X |   |   |   |   |   |   |   | X | X | X       | X         | -       | - | - |
|      | Lesser yellowlegs             |           | 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 |   |   |   |   |   |   | -       | -         | -       |   |   |
|      | Sanderling                    |           | X | X    | X | X |   |   |   |   |   |   | X | X | X       | X         | -       | - | - |
|      | Semipalmated plover           |           | 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 | 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 | X | - | -       | -         |         |
| 150  | Piping plover      | P T HIGH  | 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 | -        | -       | -       | -         | -       |
|      | 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 | -        | -       | -       | -         | -       |
|      | 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 | -        | -       | -       | -         | -       |
|      | Fringed flounder    |           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | -        | -       | -       | -         | -       |
|      | Gafftopsail catfish |           |   |   |   |   | 1 | 2 | 2 | 2 | 1 |   |   |   | -        | -       | -       | -         | -       |
|      | Gray snapper        |           |   |   |   |   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | -        | -       | -       | -         | -       |
|      | Gulf killifish      |           | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 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 | -        | -       | -       | -         | -       |
|      | 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 | -        | -       | -       | -         | -       |
|      | Pigfish             |           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 |   |   | -        | -       | -       | -         | -       |
|      | 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 |   | -        | -       | -       | -         | -       |
|      | 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 |   |   |   | -        | -       | -       | -         | -       |
|      | 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 |   | -        | -       | -       | -         | -       |
|      | Striped anchovy     |           |   |   |   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   | -        | -       | -       | -         | -       |
|      | 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 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |   | -        | -       | -       | -         | -       |
|      | White mullet        |           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   | -        | -       | -       | -         | -       |
| 6    | Inland silverside   |           | 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 |   | JUN-JUL  | -       | -       | -         | -       |
|      | Marsh killifish     |           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   | -        | -       | -       | -         | -       |
|      | Northern kingfish   |           |   | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |   | -        | -       | -       | -         | -       |
|      | Rough silverside    |           | 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 |   | JAN-DEC  | JAN-DEC | JAN-DEC | JAN-DEC   | JAN-DEC |
| 10   | Gulf sturgeon       | P T       | X | X | X | X | X | X | X | X | X | X | X |   | -        | -       | -       | -         | -       |
| 104  | Alabama shad        |           | 1 |   |   |   |   |   |   |   |   |   |   |   | -        | -       | -       | -         | -       |
|      | Gizzard shad        |           | 1 |   |   |   |   |   | 1 |   |   |   |   |   | -        | -       | -       | -         | -       |
|      | Lane snapper        |           |   |   |   |   |   | 1 |   | 1 | 1 |   |   |   | -        | -       | -       | -         | -       |
|      | Paddlefish          | P         | 1 |   |   |   |   |   |   |   |   |   |   |   | -        | -       | -       | -         | -       |
|      | Saltmarsh topminnow |           |   |   |   | 1 |   |   |   |   |   |   |   |   | -        | -       | -       | -         | -       |
|      | Skipjack herring    |           |   |   |   |   |   |   |   | 1 |   |   |   |   | -        | -       | -       | -         | -       |
| 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 | 1 |   |   |   | 1 | 1 |   |   | -        | -       | -       | -         | -       |
|      | 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 | -        | -       | -       | -         | -       |
|      | Gafftopsail catfish |           |   |   |   | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 |   | -        | -       | -       | -         | -       |
|      | 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 | 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 |   | -        | -       | -       | -         | -       |
|      | Hardhead catfish    |           | 2 | 2 | 2 | 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 | 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 |   |   |   |   | 1 | 1 |   |   | -        | -       | -       | -         | -       |
|      | 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 | -        | -       | -       | -         | -       |
|      | 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 | -        | -       | -       | -         | -       |
|      | White mullet        |           | 1 |   |   | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |   | -        | -       | -       | -         | -       |
| 113  | Least puffer        |           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | -        | -       | -       | -         | -       |
|      | 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 |   | -        | -       | -       | -         | -       |
|      | Southern kingfish   |           | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | -        | -       | -       | -         | -       |
|      | Star drum           |           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | -        | -       | -       | -         | -       |
| 114  | Pigfish             |           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 |   |   | -        | -       | -       | -         | -       |
|      | Spotted hake        |           | 2 | 2 | 2 | 1 |   |   |   |   |   | 1 |   |   | -        | -       | -       | -         | -       |
|      |                     |           |   |   |   |   |   |   |   |   |   |   |   |   | -        | -       | -       | -         | -       |
| 141  | Atlantic spadefish  |           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | -        | -       | -       | -         | -       |
|      | Gulf butterfish     |           | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | -        | -       | -       | -         | -       |
|      | Harvestfish         |           | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | -        | -       | -       | JAN-DEC   | -       |
|      | Ladyfish            |           |   | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 |   |   |   | -        | -       | -       | -         | -       |
|      | Scaled sardine      |           |   |   |   | 2 | 2 | 2 |   |   |   |   |   |   |          |         |         |           |         |

**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 | - | -       | -       | -       |         |

**REPTILE:**

| RAR# | Species                          | S F Conc. | J | F | M | A | M | J | J | A | S | O | N | D | Nesting | Hatching | Interesting | 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.