DEPARTMENT OF THE ARMY PERMIT STATE PROGRAMMATIC GENERAL PERMIT (SPGP V) STATE OF FLORIDA

Permittee: Recipient of a verification of a State of Florida Exemption, General permit, or issuance of an Individual State Permit from the Florida Department of Environmental Protection (FDEP), a water management district (Designee), or a local government with delegated authority under section 373.441, F.S. (Designee).

Effective Date: July 26, 2016
Expiration Date: July 26, 2021

Issuing Office: U.S. Army Corps of Engineers District, Jacksonville

NOTE: The term "you" and its derivatives, as used in this permit, means the Permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the U.S. Army Corps of Engineers (Corps) having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

NOTE: The term “Applicant”, as used in this permit, means a person or authorized agent submitting an application for verification of a State of Florida Exemption, General Permit, or issuance of an Individual State Permit from the FDEP, a water management district (Designee), or a local government with delegated authority under section 373.441, F.S. (Designee).

After you receive written verification for your project under this State Programmatic General Permit (SPGP V), you are authorized to perform work in accordance with the terms and conditions specified below.

Coordination Agreements between the Corps and the FDEP and Designees outline the steps each agency will take during the processing of an application under the SPGP V. For the prior State Programmatic General Permit (SPGP IV-R1), agreements were in place with FDEP, the St. Johns River Water Management District, Hillsborough County,

and the Southwest Florida Water Management District. These and possibly additional agencies will implement SPGP V upon execution of updated agreements.

Work Authorized: The following five categories of activities.

a. Shoreline Stabilization. This category includes riprap, seawalls, and other shoreline stabilization. Except where additional restrictions are noted, this category of activity is defined as set forth in the State of Florida Exemptions and General Permits cited below, or equivalent as adopted by reference in Chapter 62-330, Florida Administrative Code (F.A.C.).

Groins, jetties, breakwaters, and beach nourishments/re-nourishments are not authorized by this SPGP.

62-330.051(12)(a), F.A.C.; 403.813(1)(i), F.S.	Synopsis: Construction of seawalls or riprap, including only that backfilling needed to level the land behind seawalls or riprap, in artificially created waterways.
62-330.051(12)(b), F.A.C.; 403.813(1)(e), F.S	Synopsis: Restoration of seawall or riprap at its previous location or upland of or within 18 inches waterward of its previous location.
62-330.051(12)(c), F.A.C.; 403.813(1)(o), F.S.	Synopsis: Construction of private vertical seawalls in wetlands or other surface waters, other than in an estuary or lagoon, and the construction of riprap revetments, and is no more than 150 feet in length. Additional restrictions: Not authorized by this SPGP V in an estuary or lagoon.
62-330.431, F.A.C.; 62-330.051(12)(d), F.A.C.	Synopsis: Installation of riprap; installation of batter or king piles used exclusively to stabilize and repair seawalls and that do not impede navigation.
62-330.051(12)(e), F.A.C.	*Synopsis. Living Shorelines*. Restoration of an eroding shoreline with native wetland vegetative enhancement plantings. Additional Restriction: Not authorized by this SPGP V if the work extends water ward past the adjacent shorelines (this provision is to preclude changes in down drift currents).

b. Boat Ramps and Boat Launch Areas and Structures Associated with Such Ramps or Launch Areas. This category of activity is defined as set forth in the State of Florida Exemptions and General Permits cited below, or equivalent as adopted by reference in Chapter 62-330, F.A.C.

62-330.051(5)(e), F.A.C.; 403.813(1)(c), F. S.	Synopsis: Installation and maintenance to design specifications of boat ramps on artificial bodies of water or public boat ramps on any waters.

c. Docks, Piers, Associated Facilities, and other Minor Piling-Supported Structures. This category of activity is defined as set forth in the State of Florida Exemptions and General Permits cited below, or equivalent as adopted by reference in Chapter 62-330, F.A.C.

Municipal or commercial fishing piers are not authorized by this SPGP V.

62-330.051(5)(a), F.A.C.; 403.813(1)(b), F. S.	Synopsis: Installation, replacement or repair of mooring pilings and dolphins associated with private docks.
62-330.051(5)(b), F.A.C.; 403.813(1)(b), F. S.	Synopsis: Installation of private docks of 500/1000 square feet or less of surface area over wetlands or other surface waters.
62-330.051(5)(c), F.A.C.; 403.813(1)(i), F. S.	Synopsis: Construction of private docks in artificially created waterways.
62-330.051(5)(d), F.A.C.; 403.813(1)(d), F.S.	Synopsis: Replacement or repair of existing docks and mooring piles.
62-330.051(8), F.A.C.; 403.813(1)(k), F.S.	Synopsis: Installation of aids to navigation and buoys associated with such aids.
62-330.427, F.A.C.	Synopsis: Construction, extension, and removal of certain piers and associated structures.
62-330.475(1)(a), F.A.C.	Synopsis: Piling supported structures, less than 1,000 square feet, not in Outstanding Florida Waters.
62-330.475(1)(b), F.A.C.	Synopsis: Piling supported structures, less than 500 square feet, in Outstanding Florida Waters.
62-330.051(5)(f), F.A.C.; 403.813(1)(s), F.S.	Synopsis: Construction, installation, operation or maintenance of floating vessel platforms and boat lifts.

d. Maintenance Dredging of Canals and Channels. This category includes return water. This category also includes removal of organic detrital material from freshwater lakes and rivers. Except where an additional restriction is noted, this category of activity is defined as set forth in the State of Florida Exemptions and General Permits cited below, or equivalent as adopted by reference in Chapter 62-330, F.A.C.

62-330.051(7)(a), F.A.C.; 403.813(1)(f), F.S.	Synopsis: Maintenance dredging of existing manmade canals, channels, basins, berths, and intake and discharge structures.
62-330.051(3)(b), F.A.C.; 403.813(1)(r), F.S.	Synopsis: Removal of aquatic plants, tussocks, and organic detrital material Additional Restriction: Authorization by this SPGP V limited to Freshwater lakes only.
62-330.051(3)(b), F.A.C.; 403.813(1)(u), F.S.	Synopsis: Removal of organic detrital material by individual residential property owners (Freshwater rivers and lakes only).
62-330.475(1)(d), F.A.C.	Synopsis: Maintenance dredging of 50 cubic yards or less, spoil in uplands.

e. Transient Activities. Except where additional restrictions are noted below, this category of activity is defined as set forth by the State of Florida Exemptions and General Permits cited below, or equivalent as adopted by reference in Chapter 62-330, F.A.C.

62-330.051(5)(g), F.A.C.	Synopsis: The removal of derelict vessels.
62-330.051(11)(b), F.A.C.	Synopsis: Construction, operation, maintenance, and removal of scientific sampling, measurement, and monitoring devices.
62-330.453, F.A.C.; 62-330. 457, F.A.C.	Synopsis: Installation, Maintenance, Repair, and Removal of Utility Lines and Subaqueous Utility Crossings. Additional restrictions: Authorization under SPGP V is limited to upland to upland directional drilling (HDD). Crossing a federal project is not authorized by this SPGP V (including federally authorized channels of the Intracoastal Waterways, inlets, ports and turning basins; and including levees, dikes, dams or other water retaining structures. HDD crossing of a flood control channel/canal in a Federal project (either federally or locally maintained) may be authorized if meets Special Condition 18.
62-330.407, F.A.C.	Synopsis: Geotechnical investigations. Additional Restrictions: Seismic exploratory activities and any activities on tribal lands or waters are not authorized by this SPGP V.

A. Special Conditions Related to Procedure and Identification which Projects are or are not authorized by this SPGP.

1. Permit applications for proposed Projects will be submitted to the appropriate FDEP or Designee office. Instead of immediately forwarding a copy of the application to the Corps, the FDEP or Designee will review the Project. If the type of work is covered under the SPGP V, the following categories will be used as guidance on the actions to take:

a. Green: Projects identified as "Green" will be processed by the FDEP or Designee. A copy of the application will not be forwarded to the Corps for review. Verification of the State Exemption, General Permit, or issuance of an Individual State Permit will include language confirming Federal Authorization under the SPGP V.

b. Yellow: Projects identified as “Yellow” will be forwarded to the Corps. The Corps will reply whether to treat that Project as “Red”, as “Green” or as “Green” with addition of additional (specified) special conditions.

c. Red: FDEP or Designee and the Corps will review the Project separately. FDEP or Designee will forward a copy of the Permit Application to the Corps and will notify the Applicant that the Project is not authorized under the SPGP V.

2. Special Conditions Identifying Projects that are “Red”. The following projects are **not** authorized by this SPGP V.

a. A “Yellow” Project moved to the “Red” category by the Corps.

b. (For all projects except *Transient Activities,* which would be “Yellow”, see Special Condition 3.g.). Projects anywhere between the shoreline and federally authorized channel, turning basin, etc. of a port or inlet. Projects within 150 feet of the near design edge of a federal channel (except the Intracoastal Waterway) including the design edge of a widener (where the width of the channel is widened, for example, when the channel changes direction). Projects on the Intracoastal Waterway (either the Atlantic or Gulf coasts) where the width of the shoreline would result in structures or other work being located within 100 feet of the near design edge of the channel. Projects within federal channels. Projects crossing levees, dikes, dams or other water retaining structures of a federally authorized project. Projects crossing a flood control channel/canal in a federally authorized project (either federally or locally maintained)

c. A Project authorized under FDEP or Designee enforcement actions.

d. A Project authorized under FDEP or Designee emergency permitting.

e. A Project located within the geographic boundaries of: Monroe County (but boat lifts may be authorized under SPGP V in Monroe County); the Timucuan

Ecological and Historical Preserve (Duval County); the St. Mary's River, from its headwaters to its confluence with the Bells River; the Wekiva River from its confluence with the St. Johns River to Wekiwa Springs, Rock Springs Run from its headwaters at Rock Springs to the confluence with the Wekiwa Springs Run, Black Water Creek from the outflow from Lake Norris to the confluence with the Wekiva River; projects that impact mangroves in canals at Garfield Point including Queens Cove (St. Lucie County); the Loxahatchee River from Riverbend Park downstream to Jonathan Dickinson State Park; the St. Lucie Impoundment (Martin County); all areas regulated under the Lake Okeechobee and Okeechobee Waterway Shoreline Management Plan, located between St. Lucie Lock (Martin County) and W.P. Franklin Lock (Lee County); the Biscayne Bay National Park Protection Zone (Miami-Dade County); Harbor Isles (Pinellas County); the Faka Union Canal (Collier County); the Tampa Bypass Canal (Hillsborough County); canals in the Kings Bay/Crystal River/Homosassa/Salt River system (Citrus County); Lake Miccosukee (Jefferson County).

f. (For all projects except *Docks, Piers, Associated Facilities, and Other Minor Piling-Supported Structures* and *Transient activities*.) A Project located in

(1) the main channels or tributaries of the Chipola River, Apalachicola River, Ochlockonee River, Econfina Creek, Suwannee River, Santa Fe, New River (Bradford-Union County Line), Escambia River, Yellow River, or the Choctawhatchee River, or

(2) in designated critical habitat where the essential physical and biological features (or the terms essential features / primary constituent elements (PCEs) for older designations) are present for

(i) Smalltooth sawfish (Smalltooth sawfish critical habitat does not include areas containing existing (already constructed) federally authorized or permitted man-made structures such as channels or canals maintained at depths greater than 3 ft. at MLLW, boat ramps, docks, and marinas deeper than 3 ft. at MLLW)(note that PCEs are usually present at/near the shoreline), or

(ii) acroporid corals (Acropora spp. critical habitat does not include areas containing existing (already constructed) federally authorized or permitted man-made structures such as aids-to-navigation, artificial reefs, boat ramps, docks, pilings, maintained channels, or marinas), or

(iii) Gulf sturgeon (Gulf sturgeon critical habitat does not include existing developed sites such as dams, piers, marinas, bridges, boat ramps, exposed oil and gas pipelines, oil rigs, and similar structures or designated public swimming areas)(note that PCEs are usually present at/near the shoreline), or

(iv) American crocodile, or

(v) Piping plover, or

(vi) freshwater mussels, or

(vii) Johnsons seagrass, or

(viii) North Atlantic Right whale, or

(3) in the Florida panther focus area.

g. (For *Maintenance Dredging of Canals and Channels).* Special Condition 2.e., also applies to the spoil disposal area.

h. (For *Docks, Piers, Associated Facilities, and Other Minor Piling-Supported Structures* and *Transient activities*.) Project located:

(1) in designated critical habitat where the essential physical and biological features (or the terms essential features / primary constituent elements (PCEs) for older designations) are present for:

(i) acroporid corals (Acropora spp. critical habitat does not include areas containing existing (already constructed) federally authorized or permitted man-made structures such as aids-to-navigation, artificial reefs, boat ramps, docks, pilings, maintained channels, or marinas.), or

(ii) American crocodile, or

(iii) Piping plover, or

(iv) North Atlantic right whale, or

(2) in the Florida panther focus area.

i. Any Project located in the following exclusion locations:

(1) In areas identified as Smalltooth sawfish exclusion zones on the Caloosahatchee River (Lee County).

(2) At the mouths of Gulf sturgeon spawning rivers (Escambia River,

Blackwater/Yellow Rivers, Choctawhatchee River, Apalachicola River, and Suwannee River) and narrow inlets (Indian Pass and Government Cut in Apalachicola Bay and Destin Pass in Choctawhatchee Bay) where any portion of the project is within 1,400 feet of the opposite bank of the river or inlet.

(3) Physical structures (e.g., seawalls, docks, boat ramps) within the boundaries of nearshore reproductive habitat of loggerhead critical habitat (except for scientific survey devices).

(4) In the St. Mary's river between October 1 and December 31, to protect Atlantic sturgeon during spawning season.

j. When using the "*The Corps of Engineers, Jacksonville District, and the State of Florida Effect Determination Key for the Manatee in Florida*" April 2013 (Manatee Key), A Project that keys out to "may affect" or "may affect, no likely to adversely affect" but further consultation with the U.S. Fish and Wildlife Service is necessary.

k. A Project is proposed in Anastasia Island, Southeastern, Perdido Key, Choctawhatchee, or St. Andrews beach mouse habitat. For *Maintenance Dredging of Canals and Channels)***,** also applies to the spoil disposal area.

l. A Project is proposed on or contiguous to beaches on the Atlantic Ocean, Gulf of Mexico, or in the Florida Keys.

m. A Project is within 2,500 feet of an active wood stork nesting colony.

n. Project adversely impacts any other federally listed threatened or endangered species, or a species proposed for such designation, or its designated critical habitat unless covered under the Biological Opinion for SPGP IV-R1.

o. A Project which will adversely impact the following Essential Fish Habitats: Estuarine emergent vegetated wetlands (flooded saltmarshes, brackish marsh and tidal creeks), Estuarine scrub/shrub (mangrove fringe), Submerged rooted vascular plants (sea grasses), Oyster Reefs and Shell Banks, Tidal freshwater (palustrine) wetlands, Tidal palustrine forested, Tidal freshwater submerged aquatic vegetation, Coral and Live/Hard Bottom Habitats. Furthermore, Projects are excluded if located in a real estate parcel that is substantially submerged and largely covered by seagrass (unless owned by the U.S. Government or State of Florida).

p. (For *Maintenance Dredging of Canals and Channels*. A Project where excavated material is proposed to be used to create wildlife islands or is proposed for other types of in-water disposal.

q. (For *Maintenance Dredging of Canals and Channels)*. A Project where dredging will be performed by hopper dredge.

r. (For boatlifts in Monroe County). If construction of the lift involves new pilings.

3. Special Conditions Identifying Projects that are “Yellow”. These Projects are to be sent to the Corps for its reply as to whether the Project will be “Green” or “Red”.

a. A Project in Federal right-of-ways or easements.

b. A Project authorized by FDEP or Designee after-the-fact permits.

c. A Project currently under Federal enforcement action.

d. (For *Boat Launch Areas and Structures Associated with such Ramps or Launch Areas.) A Project which includes* dredging of access channels.

e. (For *Maintenance Dredging of Canals and Channels)*. A Project where the dredged and/or return water is subject to evaluation under criteria prescribed in the “Inland Testing Manual” (ITM).

f. (For *Maintenance Dredging of Canals and Channels)* and *Boat Ramps.) A Project* proposed by a governmental entity, including but not limited to, a County, City, Port Authority, or Navigation District.

g. (For *Transient Activities*). Projects anywhere between the shoreline and federally authorized channel, turning basin, etc. of a port or inlet. Projects within 150 feet of the near design edge of a federal channel (except the Intracoastal Waterway) including the design edge of a widener (where the width of the channel is widened, for example, when the channel changes direction). Projects on the Intracoastal Waterway (either the Atlantic or Gulf coasts) where the width of the shoreline would result in structures or other work being located within 100 feet of the near design edge of the channel. Projects within federal channels. Projects crossing levees, dikes, dams or other water retaining structures of a federally authorized project. Projects crossing a flood control channel/canal in a federally authorized project (either federally or locally maintained).

h. When using the “*The Corps of Engineers, Jacksonville District, and the State of Florida Effect Determination Key for the Manatee in Florida*” April 2013 (Manatee Key), for *Docks, Piers, Associated Facilities, and Other Minor Piling-Supported*

Structures and for *Boat Ramps and Boat Launch Areas and Structures Associated with such Ramps or Launch Areas*, if other than a residential facility, and the Project provides “new” access for watercraft and keys out to a “may affect, not likely to adversely affect.”

i. A Project on canals or channels where the structures extend to more than 25% of the canal/channel width, excluding dense areas of shoreline vegetation such as mangrove, as measured from the Project location to the opposite shoreline (in order to maintain no less than 50% of the open-water portion of the waterbody for public use).

j. (For boatlifts in Monroe County). A project located where the navigable channel is less than 40 feet wide at the end of the canal, or at the corner at the end of the canal, or where the boatlift will extend waterward of lifts or structures at adjacent properties or where there are no nearby neighboring boatlifts or structures and the boatlift extends more than 25% of the canal width (i.e., where this may affect navigation).

k. All applications for *Subaqueous Utility Lines* of the *Transient Activities* category so that the Corps may review the *Frac-out Contingency Plan* (Special Condition 15) and/or contact the Applicant to obtain same.

4. Special Conditions Identifying Projects that are “Green”. These projects are authorized by this SPGP V with the following characteristics.

a. (A Project for *Shoreline Stabilization.)* To prevent erosion or to stabilize a shoreline where erosion has taken place. Construction and/or repairs to groins, jetties, breakwaters that are perpendicular to shore, and beach nourishment/renourishment are not authorized.

b. (A Project for *Shoreline Stabilization.)*

(1) New vertical seawalls or other stabilization measures will not be placed waterward of the Mean High Water Line (MHWL) or Ordinary High Water Line (OHWL), unless necessary to align with existing adjacent seawalls, and not to exceed 150’ in length.

(2) Seawall and/or riprap restoration may be permitted at its previous location, upland of, or within 18 inches waterward of its previous location.

(3) New riprap will not be placed more than 10 feet waterward of the Mean High Water Line (MHWL) or Ordinary High Water Line (OHWL).

(4) Shoreline stabilization structures other than vertical seawalls shall be no steeper than a 2H:1V slope.

c. (A Project for *Boat Ramps and Boat Launch Areas and Structures Associated with such Ramps or Launch Areas.)*

(1) Private, single-family boat ramp or structure requiring 50 cubic yards of fill material or less.

(2) Ramp width does not exceed 40 feet (note: F.S. 403.813 limits to 30 feet).

(3) Maximum of 2 boat lanes including construction of new boat ramps and the repair and/or expansion of existing boat ramps.

(3) No more than 70 vehicle parking spaces associated with the boat ramp.

(4) Repair and replacement of existing boat ramps in the same footprint.

(5) Excavation limited to that necessary for site preparation.

d. (A Project for *Maintenance Dredging of Canals and Channels.* Dredging will be limited to the previous project depth, or to -5.0 feet below Mean Low Water (MLW) or Ordinary Low Water (OLW).

e. (A Project for *Maintenance Dredging of Canals and Channels).* Excavated spoil material shall be deposited in a suitable upland (i.e., non-wetland pursuant to current Federal criteria) disposal site which does not support, or is incapable of supporting, the Florida scrub-jay, eastern indigo snake, or beach mice.

f. When using the "*The Corps of Engineers, Jacksonville District, and the State of Florida Effect Determination Key for the Manatee in Florida*" April 2013 (Manatee Key),

(1) (A Project for *Docks, Piers, Associated Facilities, and Other Minor Piling-Supported Structures* and for *Boat Ramps and Boat Launch Areas and Structures Associated with such Ramps or Launch Areas*). *If* a residential Project which keys out to "no effect" or if the Project is for other than a residential facility and provides "new" access for watercraft which keys out to a "no effect" or a "may affect not likely to adversely affect"

(2) (For all other projects) A project keys out to “no effect” or “may affect not likely to adversely affect.”

B. Special Conditions Related To All Reviews and Authorizations. In addition to the conditions specified above, the following Special Conditions apply to all projects reviewed and/or authorized under the SPGP V.

1. The District Engineer reserves the right to require that any request for authorization under this SPGP V be evaluated as an Individual Permit. Conformance with the terms and conditions of the SPGP V does not automatically guarantee Federal authorization.

2. On a case-by-case basis the Corps may impose additional Special Conditions which are deemed necessary to minimize adverse environmental impacts.

3. Failure to comply with all conditions of the Federal authorizations under the SPGP V would constitute a violation of the Federal authorization.

4. No structure or work shall adversely affect or disturb properties listed in the National Register of Historic Places or those eligible for inclusion in the National Register. Prior to the start of work, the Applicant/Permittee or other party on the Applicant’s/Permittee’s behalf, shall conduct a search of known historical properties by contracting a professional archaeologist, and contacting the Florida Master Site File at 850-245-6440 or SiteFile@dos.state.fl.us. The Applicant/Permittee can also research sites in the National Register Information System (NRIS). Information can be found at http://www.cr.nps.gov/nr/research.

a. If, during the initial ground disturbing activities and construction work, there are archaeological/cultural materials unearthed (which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work in the vicinity and notify the Compliance and Review staff of the State Historic Preservation Office at 850-245-6333 and the Corps Regulatory Project Manager to assess the significance of the discovery and devise appropriate actions, including salvage operations. Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7.

b. In the unlikely event that human remains are identified, they will be treated in accordance with Section 872.05, Florida Statutes; all work in the vicinity shall immediately cease and the local law authority, the State Archaeologist (850-245-6444), and the Corps Regulatory Project Manager shall immediately be notified. Such activity

shall not resume unless specifically authorized by the State Archaeologist and the Corps.

5. No work shall be authorized under the SPGP V which proposes the use of prefabricated modules for habitat creation, restoration, or enhancement except as allowed in Special Condition 15 for *Living Shorelines* of the *Shoreline Stabilization category*.

6. The Design and construction of a Project must comply with the following.

a. Where aquatic vegetation is present, adverse impacts to aquatic vegetation from construction of piling-supported structures may be avoided/minimized by adherence to, or employing alternative construction techniques that provide a higher level of protection than, the protective criteria in the joint U.S. Army Corps of Engineers'/National Marine Fisheries Service's **"***Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat"* U.S. Army Corps of Engineers/National Marine Fisheries Service August 2001 (updated June 2008). Unless otherwise specifically approved by the National Marine Fisheries Service, where aquatic vegetation is present, piling-supported structures authorized under the SPGP V must comply with, or provide a higher level of protection than, the criteria contained in the referenced construction guidelines. Mangrove impacts are limited to the removal of mangroves along 4 linear feet of shoreline to accommodate a 4-ft-wide access walkway associated with a dock that meets the above guidelines.

b. Additionally, because of concerns about adverse impacts to the endangered Johnson's seagrass (*Halophila johnsonii*) in the lagoon and canal systems on Florida's east coast from Sebastian Inlet (Brevard County) south to and including central Biscayne Bay (Miami-Dade County), the following requirements must be met:

(1) Piling-supported structures must comply with, or provide a higher level of protection than, the criteria contained in the construction guidelines titled "*Key for Construction Conditions for Docks or Other Minor Structures Constructed in or Over Johnson's seagrass (Halophila johnsonii)"* National Marine Fisheries Service/U.S. Army Corps of Engineers - February 2002 (updated October 2002)*."*

(2) Removal of derelict vessels must comply with the practices of Special Condition 18.

(3) All other activities will have no effect on Johnson's seagrass, i.e., no seagrass is present.

c. The presence of seagrass will be determined utilizing the attached "*Submerged Aquatic Vegetation Survey Guidelines*".

7. For projects in waters accessible to sea turtles, Smalltooth sawfish, Gulf sturgeon, or Shortnose sturgeon, the Permittee will utilize the "*Sea Turtle and Smalltooth Sawfish Construction Conditions*" and the following additions:

a. Any collision(s) with and/or injuries to any whale, or sturgeon occurring during the construction of a project, shall be reported immediately to NMFS's Protected Resources Division (PRD) at (727-824-5312).

b. Reports to NMFS's Protected Resources Division (PRD) may be made by email to takereport.nmfsser@noaa.gov.

c. Sea turtle and marine mammal stranding/rescue organizations' contact information is available by region at http://www.nmfs.noaa.gov/pr/health/networks.htm.

d. Smalltooth sawfish encounters shall be reported to http://www.flmnh.ufl.edu/fish/sharks/sawfish/sawfishencounters.html.

e. All work must occur during daylight hours.

8. The Permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The Permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such "take" permits are required for a particular activity.

9. With limited exceptions, it is illegal to approach within 500 yards of a right whale by vessel, aircraft, or any other means (50 CFR 224.103 (c). Any vessel finding itself within 500 yards of a right whale must depart immediately at a safe, slow speed.

10. Turbidity control measures shall be used throughout construction to control erosion and siltation to ensure there are no violations of state or federal water quality standards. Turbidity control measures shall be: (1) for the smallest practicable area; (2) monitored daily to ensure listed species are not entangled or trapped in the project area; (3) shall be removed promptly upon project completion and the return of water quality conditions; (4) and shall not block entry to or exit from designated critical habitat. Siltation barriers shall be made of material in which listed species cannot become entangled (i.e., reinforced impermeable polycarbonate vinyl fabric [PVC]).

a. Turbidity curtains are not required where not practical in dynamic systems such as surf zones and could actually do more harm than good if the curtains become detached (e.g., they could entrap pelagic organisms and become entangled around benthic organisms, such as coral).

b. Turbidity barriers are not required if installation of single piling in deep water since is unlikely to adversely affect water quality.

11. In-water rope or chain must meet the following requirements: Industrial grade metal chains or heavy cables that do not readily loop and tangle; All in-water lines (rope and cable) must be thick and taut and cannot have excess line in the water; Lines can be enclosed in a plastic or rubber sleeve/tube to add rigidity.

12. No work shall occur where hard bottom or any hard or coral including ESA-listed coral species are present within the footprint of the project.

13. No work shall occur that results in removal of mangroves (including prop roots), except:

a. as provided by Special Condition 6.a.; or,

b. for removal of mangroves growing at the foot or from an existing seawall whose removal needed to repair the seawall.

14. No work shall occur that results in impacts to seagrass except as provided by Special Condition B.6.

15**.** (For *Docks, Piers, Associated Facilities, and Other Minor Piling-Supported Structures* and *Boat Ramps and Boat Launch Areas and Structures Associated with Such Ramps or Launch Areas.*)

a. Aids to Navigation and Private Aids to Navigation (e.g. attached to the structures authorized by the SPGP) must be approved by and installed in accordance with U.S. Coast Guard requirements.

b. Temporary structures associated with marine events will be removed and the site restored upon completion of the event.

c. (*For multi-family residential docks (e.g., condos, trailer parks, apartment complexes) designated for fishing or vessel storage, for temporary marine event pile-supported structures involving high speed vessel traffic or fishing, and for commercial or public boat ramps.*) Install educational signs as follows in a visible location to alert

boaters of listed species in the area susceptible to vessel strikes or hook-and-line captures. NMFS website (http://sero.nmfs.noaa.gov/protected_resources/section_7/protected_species_educational_signs/index.html) provides sign installation guidance and most current version of the signs.

(1) All commercial and public boat ramps shall install the Save Sea Turtle, Sawfish, and Dolphin sign.

(2) If the Project occurs within the range of Gulf, Atlantic, or Shortnose sturgeon, the Permittee will install and maintain the *Report Sturgeon* sign.

(3) If the Project occurs within 14 miles of North Atlantic Right Whale critical habitat, the Permittee will install and maintain the *Help Protect North Atlantic Right Whales* sign.

d. Project construction will take place from uplands or from floating equipment (e.g., barge); prop or wheel-washing is prohibited.

16. (For *Transient activities*.)

a. Temporary structures shall not block access of species to an area such as preventing movement in or out of a river or channel.

b. (*For scientific sampling, measurement, and monitoring devices*.) No later than 24 months from initial installation, or upon completion of data acquisition, whichever comes first, the measuring device and any other structure or fills associated with that device (e.g., anchors, buoys, lines) must be removed and the site must be restored to pre-construction elevations.

17. (For *Living Shorelines* of the *Shoreline Stabilization category.)*

a. Only native plant species will be planted.

b. Not more than 500 linear feet in length, not more than 35 ft waterward of the high tide line (note that FAC 62-330 limits to 10 feet of the mean high water line) or result in more than 0.5 ac area between the natural shoreline and the structure.

c. No discharge of earthen fill material, other than earthen material associated with vegetative planting, is not authorized.

d. Construction, maintenance and removal of approved permanent, shore-parallel wave attenuation structures are authorized. Approved permanent wave attenuation materials include oyster breakwaters (described above), clean limestone boulders, and prefabricated structures made of concrete and rebar that are designed in a manner that cannot trap sea turtles, Smalltooth sawfish, or sturgeon. Reef balls that are not open on the bottom, triangle structures with a top opening of at least 3 feet between structures, and reef discs stacked on a pile may be used.

e. (For oyster breakwaters).

(1) Reef materials shall be placed in a manner to ensure that materials (e.g., bagged oyster shell, oyster mats, loose cultch surrounded and contained by a stabilizing feature, reef balls, and reef cradles) will remain stable and prevent movement of materials to surrounding areas.

(2) Materials must be placed in designated locations (i.e., shall not be indiscriminately/randomly dumped) and shall not be placed outside of the total project limits.

18. (For *Subaqueous Utility Lines* of the *Transient Activities* category*.)*

a. A Frac-out Contingency Plan similar to the attached plan will be developed, submitted with the application and then followed.

b. All subaqueous transmission lines crossing over, under, or in flood control channels/canals in Federal projects (either federally or locally maintained) which are installed with horizontal direction drilling (HDD) shall ensure the top of the HDD boring is a minimum of 10 feet beneath the bottom of the channel plus a minimum 25 feet outside the channel edges and the estimated total drilling fluid pressure is less than 10 psi. Projects not in compliance with these criteria shall not be eligible for authorization under SPGP V.

c. The Permittee shall, upon completion of work, provide an as-built survey showing the horizontal and vertical location (X-Y-Z coordinates in NAD 83 and NAVD 88) of the object below the channel as it enters and exits the design edges of the authorized width of the channel, plus a minimum of 25 feet outside the channel edges.

19. (For R*emoval of Derelict Vessels* of the *Transient Activities* category*.)*

a. Removal of marine debris shall require visual confirmation (e.g., divers, swimmers, camera) that the item can be removed without causing further damage to aquatic resources.

b. If an item cannot be removed without causing harm to surrounding coral, the item will be disassembled as much as practicable so that it no longer can accidently harm or trap species.

c. Monofilament debris will be carefully cut loose from coral so as not to cause further harm. Under no circumstance will line be pulled through coral since this could cause breakage of coral.

d. Marine debris shall be lifted straight up and not be dragged through seagrass beds, coral, or hard bottom habitats. Debris shall be properly disposed of in appropriate facilities in accordance with applicable federal and state requirements.

20. For concrete piles installed by impact hammer:

a. The piles will be less than or equal to than 24 inches in diameter; and

b. Not more than 10 piles will be installed per day if in open water; or,

c. Not more than 5 piles will be installed per day in a *confined space*. A *confined space* is defined as any area that has a solid object (e.g., shoreline, seawall, jetty) or structure within 150 feet of the pile installation site that would effectively serve as a barrier or otherwise prevent animals from moving past it to exit the area. This does not include objects such as docks or other pile-supported structures that would not stop animal movement or significantly reflect noise.

21. Metal piles will NOT be installed by impact hammer.

22. Projects within the boundary of the NOAA Florida Keys National Marine Sanctuary require prior approval from the Sanctuary.

23. The Permittee shall use only clean fill material. The fill material shall be upland sources and be free of items such as trash, debris, automotive parts, asphalt, construction materials, concrete block with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act.

24. No blasting is authorized.

25. For Projects authorized under this SPGP V in navigable waters of the U.S., the Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized,

or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

26. The SPGP V will be valid for five (5) years from the date of issuance unless suspended or revoked by issuance of a public notice by the District Engineer. The Corps, in conjunction with the Federal resource agencies, will conduct periodic reviews to ensure that continuation of the permit during the five-year authorization period is not contrary to the public interest. If revocation occurs, all future applications for activities covered by the SPGP V will be evaluated by the Corps.

27. If the SPGP V expires or is revoked prior to completion of the authorized work, authorization of activities which have commenced or are under contract to commence in reliance upon the SPGP V will remain in effect provided the activity is completed within twelve (12) months of the date the SPGP V expired or was revoked.

28. The General Conditions attached hereto are made a part of this SPGP V and must be attached to all authorizations processed under this SPGP V.

This SPGP V becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

D. W. Kinard
for

July 26, 2016

(DISTRICT ENGINEER) (DATE)
Jason A. Kirk, P.E.
Colonel, U.S. Army
District Commander

Attachments to
Department of the Army State Programmatic General Permit (SPGP V)

1. General Conditions for Federal Authorization for SPGP V.

2. Department of the Army Permit Transfer for SPGP V.

3. *The Corps of Engineers, Jacksonville District, and the State of Florida Effect Determination Key for the Manatee in Florida*.

4. *Standard Manatee Conditions for In-Water Work* (Manatee Construction Conditions)

5. *Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat.*

6. *Key for Construction Conditions for Docks or Other Minor Structures Constructed in or Over Johnson's seagrass (Halophila johnsonii).*

7. *Sea Turtle and Smalltooth Sawfish Construction Conditions* and additions for this SPGP V.

8. *Submerged Aquatic Vegetation Survey Guidelines*

9. Florida Panther Focus Area.

10. Critical Habitat Essential Features/PCEs

11. Acropora spp. Critical Habitat Maps.

12. American Crocodile Critical Habitat Map.

13. Smalltooth Sawfish Critical Habitat Maps.

14. Piping Plover Critical Habitat Maps.

15. Freshwater Mussels Critical Habitat Maps.

16. Gulf Sturgeon Critical Habitat Maps.

17. Johnson's Seagrass Critical Habitat Maps.

18. Johnson's Seagrass Range Map.

19. Wood Stork Active Nesting Colony Map.

20. Beach Mice Habitat.

21. Scrub Jay Habitat.

22. Indigo Snake Habitat.

23. Federal Navigation Channels.

24. Smalltooth Sawfish Exclusion Zones.

25. Loogerhead Turtle Nearshore Reproductive Critical Habitat.

26. North Atlantic Right Whale Critical Habitat.

27. Frac-Out Sample Plan.

General Conditions for Federal Authorization for SPGP V

1. The time limit for completing the work authorized ends on July 26, 2021.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner on the enclosed form and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Further Information:

1. Limits of this authorization.

   a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

   b. This permit does not grant any property rights or exclusive privileges.

   c. This permit does not authorize any injury to the property or rights of others.

   d. This permit does not authorize interference with any existing or proposed Federal projects.

2. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or Construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

3. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

4. Reevaluation of Permit Decision: This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 3 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

5. Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CER 209.170) accomplish the corrective measures by contract or otherwise and bill you for

the cost.

6. When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date the enclosed form.

7. The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the U.S. Army Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal, relocation or alteration.

Department of the Army Permit Transfer for SPGP V

PERMITEE: _____

PERMIT NUMBER: _____ DATE: _____

ADDRESS/LOCATION OF PROJECT:

_____

_____
(Subdivision) (Lot) (Block)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. Although the construction period for works authorized by Department of the Army permits is finite, the permit itself, with its limitations, does not expire.

To validate the transfer of this permit and the associated responsibilities associated with compliance with its terms and conditions, have the transferee sign and date below and mail to the U.S. Army Corps of Engineers, Enforcement Branch, Post Office Box 4970, Jacksonville, FL 32232-0019.

_____ _____
(Transferee Signature) (Date)

_____
(Name Printed)

_____
(Street address)

_____
(Mailing address)

_____
(City, State, Zip Code)

THE CORPS OF ENGINEERS, JACKSONVILLE DISTRICT, AND THE STATE OF FLORIDA EFFECT DETERMINATION KEY FOR THE MANATEE IN FLORIDA
April 2013

Purpose and background of the key

The purpose of this document is to provide guidance to improve the review of permit applications by U.S. Army Corps of Engineers' (Corps) Project Managers in the Regulatory Division regarding the potential effects of proposed projects on the endangered West Indian manatee (*Trichechus manatus*) in Florida, and by the Florida Department of Environmental Protection or its authorized designee or Water Management District, for evaluating projects under the State Programmatic General Permit (SPGP) or any other Programmatic General Permits that the Corps may issue for administration by the above agencies. Such guidance is contained in the following dichotomous key. The key applies to permit applications for in-water activities such as, but not limited to: (1) dredging [new or maintenance dredging of not more than 50,000 cubic yards], placement of fill material for shoreline stabilization, and construction/placement of other in-water structures as well as (2) construction of docks, marinas, boat ramps and associated trailer parking spaces, boat slips, dry storage or any other watercraft access structures or facilities.

At a certain step in the key, the user is referred to graphics depicting important manatee areas or areas with inadequate protection. The maps can be downloaded from the Corps' web page at http://www.saj.usace.army.mil/Missions/Regulatory/SourceBook.aspx. We intend to utilize the most recent depiction of these areas, so should these areas be modified by statute, rule, ordinance and/or other legal mandate or authorization, we will modify the graphical depictions accordingly. These areas may be shaded or otherwise differentiated for identification on the maps.

Explanatory footnotes are provided in the key and must be closely followed whenever encountered.

Scope of the key

This key should only be used in the review of permit applications for effect determinations on manatees and should not be used for other listed species or for other aquatic resources such as Essential Fish Habitat (EFH). Corps Project Managers should ensure that consideration of the project's effects on any other listed species and/or on EFH is performed independently. This key may be used to evaluate applications for all types of State of Florida (State Programmatic General Permits, noticed general permits, standard general permits, submerged lands leases, conceptual and individual permits) and Department of the Army (standard permits, letters of permission, nationwide permits, and regional general permits) permits and authorizations. The final effect determination will be based on the project location and description; the potential effects to manatees, manatee habitat, and/or manatee critical habitat; and any measures (such as project components, standard construction precautions, or special conditions included in the authorization) to avoid or minimize effects to manatees or manatee critical habitat. Projects that key to a "may affect" determination equate to "likely to adversely affect" situations, and those projects should not be processed under the SPGP or any other programmatic general permit. For

all "may affect" determinations, Corps Project Managers shall refer to the Manatee Programmatic Biological Opinion, dated March 21, 2011, for guidance on eliminating or minimizing potential adverse effects resulting from the proposed project. If unable to resolve the adverse effects, the Corps may refer the applicant to the U.S. Fish and Wildlife Service (Service) for further assistance in attempting to revise the proposed project to a "may affect, not likely to adversely affect" level. The Service will coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) and the counties, as appropriate. Projects that provide new access for watercraft and key to "may affect, not likely to adversely affect" may or may not need to be reviewed individually by the Service.

MANATEE KEY
Florida[1]
April 2013

The key is not designed to be used by the Corps' Regulatory Division for making their effect determinations for dredging projects greater than 50,000 cubic yards, the Corps' Planning Division in making their effect determinations for civil works projects or by the Corps' Regulatory Division for making their effect determinations for projects of the same relative scope as civil works projects. These types of activities must be evaluated by the Corps independently of the key.

A. Project is not located in waters accessible to manatees and does not directly or indirectly affect manatees (see Glossary).....*No effect*

Project is located in waters accessible to manatees **or** directly or indirectly affects manatees ..... B

B. Project consists of one or more of the following activities, all of which are *May affect*:

1. blasting or other detonation activity for channel deepening and/or widening, geotechnical surveys or exploration, bridge removal, movies, military shows, special events, etc.;

2. installation of structures which could restrict or act as a barrier to manatees;

3. new or changes to existing warm or fresh water discharges from industrial sites, power plants, or natural springs or artesian wells (but only if the new or proposed change in discharge requires a Corps permit to accomplish the work);

4. installation of new culverts and/or maintenance or modification of existing culverts (where the culverts are 8 inches to 8 feet in diameter, ungrated and in waters accessible, or potentially accessible, to manatees)[2];

5. mechanical dredging from a floating platform, barge or structure[3] that restricts manatee access to less than half the width of the waterway;

6. creation of new slips or change in use of existing slips, even those located in a county with a State-approved Manatee Protection Plan (MPP) in place and the number of slips is less than the MPP threshold, to accommodate docking for repeat use vessels, (*e.g.*, water taxis, tour boats, gambling boats, etc; or slips or structures that are not civil works projects, but are frequently used to moor large vessels (>100') for shipping and/or freight purposes; does not include slips used for docking at boat sales or repair facilities or loading/unloading at dry stack storage facilities and boat ramps); [Note: For projects within Bay, Dixie, Escambia, Franklin, Gilchrist, Gulf, Hernando, Jefferson, Lafayette, Monroe (south of Craig Key), Nassau, Okaloosa, Okeechobee, Santa Rosa, Suwannee, Taylor, Wakulla or Walton County, the reviewer should proceed to Couplet C.]

7. any type of in-water activity in a Warm Water Aggregation Area (WWAA) or No Entry Area (see Glossary and accompanying Maps[4]); [Note: For residential docking facilities in a Warm Water Aggregation Area that is not a Federal manatee sanctuary or No Entry Area, the reviewer should proceed to couplet C.]

8. creation or expansion of canals, basins or other artificial shoreline and/or the connection of such features to navigable waters of the U.S.; [Note: For projects proposing a single residential dock, the reviewer should proceed to couplet C; otherwise, project is a *May Affect.*]

9. installation of temporary structures (docks, buoys, etc.) utilized for special events such as boat races, boat shows, military shows, etc., but only when consultation with the U.S. Coast Guard and FWS has not occurred; [Note: See programmatic consultation with the U.S. Coast Guard on manatees dated May 10, 2010.].

Project is other than the activities listed above C

C. Project is located in an Important Manatee Area (IMA) (see Glossary and accompanying Maps[4]) ..... D

Project is not located in an Important Manatee Area (IMA) (see Glossary and accompanying Maps[4]) ..... G

D. Project includes dredging of less than 50,000 cubic yards ..... E

Project does not include dredging ..... G

E. Project is for dredging a residential dock facility or is a land-based dredging operation ..... N

Project not as above ..... F

F. Project proponent **does not elect** to follow all dredging protocols described on the maps for the respective IMA in which the project is proposed ..... *May affect*

Project proponent **elects** to follow all dredging protocols described on the maps for the respective IMA in which the project is proposed ..... G

G. Project provides new[5] access for watercraft, *e.g.*, docks or piers, marinas, boat ramps and associated trailer parking spaces, new dredging, boat lifts, pilings, floats, floating docks, floating vessel platforms, boat slips, dry storage, mooring buoys, or other watercraft access (residential boat lifts, pilings, floating docks, and floating vessel platforms installed in existing slips are not considered new access) or improvements allowing increased watercraft usage ..... H

Project does not provide new[5] access for watercraft, *e.g.*, bulkheads, seawalls, riprap, maintenance dredging, boardwalks and/or the maintenance (repair or rehabilitation) of currently serviceable watercraft access structures provided all of the following are met: (1) the number of slips is not increased; (2) the number of existing slips is not in question; and (3) the improvements do not allow increased watercraft usage ..... N

H. Project is located in the Braden River Area of Inadequate Protection (Manatee County) (see Glossary and accompanying AIP Map[4]) ..... *May affect*

Project is not located in the Braden River Area of Inadequate Protection (Manatee County) (see Glossary and accompanying AIP Map[4]) I

I. Project is for a multi-slip facility (see Glossary) ..... J

Project is for a residential dock facility or is for dredging (see Glossary) ..... N

J. Project is located in a county that currently has a State-approved MPP in place (BREVARD, BROWARD, CITRUS, CLAY, COLLIER, DUVAL, INDIAN RIVER, LEE, MARTIN, MIAMI-DADE, PALM BEACH, ST. LUCIE, SARASOTA, VOLUSIA) or shares contiguous waters with a county having a State-approved MPP in place (LAKE, MARION, SEMINOLE)[6] ..... K

Project is located in a county not required to have a State-approved MPP L

K. Project has been developed or modified to be consistent with the county's State-approved MPP **and** has been verified by a FWC review (or FWS review if project is exempt from State permitting) **or** the number of slips is below the MPP threshold ..... N

Project has not been reviewed by the FWC or FWS **or** has been reviewed by the FWC or FWS **and** determined that the project is not consistent with the county's State-approved MPP ..... *May affect*

L. Project is located in one of the following counties: CHARLOTTE, DESOTO[7], FLAGLER, GLADES, HENDRY, HILLSBOROUGH, LEVY, MANATEE, MONROE[7], PASCO[7], PINELLAS ..... M

Project is located in one of the following counties: BAY, DIXIE, ESCAMBIA, FRANKLIN, GILCHRIST, GULF, HERNANDO, JEFFERSON, LAFAYETTE, MONROE (south of Craig Key), NASSAU, OKALOOSA, OKEECHOBEE, PUTNAM, SANTA ROSA, ST. JOHNS, SUWANNEE, TAYLOR, WAKULLA, WALTON ..... N

M. The number of slips does not exceed the residential dock density threshold (see Glossary) ..... N

The number of slips exceeds the residential dock density threshold (see Glossary) ..... *May affect*

N. Project impacts to submerged aquatic vegetation[8], emergent vegetation or mangrove will have beneficial, insignificant, discountable[9] or no effects on the manatee[10] ..... O

Project impacts to submerged aquatic vegetation[8], emergent vegetation or mangrove may adversely affect the manatee[10] ..... *May affect*

O. Project proponent **elects** to follow standard manatee conditions for in-water work[11] and requirements, as appropriate for the proposed activity, prescribed on the maps[4] ..... P

Project proponent **does not elect** to follow standard manatee conditions for in-water work[11] and appropriate requirements prescribed on the maps[4] ..... *May affect*

P. If project is for a new or expanding[5] multi-slip facility and is located in a county with a State-approved MPP in place **or** in Bay, Dixie, Escambia, Franklin, Gilchrist, Gulf, Hernando, Jefferson, Lafayette, Monroe (south of Craig Key), Nassau, Okaloosa, Okeechobee, Putnam, St. Johns, Santa Rosa, Suwannee, Taylor, Wakulla or Walton County, the determination of "*May affect, not likely to adversely affect*" is appropriate[12] and no further consultation with the Service is necessary.

If project is for a new or expanding[5] multi-slip facility and is located in Charlotte, Desoto, Flagler, Glades, Hendry, Hillsborough, Levy, Manatee, Monroe (north of Craig Key), Pasco, or Pinellas County, further consultation with the Service is necessary for "*May affect, not likely to adversely affect*" determinations.

If project is for repair or rehabilitation of a multi-slip facility and is located in an Important Manatee Area, further consultation with the Service is necessary for "*May affect, not likely to adversely affect*" determinations. If project is for repair or rehabilitation of a multi-slip facility and: (1) is not located in an Important Manatee Area; (2) the number of slips is not increased; (3) the number of existing slips is not in question; and (4) the improvements to the existing watercraft access structures do not allow increased watercraft usage, the determination of "*May affect, not likely to adversely affect*" is appropriate[12] and no further consultation with the Service is necessary.

If project is a residential dock facility, shoreline stabilization, or dredging, the determination of "*May affect, not likely to adversely affect*" is appropriate[12] and no further consultation with the Service is necessary. Note: For residential dock facilities located in a Warm Water Aggregation Area or in a No Entry area, seasonal restrictions may apply. See footnote 4 below for maps showing restrictions.

If project is other than repair or rehabilitation of a multi-slip facility, a new[5] multi-slip facility, residential dock facility, shoreline stabilization, or dredging, and does not provide new[5] access for watercraft or

improve an existing access to allow increased watercraft usage, the determination of "*May affect, not likely to adversely affect*" is appropriate[12] and no further consultation with the Service is necessary.

[1] On the St. Mary's River, this key is only applicable to those areas that are within the geographical limits of the State of Florida.

[2] All culverts 8 inches to 8 feet in diameter must be grated to prevent manatee entrapment. To effectively prevent manatee access, grates must be permanently fixed, spaced a maximum of 8 inches apart (may be less for culverts smaller than 16 inches in diameter) and may be installed diagonally, horizontally or vertically. For new culverts, grates must be attached prior to installation of the culverts. Culverts less than 8 inches or greater than 8 feet in diameter are exempt from this requirement. If new culverts and/or the maintenance or modification of existing culverts are grated as described above, the determination of "*May affect, not likely to adversely affect*" is appropriate[11] and no further consultation with the Service is necessary.

[3] If the project proponent agrees to follow the standard manatee conditions for in-water work as well as any special conditions appropriate for the proposed activity, further consultation with the Service is necessary for "*May affect, not likely to adversely affect*" determinations. These special conditions may include, but are not limited to, the use of dedicated observers (see Glossary for definition of dedicated observers), dredging during specific months (warm weather months vs cold weather months), dredging during daylight hours only, adjusting the number of dredging days, does not preclude or discourage manatee egress/ingress with turbidity curtains or other barriers that span the width of the waterway, etc.

[4] Areas of Inadequate Protection (AIPs), Important Manatee Areas (IMAs), Warm Water Aggregation Areas (WWAAs) and No Entry Areas are identified on these maps and defined in the Glossary for the purposes of this key. These maps can be viewed on the Corps' web page. If projects are located in a No Entry Area, special permits may be required from FWC in order to access these areas (please refer to Chapter 68C-22 F.A.C. for boundaries; maps are also available at FWC's web page).

[5] New access for watercraft is the addition or improvement of structures such as, but not limited to, docks or piers, marinas, boat ramps and associated trailer parking spaces, boat lifts, pilings, floats, floating docks, floating vessel platforms, (maintenance dredging, residential boat lifts, pilings, floating docks, and floating vessel platforms installed in existing slips are not considered new access), boat slips, dry storage, mooring buoys, new dredging, etc., that facilitates the addition of watercraft to, and/or increases watercraft usage in, waters accessible to manatees. The repair or rehabilitation of any type of currently serviceable watercraft access structure is not considered new access provided all of the following are met: (1) the number of slips is not increased; (2) the number of existing slips is not in question; and (3) the improvements to the existing watercraft access structures do not result in increased watercraft usage.

[6] Projects proposed within the St. Johns River portion of Lake, Marion, and Seminole counties and contiguous with Volusia County shall be evaluated using the Volusia County MPP.

[7] For projects proposed within the following areas: the Peace River in DeSoto County; all areas north of Craig Key in Monroe County, and the Anclote and Pithlachascotee Rivers in Pasco County, proceed to Couplet M. For all other locations in DeSoto, Monroe (south of Craig Key) and Pasco Counties, proceed to couplet N.

[8] Where the presence of the referenced vegetation is confirmed within the area affected by docks and other piling-supported minor structures and the reviewer has concluded that the impacts to SAV, marsh or mangroves would not adversely affect the manatee or its critical habitat, proceed to couplet O.

Where the presence of the referenced vegetation is confirmed within the area affected by docks and other piling-supported minor structures and the reviewer has concluded that the impacts to SAV, marsh or mangroves would adversely affect the manatee or its critical habitat, the applicant can elect to avoid/minimize impacts to that vegetation. In that instance, where impacts are unavoidable and the applicant elects to abide by or employ construction techniques that exceed the criteria in the following documents, the reviewer should conclude that the impacts to SAV, marsh or mangroves would not adversely affect the manatee or its critical habitat and proceed to couplet O.

- "Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat," prepared jointly by the U.S. Army Corps of Engineers and the National Marine Fisheries Service (August 2001) [refer to the Corps' web page], and

- "Key for Construction Conditions for Docks or Other Minor Structures Constructed in or over Johnson's seagrass (*Halophila johnsonii*)," prepared jointly by the National Marine Fisheries Service and U.S. Army Corps of Engineers (October 2002), for those projects within the known range of Johnson's seagrass occurrence (Sebastian Inlet to central Biscayne Bay in the lagoon systems on the east coast of Florida) [refer to the Corps' web page],

Where the presence of the referenced vegetation is confirmed within the area affected by docks and other piling-supported minor structures and the reviewer has concluded that the impacts to SAV, marsh or mangroves would adversely affect the manatee or its critical habitat, and the applicant does not elect to follow the above Guidelines, the Corps will need to request formal consultation on the manatee with the Service as *May affect*.

For activities other than docks and other piling-supported minor structures proposed in SAV, marsh, or mangroves (*e.g.*, new dredging, placement of riprap, bulkheads, etc.), if the reviewer determines the impacts to the SAV, marsh or mangroves will not adversely affect the manatee or its critical habitat, proceed to couplet O, otherwise the Corps will need to request formal consultation on the manatee with the Service as *May affect*.

[9] See Glossary, under "is not likely to adversely affect."

[10] Federal reviewers, when making your effects determination, consider effects to manatee designated critical habitat pursuant to section 7(a)(2) of the Endangered Species Act. State reviewers, when making your effects determination, consider effects to manatee habitat within the entire State of Florida, pursuant to Chapter 370.12(2)(b) Florida Statutes.

[11] See the Corps' web page for manatee construction conditions. At this time, manatee construction precautions c and f are not required in the following Florida counties: Bay, Escambia, Franklin, Gilchrist, Gulf, Jefferson, Lafayette, Okaloosa, Santa Rosa, Suwannee, and Walton.

[12] By letter dated April 25, 2013, the Corps received the Service's concurrence with "*May affect, not likely to adversely affect*" determinations made pursuant to this key for the following activities: (1) selected non-watercraft access projects; (2) watercraft-access projects that are residential dock facilities, excluding those located in the Braden River AIP; (3) launching facilities solely for kayaks and canoes, and (4) new or expanding multi-slip facilities located in Bay, Dixie, Escambia, Franklin, Gilchrist, Gulf, Hernando, Jefferson, Lafayette, Monroe (south of Craig Key), Nassau, Okaloosa, Okeechobee, Santa Rosa, Suwannee, Taylor, Wakulla or Walton County.

Additionally, in the same letter dated April 25, 2013, the Corps received the Service's concurrence for "*May affect, not likely to adversely affect*" determinations specifically made pursuant to Couplet G of the key for the repair or rehabilitation of currently serviceable multi-slip watercraft access structures provided all of the following are met: (1) the project is not located in an IMA, (2) the number of slips is not increased; (3) the number of existing slips is not in question; and (4) the improvements to the existing watercraft access structures do not allow increased watercraft usage. Upon receipt of such a programmatic concurrence, no further consultation with the Service for these projects is required.

GLOSSARY

Areas of inadequate protection (AIP) – Areas within counties as shown on the maps where the Service has determined that measures intended to protect manatees from the reasonable certainty of watercraft-related take are inadequate. Inadequate protection may be the result of the absence of manatee or other watercraft speed zones, insufficiency of existing speed zones, deficient speed zone signage, or the absence or insufficiency of speed zone enforcement.

Boat slip – A space on land or in or over the water, other than on residential land, that is intended and/or actively used to hold a stationary watercraft or its trailer, and for which intention and/or use is confirmed by legal authorization or other documentary evidence. Examples of boat slips include, but are not limited to, docks or piers, marinas, boat ramps and associated trailer parking spaces, boat lifts, floats, floating docks, pilings, boat davits, dry storage, etc.

Critical habitat – For listed species, this consists of: (1) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of the Endangered Species Act (ESA), on which are found those physical or biological features (constituent elements) (a) essential to the conservation of the species and (b) which may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the ESA, upon a determination by the Secretary that such areas are essential for the conservation of the species. Designated critical habitats are described in 50 CFR 17 and 50 CFR 226.

Currently serviceable – Currently, serviceable means usable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects – The direct or immediate effects of the project on the species or its habitat.

Dredging – For the purposes of this key, the term dredging refers to all in-water work associated with dredging operations, including mobilization and demobilization activities that occur in water or require vessels.

Emergent vegetation – Rooted emergent vascular macrophytes such as, but not limited to, cordgrass (*Spartina alterniflora and S. patens*), needle rush (*Juncus roemerianus*), swamp sawgrass (*Cladium mariscoides*), saltwort (*Batis maritima*), saltgrass (*Distichlis spicata*), and glasswort (*Salicornia virginica*) found in coastal salt marsh-related habitats (tidal marsh, salt marsh, brackish marsh, coastal marsh, coastal wetlands, tidal wetlands).

Formal consultation – A process between the Services and a Federal agency or applicant that: (1) determines whether a proposed Federal action is likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat; (2) begins with a Federal agency's written request and submittal of a complete initiation package; and (3) concludes with the issuance of a biological opinion and incidental take statement by either of the Services. If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Services concur, in writing, that a proposed

action "is not likely to adversely affect" listed species or designated critical habitat). [50 CFR 402.02, 50 CFR 402.14]

Important manatee areas (IMA) – Areas within certain counties where increased densities of manatees occur due to the proximity of warm water discharges, freshwater discharges, natural springs and other habitat features that are attractive to manatees. These areas are heavily utilized for feeding, transiting, mating, calving, nursing or resting as indicated by aerial survey data, mortality data and telemetry data. Some of these areas may be federally-designated sanctuaries or state-designated "seasonal no entry" zones. Maps depicting important manatee areas and any accompanying text may contain a reference to these areas and their special requirements. Projects proposed within these areas must address their special requirements.

Indirect effects – Those effects that are caused by or will result from the proposed action and are later in time, but are still reasonably certain to occur. Examples of indirect effects include, but are not limited to, changes in water flow, water temperature, water quality (*e.g.*, salinity, pH, turbidity, nutrients, chemistry), prop dredging of seagrasses, and manatee watercraft injury and mortality. Indirect effects also include watercraft access developments in waters not currently accessible to manatees, but watercraft access can, is, or may be planned to waters accessible to manatees by the addition of a boat lift or the removal of a dike or plug.

Informal consultation – A process that includes all discussions and correspondence between the Services and a Federal agency or designated non-Federal representative, prior to formal consultation, to determine whether a proposed Federal action may affect listed species or critical habitat. This process allows the Federal agency to utilize the Services' expertise to evaluate the agency's assessment of potential effects or to suggest possible modifications to the proposed action which could avoid potentially adverse effects. If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Services concur, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat). [50 CFR 402.02, 50 CFR 402.13]

In-water activity – Any type of activity used to construct/repair/replace any type of in-water structure or fill; the act of dredging.

In-water structures – watercraft access structures – Docks or piers, marinas, boat ramps, boat slips, boat lifts, floats, floating docks, pilings (depending on use), boat davits, etc.

In-water structures – other than watercraft access structures – Bulkheads, seawalls, riprap, groins, boardwalks, pilings (depending on use), etc.

Is likely to adversely affect – The appropriate finding in a biological assessment (or conclusion during informal consultation) if any adverse effect to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions and the effect is not: discountable, insignificant, or beneficial (see definition of "is not likely to adversely affect"). An "is likely to adversely affect" determination requires the initiation of formal consultation under section 7 of the ESA.

Is not likely to adversely affect – The appropriate conclusion when effects on listed species are expected to be discountable, insignificant, or completely beneficial. **Discountable effects** are those extremely unlikely to occur. **Insignificant effects** relate to the size of the impact and should never reach the scale where take occurs. **Beneficial effects** are contemporaneous positive effects without any adverse effects to the species. Based on best judgment, a person would not (1) be able to meaningfully measure, detect, or evaluate insignificant effects or (2) expect discountable effects to occur.

Manatee Protection Plan (MPP) – A manatee protection plan (MPP) is a comprehensive planning document that addresses the long-term protection of the Florida manatee through law enforcement, education, boat facility siting, and habitat protection initiatives. Although MPPs are primarily developed by the counties, the plans are the product of extensive coordination and cooperation between the local governments, the FWC, the Service, and other interested parties.

Manatee Protection Plan thresholds – The smallest size of a multi-slip facility addressed under the purview of a Manatee Protection Plan (MPP). For most MPPs, this threshold is five slips or more. For Brevard, Clay, Citrus, and Volusia County MPPs, this threshold is three slips or more.

Mangroves – Rooted emergent trees along a shoreline that, for the purposes of this key, include red mangrove (*Rhizophora mangle*), black mangrove (*Avicennia germinans*) and white mangrove (*Laguncularia racemosa*).

May affect – The appropriate conclusion when a proposed action may pose <u>any</u> effects on listed species or designated critical habitat. When the Federal agency proposing the action determines that a "may affect" situation exists, then they must either request the Services to initiate formal consultation or seek written concurrence from the Services that the action "is not likely to adversely affect" listed species. For the purpose of this key, all "may affect" determinations equate to "likely to adversely affect" and Corps Project Managers should request the Service to initiate formal consultation on the manatee or designated critical habitat. **No effect** – the appropriate conclusion when the action agency determines its proposed action will not affect a listed species or designated critical habitat.

Multi-slip facility – Multi-slip facilities include commercial marinas, private multi-family docks, boat ramps and associated trailer parking spaces, dry storage facilities and any other similar structures or activities that provide access to the water for multiple (five slips or more, except in Brevard, Clay, Citrus, and Volusia counties where it is three slips or more) watercraft. In some instances, the Corps and the Service may elect to review multiple residential dock facilities as a multi-slip facility.

New access for watercraft – New dredging and the addition, expansion or improvement of structures such as, but not limited to, docks or piers, marinas, boat ramps and associated trailer parking spaces, boat lifts, pilings, floats, floating docks, floating vessel platforms, (residential boat lifts, pilings, floats, and floating vessel platforms installed in existing slips are not considered new access), boat slips, dry storage, mooring buoys, etc., that facilitates the addition of watercraft to, and/or increases watercraft usage in, waters accessible to manatees.

Observers – During dredging and other in-water operations within manatee accessible waters, the standard manatee construction conditions require all on-site project personnel to watch for manatees to ensure that those standard manatee construction conditions are met. Within important manatee areas (IMA) and under special circumstances, heightened observation is needed. **Dedicated Observers** are those having some prior experience in manatee observation, are dedicated only for this task, and must be someone other than the dredge and equipment operators/mechanics. **Approved Observers** are dedicated observers who also must be approved by the Service (if Federal permits are involved) and the FWC (if state permits are involved), prior to work commencement. Approved observers typically have significant and often project-specific observational experience. Documentation on prior experience must be submitted to these agencies for approval and must be submitted a minimum of 30 days prior to work commencement. When dedicated or approved observers are required, observers must be on site during all in-water activities, and be equipped with polarized sunglasses to aid in manatee observation. For prolonged in-water operations, multiple observers may be needed to perform observation in shifts to reduce fatigue (recommended shift length is no longer than six hours). Additional information concerning observer approval can be found at FWC's web page.

Residential boat lift – A boat lift installed on a residential dock facility.

Residential dock density ratio threshold – The residential dock density ratio threshold is used in the evaluation of multi-slip projects in some counties without a State-approved Manatee Protection Plan and is consistent with 1 boat slip per 100 linear feet of shoreline (1:100) owned by the applicant.

Residential dock facility – A residential dock facility means a private residential dock which is used for private, recreational or leisure purposes for single-family or multi-family residences designed to moor no more than four vessels (except in Brevard, Clay, Citrus, and Volusia counties which allow only two vessels). This also includes normal appurtenances such as residential boat lifts, boat shelters with open sides, stairways, walkways, mooring pilings, dolphins, etc. In some instances, the Corps and the Service may elect to review multiple residential dock facilities as a multi-slip facility.

Submerged aquatic vegetation (SAV) – Rooted, submerged, aquatic plants such as, but not limited to, shoal grass (*Halodule wrightii*), paddle grass (*Halophila decipiens*), star grass (*Halophila engelmanni*), Johnson's seagrass (*Halophila johnsonii*), sago pondweed (*Potamogeton pectinatus*), clasping-leaved pondweed (*Potamogeton perfoliatus*), widgeon grass (*Ruppia maritima*), manatee grass (*Syringodium filiforme*), turtle grass (*Thalassia testudinum*), tapegrass (*Vallisneria americana*), and horned pondweed (*Zannichellia palustris*).

Warm Water Aggregation Areas (WWAAs) and **No Entry Areas** – Areas within certain counties where increased densities of manatees occur due to the proximity of artificial or natural warm water discharges or springs and are considered necessary for survival. Some of these areas may be federally-designated manatee sanctuaries or state-designated seasonal "no entry" manatee protection zones. Projects proposed within these areas may require consultation in order to offset expected adverse impacts. In addition, special permits may be required from the FWC in order to access these areas.

Watercraft access structures – Docks or piers, marinas, boat ramps and associated trailer parking spaces, boat slips, boat lifts, floats, floating docks, pilings, boat davits, dry storage, etc.

Waters accessible to manatees – Although most waters of the State of Florida are accessible to the manatee, there are some areas such as landlocked lakes that are not. There are also some weirs, salinity control structures and locks that may preclude manatees from accessing water bodies. If there is any question about accessibility, contact the Service or the FWC.

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK
2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.

b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.

d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.

e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com

f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

CAUTION: MANATEE HABITAT

All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:

Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC

Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat
U.S. Army Corps of Engineers/National Marine Fisheries Service
August 2001

Submerged Aquatic Vegetation:

1. Avoidance. The piling-supported structure shall be aligned so as to minimize the size of the footprint over SAV beds.

2. The height of piling-supported structure shall be a minimum of 5 feet above MHW/OHW as measured from the top surface of the decking.

3. The width of the piling-supported structure is limited to a maximum of 4 feet. A turnaround area is allowed for piling-supported structures greater than 200 feet in length. The turnaround is limited to a section of the piling-supported structure no more than 10 feet in length and no more than 6 feet in width. The turnaround shall be located at the midpoint of the piling-supported structure.

4. Over-SAV bed portions of the piling-supported structure shall be oriented in a north-south orientation to the maximum extent that is practicable.

5. a. If possible, terminal platforms shall be placed in deep water, waterward of SAV beds or in an area devoid of SAV beds.

b. If a terminal platform is placed over SAV areas and constructed of grated decking, the total size of the platform shall be limited to 160 square feet. The grated deck material shall conform to the specifications stipulated below. The configuration of the platform shall be a maximum of 8 feet by 20 feet. A minimum of 5 feet by 20 feet shall conform to the 5-foot height requirement; a 3 feet by 20 feet section may be placed 3 feet above MHW to facilitate boat access. The long axis of the platform should be aligned in a north-south direction to the maximum extent that is practicable.

c. If the terminal platform is placed over SAV areas and constructed of planks, the total size of the platform shall be limited to 120 square feet. The configuration of the platform shall be a maximum of 6 feet by 20 feet of which a minimum 4-foot wide by 20-foot long section shall conform to the 5-foot height requirement. A section may be placed 3 feet above MHW to facilitate boat access. The 3 feet above MHW section shall be cantilevered. The long axis of the platform should be aligned in a north-south direction to the maximum extent that is practicable. If the 3feet above MHW section is constructed with grating material, it may be 3 feet wide.

6. One uncovered boat lift area is allowed. A narrow catwalk (2 feet wide if planks are used, 3 feet wide if grating is used) may be added to facilitate boat maintenance along the outboard side of the boat lift and a 4-foot wide walkway may be added along the stern end of the boat lift, provided all such walkways are elevated 5 feet above MHW. The catwalk shall be cantilevered from the outboard mooring pilings (spaced no closer than 10 feet apart).

7. Pilings shall be installed in a manner which will not result in the formation of sedimentary deposits("donuts" or "halos") around the newly installed pilings. Pile driving is the preferred method of installation, but jetting with a low pressure pump may be used.

8. The spacing of pilings through SAV beds shall be a minimum of 10 feet on center.

9. The gaps between deckboards shall be a minimum of ½ inch.

Marsh:

Grid Specifications and Suppliers Section modified in October 2002 to add an additional vendor of materials.
February 2003 – Manufacturer name changed from ChemGrate to FiberGrate
May 2003 - The terms dock and pier were removed and replaced by the term piling-supported structure, to clarify our intent.
March 2008 – Added requirement for 43% open space in grids; added additional manufacturer of grating. -

1. The piling-supported structure shall be aligned so as to have the smallest over-marsh footprint as practicable.

2. The over-marsh portion of the piling-supported shall be elevated to at least 4 feet above the marsh floor.

3. The width of the piling-supported is limited to a maximum of 4 feet. Any exceptions to the width must be accompanied by an equal increase in height requirement.

Mangroves.

1. The width of the piling-supported structure is limited to a maximum of 4 feet.

2. Mangrove clearing is restricted to the width of the piling-supported structure.

3. The location and alignment of the piling-supported structure should be through the narrowest area of the mangrove fringe.

Grid Specifications and Suppliers

The following information does not constitute a U.S. Army Corps of Engineers endorsement or advertisement for any particular provider and is provided only as an example for those interested in obtaining these materials for piling-supported structure construction. Light-transmitting materials are made of various materials shaped in the form of grids, grates, lattices, etc., to allow the passage of light through the open spaces. **All light-transmitting materials used in construction for minor piling-supported structures shall have a minimum of forty-three (43) percent open space.**

A type of fiberglass grate panel is manufactured by SeaSafe (Lafayette, LA; phone: 1-800-326-8842) and FiberGrate (1-800-527-4043). A type of plastic grating is manufactured by ThruFlow Interlocking Panels (1-888-478-3569). Plastic grate panels are also distributed by Southern Pine Lumber Company (Stuart, FL; 772-692-2300). Panels are available in a variety of sizes and thicknesses. For safety, the grate should contain an anti-slip texture which is integrally molded into the top surface. The manufacturer or local distributor should be consulted to ensure that the load-bearing capacity of the selected product is sufficient to support the intended purpose. Contact the manufacturer(s) for product specifications and a list of regional distributors.

Grid Specifications and Suppliers Section modified in October 2002 to add an additional vendor of materials.
February 2003 – Manufacturer name changed from ChemGrate to FiberGrate
May 2003 - The terms dock and pier were removed and replaced by the term piling-supported structure, to clarify our intent.
March 2008 – Added requirement for 43% open space in grids; added additional manufacturer of grating. -

Key[1] for Construction Conditions for Docks or Other Minor Structures Constructed in or Over Johnson's Seagrass (*Halophila johnsonii*)
National Marine Fisheries Service/U.S. Army Corps of Engineers
October 2002

1a. The construction site is within the known range of Johnson's seagrass occurrence (Sebastian Inlet to central Biscayne Bay in the lagoonal systems on the east coast of Florida). *Go to 2.*

1b. The construction site is not within the known range of Johnson's seagrass occurrence but submerged aquatic vegetation (SAV) is present at the site. Use *"Dock Construction Guidelines in Florida for Docks or Other Minor Structures Constructed in or over Submerged Aquatic Vegetation, Marsh or Mangrove Habitat" - U.S. Army Corps of Engineers/National Marine Fisheries Service, August 2001.*

1c. The construction site is not within the range of Johnson's seagrass and SAV is not present at the site: *No construction conditions for SAV are necessary.*

2a. Seagrass survey for Johnson's seagrass is performed at the proposed site during the April 1 – August 31 growing season. *Go to 3.*

2b. No survey for Johnson's seagrass is performed at the proposed site during the growing season, or a survey is performed at the proposed site but is outside of the growing season. *Go to 4.*

3a. Johnson's seagrass is present at the proposed construction site. *Go to 5.*

3b. Johnson's seagrass is not present at the proposed construction site. *Go to 6.*

4a. The construction is in an area designated by the National Marine Fisheries Service - Protected Resources Division (NMFS-PRD) as **critical habitat[2]** for Johnson's seagrass. Use *"Dock Construction Guidelines in Florida for Docks or Other Minor Structures Constructed in or over Submerged Aquatic Vegetation, Marsh or Mangrove Habitat" - U.S. Army Corps of Engineers/National Marine Fisheries Service, August 2001,* ***except that light-transmitting materials[2] (LTMs) shall comprise 100% of all pedestrian surfaces waterward of the mean low water (MLW) line.***

4b. The construction is not in an area designated by NMFS-PRD as critical habitat for Johnson's seagrass. Use *"Dock Construction Guidelines in Florida for Docks or Other Minor Structures Constructed in or over Submerged Aquatic Vegetation, Marsh or Mangrove Habitat" - U.S. Army Corps of Engineers/National Marine Fisheries Service, August 2001,* ***except that LTMs shall comprise at least 75% of all pedestrian surfaces waterward of the MLW line and a minimum 1-inch spacing shall be maintained between all wooden deckboards used waterward of the MLW line.***

5a. The construction is in an area designated by NMFS-PRD as critical habitat for Johnson's seagrass. Use *"Dock Construction Guidelines in Florida for Docks or Other Minor Structures Constructed in or over Submerged Aquatic Vegetation, Marsh or Mangrove Habitat" - U.S. Army Corps of Engineers/National Marine Fisheries Service, August 2001,* ***except that LTMs shall comprise at least 75% of all pedestrian surfaces waterward of the MLW line and a minimum 1-inch spacing shall be maintained between all wooden deckboards used waterward of the MLW line.***

5b. The construction is not in an area designated by NMFS-PRD as critical habitat for Johnson's seagrass. Use *"Dock Construction Guidelines in Florida for Docks or Other Minor Structures Constructed in or over Submerged Aquatic Vegetation, Marsh or Mangrove Habitat" - U.S. Army Corps of Engineers/National Marine Fisheries Service, August 2001,* ***except that all pedestrian surfaces directly over Johnson's seagrass areas shall be constructed of LTMs and a minimum***

This key was modified in October 2002 to change the percent light transmittance requirement of the grids from 46 to 43 as stipulated in Note #3 .

1-inch spacing shall be maintained between all wooden deckboards used waterward of the MLW line.

6a. The construction is in an area designated by NMFS-PRD as critical habitat for Johnson's seagrass. *Use "Dock Construction Guidelines in Florida for Docks or Other Minor Structures Constructed in or over Submerged Aquatic Vegetation, Marsh or Mangrove Habitat" - U.S. Army Corps of Engineers/National Marine Fisheries Service, August 2001,* ***except that a minimum 1-inch spacing shall be maintained between all wooden deckboards used waterward of the MLW line.***

6b. The construction is not in an area designated by NMFS as critical habitat for Johnson's seagrass. *Go to 7*

7a. SAV other than Johnson's seagrass is present at the site. *Use "Dock Construction Guidelines in Florida for Docks or Other Minor Structures Constructed in or over Submerged Aquatic Vegetation, Marsh or Mangrove Habitat" - U.S. Army Corps of Engineers/National Marine Fisheries Service, August 2001.*

7b. No SAV present. *No construction conditions for SAV are necessary.*

Notes:

[1] This key is meant to complement but not supersede the *"Dock Construction Guidelines in Florida for Docks or Other Minor Structures Constructed in or over Submerged Aquatic Vegetation, Marsh or Mangrove Habitat - U.S. Army Corps of Engineers/National Marine Fisheries Service, August 2001.* **Docks incorporating light-transmitting materials shall not exceed the dimensions recommended in the Guidelines.**

[2] Federal Register 65 FR 17786, April 5, 2000, Designation of critical habitat for Johnson's seagrass.

[3] Light-transmitting materials are made of various materials shaped in the form of grids, grates, lattices, etc., to allow the passage of light through the open spaces. **All light-transmitting materials used for dock construction in the known range of Johnson's seagrass shall have a minimum of forty-three (43) percent open space.**

This key was modified in October 2002 to change the percent light transmittance requirement of the grids from 46 to 43 as stipulated in Note #3 .

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.

b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.

c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.

d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.

e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.

f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.

g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006
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Additions

to the

"*Sea Turtle and Smalltooth Sawfish Construction Conditions*"

for SPGP V

a. Any collision(s) with and/or injuries to any whale, or sturgeon occurring during the construction of a project, shall be reported immediately to NMFS's Protected Resources Division (PRD) at (727-824-5312).

b. Reports to NMFS's Protected Resources Division (PRD) may be made by email to takereport.nmfsser@noaa.gov.

c. Sea turtle and marine mammal stranding/rescue organizations' contact information is available by region at http://www.nmfs.noaa.gov/pr/health/networks.htm.

d. Smalltooth sawfish encounters shall be reported to http://www.flmnh.ufl.edu/fish/sharks/sawfish/sawfishencounters.html.

e. All work must occur during daylight hours.

Submerged Aquatic Vegetation Survey Guidelines

Please provide information on the presence of any submerged aquatic vegetation (SAV) at or adjacent to the proposed location of the work. For the initial determination of whether SAV is present or absent, please include the name of the person conducting the inspection, the date of the inspection, and a depiction of the area that was inspected. If any SAV is present, a detailed SAV survey will be required. Detailed SAV surveys can only be performed between June 1 and September 30 of each year.

At a minimum, the surveyed area shall encompass a 50-foot radius around the location of the proposed work. The ensuing report shall depict the locations of all SAV, and shall clearly depict the distribution of the various species of SAV. In addition, the report shall contain the percent cover of each species of SAV, frequency of occurrence of each species of SAV, and the name, mailing address and telephone number of the qualified person performing the survey. Furthermore, if Johnson's seagrass (*Halophila johnsonii*) is observed, the report shall include the shoot density of the Johnson's seagrass. The report should also include a plan view drawing depicting any existing structures and the proposed work in reference to the surveyed area. If the proposed work is a dock or pier and SAV is present, or if the proposed work is a dock or pier and is located in the known range of Johnson's seagrass (in lagoons on Florida's east coast from Sebastian Inlet (Brevard County) south to and including central Biscayne Bay (Miami-Dade County), the dock or pier should be designed in accordance with the joint U.S. Army Corps of Engineers/National Marine Fisheries Service dock construction guidelines (Dock Construction Guidelines in Florida for Docks or Other Minor Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat - U.S. Army Corps of Engineers/National Marine Fisheries Service - August 2001).

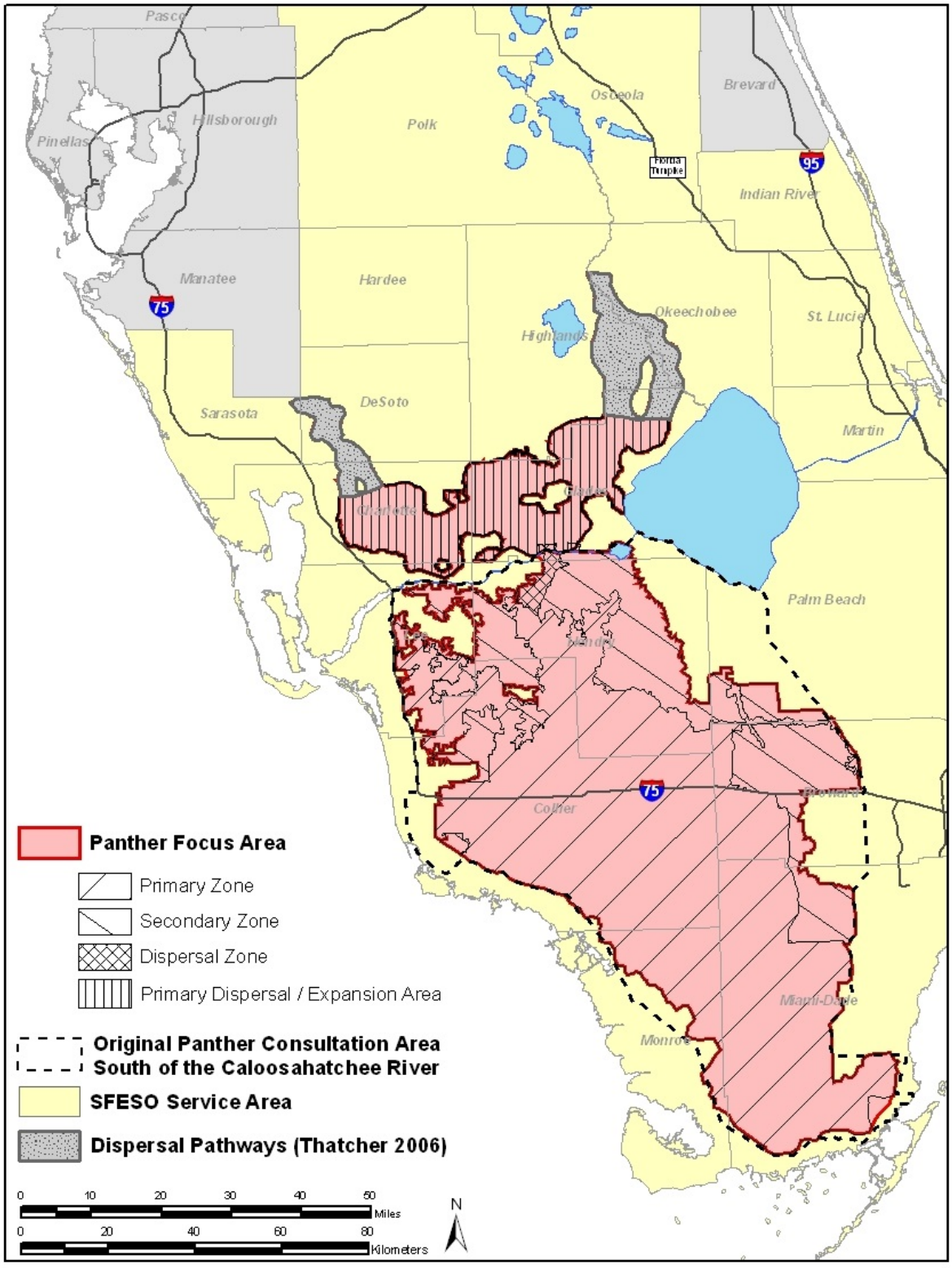

Pasco
Hillsborough
Pinellas
Polk
Osceola
Brevard
Indian River
Manatee
Hardee
Okeechobee
St. Lucie
Highlands
Sarasota
DeSoto
Martin
Charlotte
Palm Beach
Collier
Miami-Dade
Monroe
75
95
Panther Focus Area
Primary Zone
Secondary Zone
Dispersal Zone
Primary Dispersal / Expansion Area
Original Panther Consultation Area South of the Caloosahatchee River
SFESO Service Area
Dispersal Pathways (Thatcher 2006)
0 10 20 30 40 50
Miles
0 20 40 60 80
Kilometers
N

Table 14 below provides a complete list of the essential features/primary constituent elements (PCEs) of each critical habitat unit that occurs in Florida. Note that the important features of critical habitat are referred to as both essential features and PCEs. This is because the USFWS uses the term PCE and NMFS uses essential features. If a critical habitat rule is developed jointly, the term PCE is often used. For this Opinion, we refer to the features using the term defined in the specific critical habitat rule.

Table 14. Essential Features/PCEs of Each Critical Habitat Unit in Florida

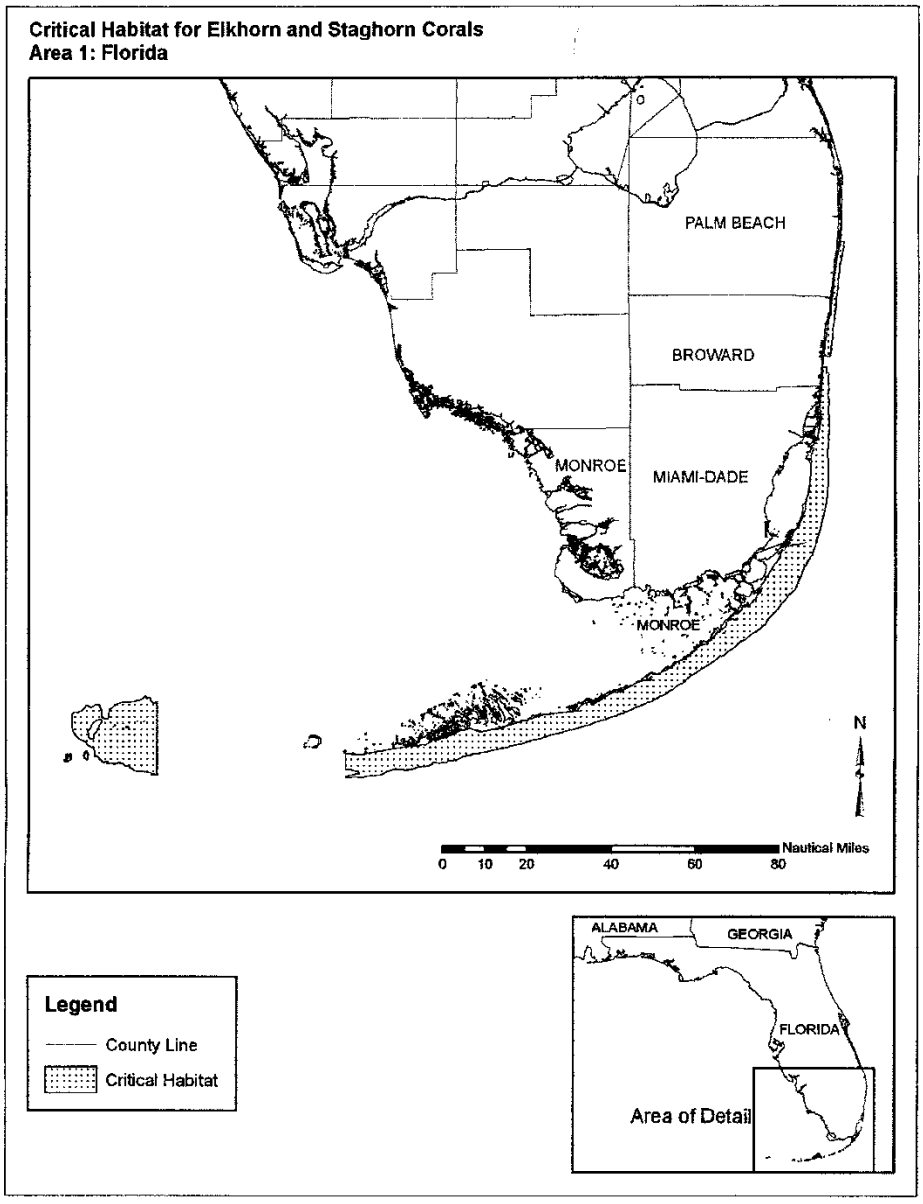
Smalltooth sawfish (74 FR 45353, Effective Date: 10/02/2009)	The physical and biological features essential to the conservation of the U.S. DPS of smalltooth sawfish, which provide nursery area functions are: red mangroves and shallow euryhaline habitats characterized by water depths between the Mean High Water line and 3 ft (0.9 m) measured at Mean Lower Low Water (MLLW). These features are included in critical habitat within the boundaries of the specific areas in paragraph (b) of this section, except where the features were not physically accessible to sawfish at the time of this designation (September 2009); for example, areas where existing water control structures prevent sawfish passage to habitats beyond the structure.
Gulf sturgeon (68 FR 13370, Effective Date: 04/18/2003)	Based on the best available information, PCEs essential for the conservation of the Gulf sturgeon include the following: abundant prey items within riverine habitats for larval and juvenile life stages, and within estuarine and marine habitats and substrates for juvenile, subadult, and adult life stages; riverine spawning sites with substrates suitable for egg deposition and development, such as limestone outcrops and cut limestone banks, bedrock, large gravel or cobble beds, marl, soapstone or hard clay; riverine aggregation areas, also referred to as resting, holding, and staging areas, used by adult, subadult, and/or juveniles, generally, but not always, located in holes below normal riverbed depths, believed necessary for minimizing energy expenditures during fresh water residency and possibly for osmoregulatory functions; a flow regime (*i.e.,* the magnitude, frequency, duration, seasonality, and rate-of-change of fresh water discharge over time) necessary for normal behavior, growth, and survival of all life stages in the riverine environment, including migration, breeding site selection, courtship, egg fertilization, resting, and staging; and necessary for maintaining spawning sites in suitable condition for egg attachment, eggs sheltering, resting, and larvae staging; water quality, including temperature, salinity, pH, hardness, turbidity, oxygen content, and other chemical characteristics, necessary for normal behavior, growth, and viability of all life stages; sediment quality, including texture and other chemical characteristics, necessary for normal behavior, growth, and viability of all life stages; and safe and unobstructed migratory pathways necessary for passage within and between riverine, estuarine, and marine habitats (*e.g.* a river unobstructed by any permanent structure, or a dammed river that still allows for passage).
Loggerhead sea turtle (79 FR 39855, Effective Date: 08/11/2014)	1. Nearshore reproductive habitat: The PBF of nearshore reproductive habitat as a portion of the nearshore waters adjacent to nesting beaches that are used by hatchlings to egress to the open-water environment as well as by nesting females to transit between beach and open water during the nesting season. The following PCEs support this habitat: (i) Nearshore waters directly off the highest density nesting beaches and their adjacent beaches, as identified in 50 CFR 17.95(c), to 1.6 km offshore; (ii) Waters sufficiently free of obstructions or artificial lighting to allow transit through the surf zone and outward toward open water; and (iii) Waters with minimal manmade structures that could promote predators (i.e.,

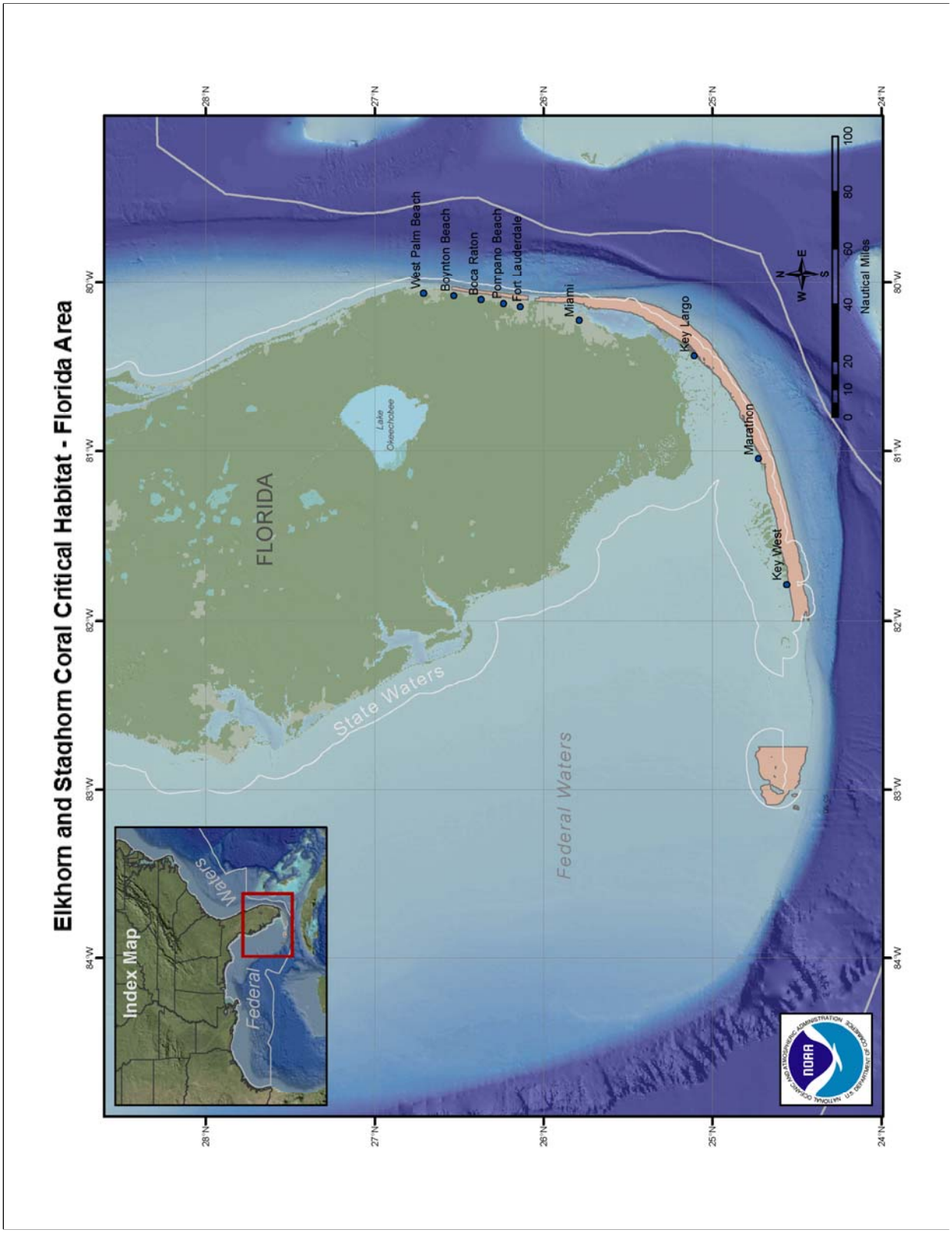
	nearshore predator concentration caused by submerged and emergent offshore structures), disrupt wave patterns necessary for orientation, and/or create excessive longshore currents. 2. Winter area: Florida does not contain any winter areas. 3. Breeding areas: the PBF of concentrated breeding habitat as those sites with high densities of both male and female adult individuals during the breeding season. PCEs that support this habitat are the following: (i) High densities of reproductive male and female loggerheads; (ii) Proximity to primary Florida migratory corridor; and (iii) Proximity to Florida nesting grounds. 4. Constricted migratory habitat: the PBF of constricted migratory habitat as high use migratory corridors that are constricted (limited in width) by land on one side and the edge of the continental shelf and Gulf Stream on the other side. PCEs that support this habitat are the following: (i) Constricted continental shelf area relative to nearby continental shelf waters that concentrate migratory pathways; and (ii) Passage conditions to allow for migration to and from nesting, breeding, and/or foraging areas. 5. Sargassum habitat: the PBF of loggerhead *Sargassum* habitat as developmental and foraging habitat for young loggerheads where surface waters form accumulations of floating material, especially *Sargassum*. PCEs that support this habitat are the following: (i) Convergence zones, surface-water downwelling areas, the margins of major boundary currents (Gulf Stream), and other locations where there are concentrated components of the *Sargassum* community in water temperatures suitable for the optimal growth of *Sargassum* and inhabitance of loggerheads; (ii) *Sargassum* in concentrations that support adequate prey abundance and cover; (iii) Available prey and other material associated with *Sargassum* habitat including, but not limited to, plants and cyanobacteria and animals native to the *Sargassum* community such as hydroids and copepods; and (iv) Sufficient water depth and proximity to available currents to ensure offshore transport (out of the surf zone), and foraging and cover requirements by *Sargassum* for post-hatchling loggerheads, i.e., >10 m depth.
Acropora (Staghorn and elkhorn coral)(73 FR 72210, Effective Date:11/26/2008)	The physical feature essential to the conservation of elkhorn and staghorn corals is: substrate of suitable quality and availability to support larval settlement and recruitment, and reattachment and recruitment of asexual fragments. "Substrate of suitable quality and availability" is defined as natural consolidated hard substrate or dead coral skeleton that is free from fleshy or turf macroalgae cover and sediment cover.
Johnson's seagrass (65 FR 17786, Effective Date: 04/05/2000)	Based on the best available information, general physical and biological features of the critical habitat areas include adequate water quality, salinity levels, water transparency, and stable, unconsolidated sediments that are free from physical disturbance.
North Atlantic right whale (The original rule is 59 FR 28805, Effective Date: 07/05/1994, and the proposed rule	**Original Rule features:** The nearshore waters of northeast Florida and southern Georgia were first designated as North Atlantic right whale critical habitat in 1994 based on use of the habitat as a winter calving ground and nursery area. At that time, essential features to critical habitat were not precisely defined; however, water temperature and depth were found to be important (59 FR 28805). The waters in the southeast critical habitat area average about 30 m (98 ft) in depth with a maximum depth of about 60 m (196 ft). Based on right whale sighting distribution data, the

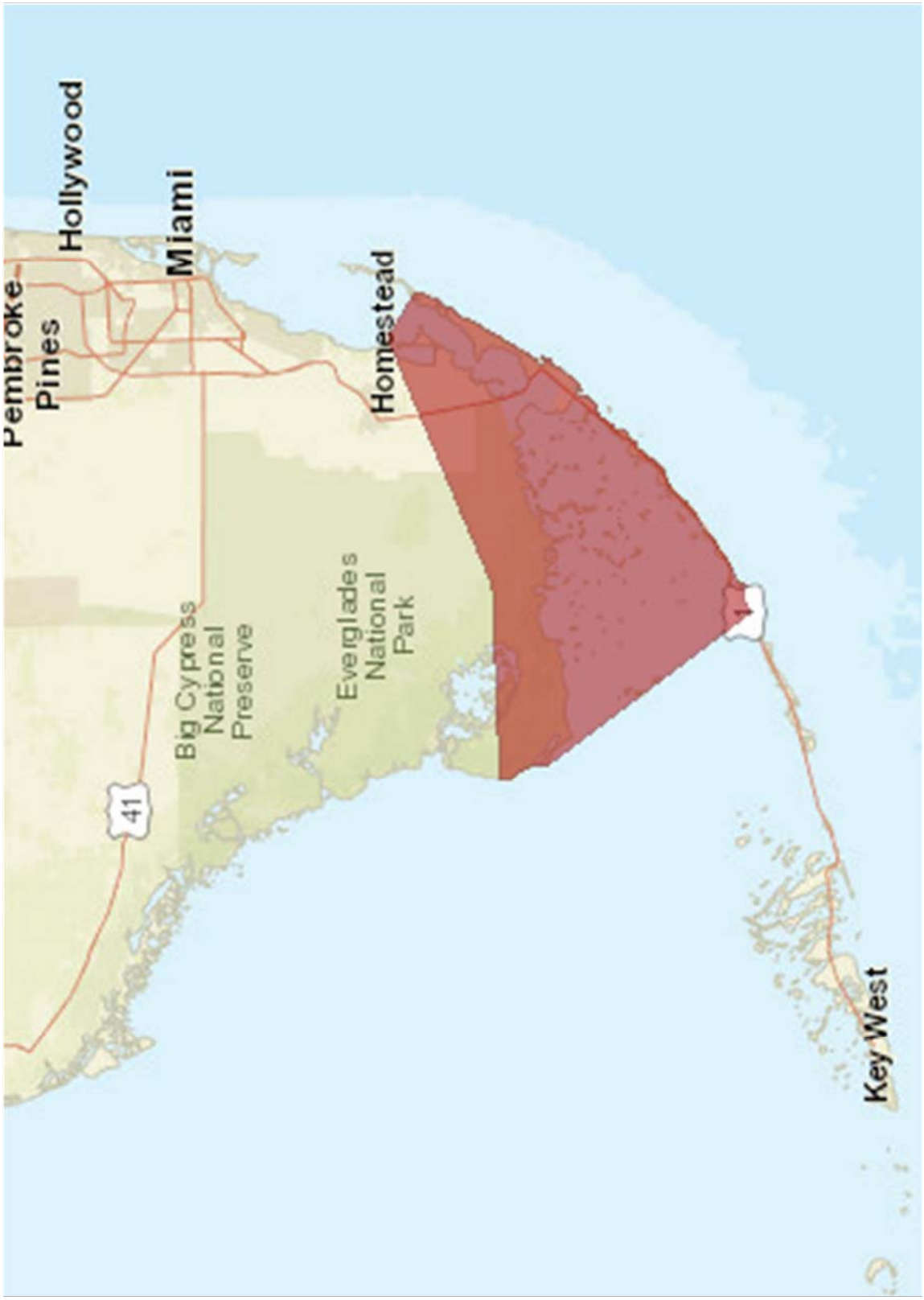
is 80 FR 9314, Effective Date: 02/20/ 2015)	average water depth at sighting was 12.6 m (41.3 ft), which is consistent with previous data suggesting North Atlantic right whales in the southeast prefer using the nearshore edge. While it is difficult to separate the effects of temperature from depth and proximity to shore, sighting data indicates that North Atlantic right whales clearly prefer a band of relatively cool water (10-13°C) while occupying southeast waters. **Proposed Rule features:** Critical habitat includes two areas (Units) located in the Gulf of Maine and Georges Bank Region (Unit 1) and off the coast of North Carolina, South Carolina, Georgia and Florida (Unit 2). *Unit 2.* The physical features essential to the conservation of the North Atlantic right whale, which provide calving area functions in Unit 2, are: (i) Sea surface conditions associated with Force 4 or less on the Beaufort Scale, (ii) Sea surface temperatures of 7°C to 17°C, and (iii) Water depths of 6 to 28 meters, where these features simultaneously co-occur over contiguous areas of at least 231 nmi^2 of ocean waters during the months of November through April. When these features are available, they are selected by right whale cows and calves in dynamic combinations that are suitable for calving, nursing, and rearing, and which vary, within the ranges specified, depending on factors such as weather and age of the calves.

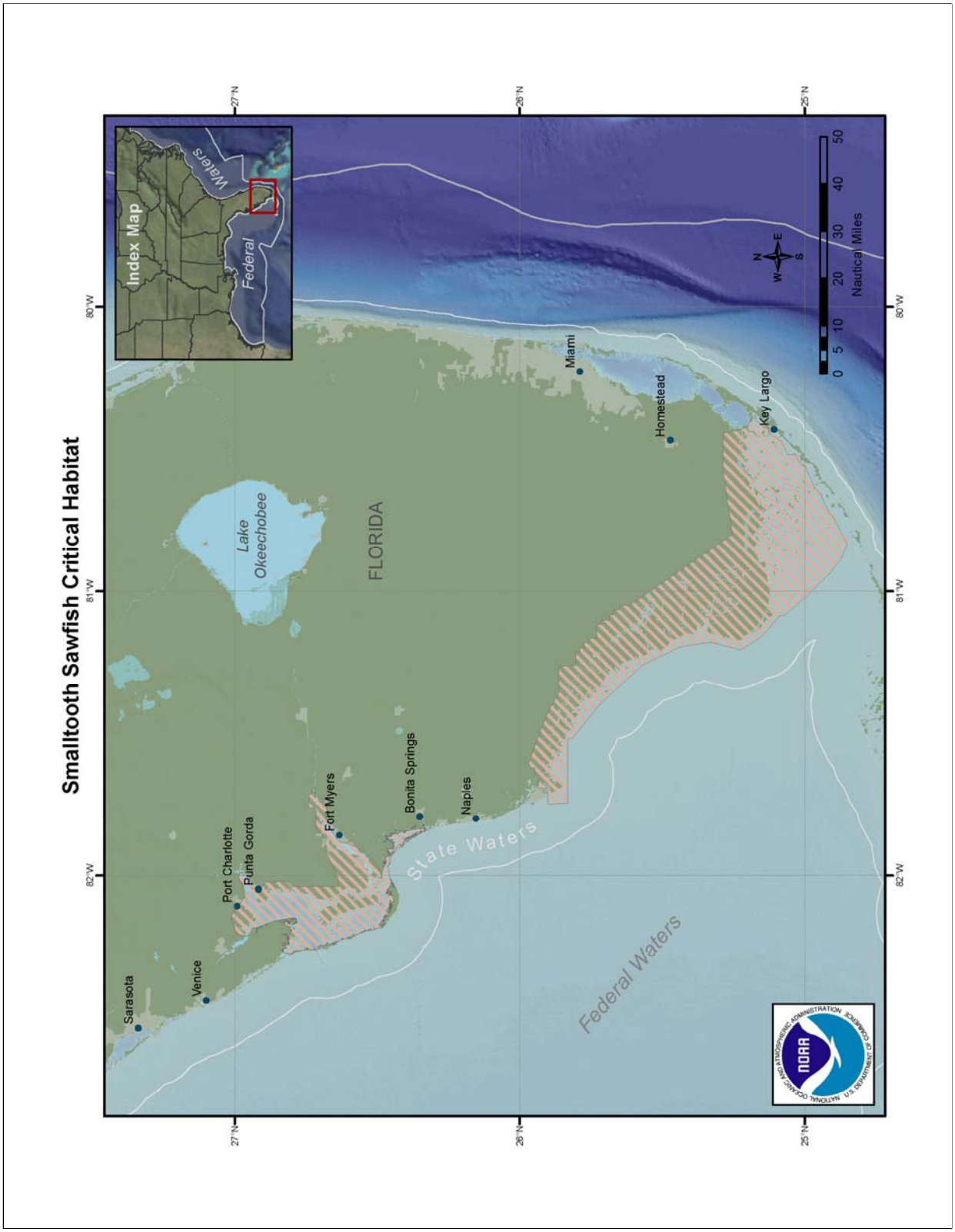
Note: These three pages used as Attachment 10 of the SPGP V are from the NMFS Statewide Programmatic Biological Opinion dated December 4, 2015. By Federal Register notice dated February 11, 2016, the FWS and NMFS amended their regulatioons to use the term 'essential physical and biological features' for designations made after this date instead of 'essential features' or 'primary consituent elements' found in the prior designations.

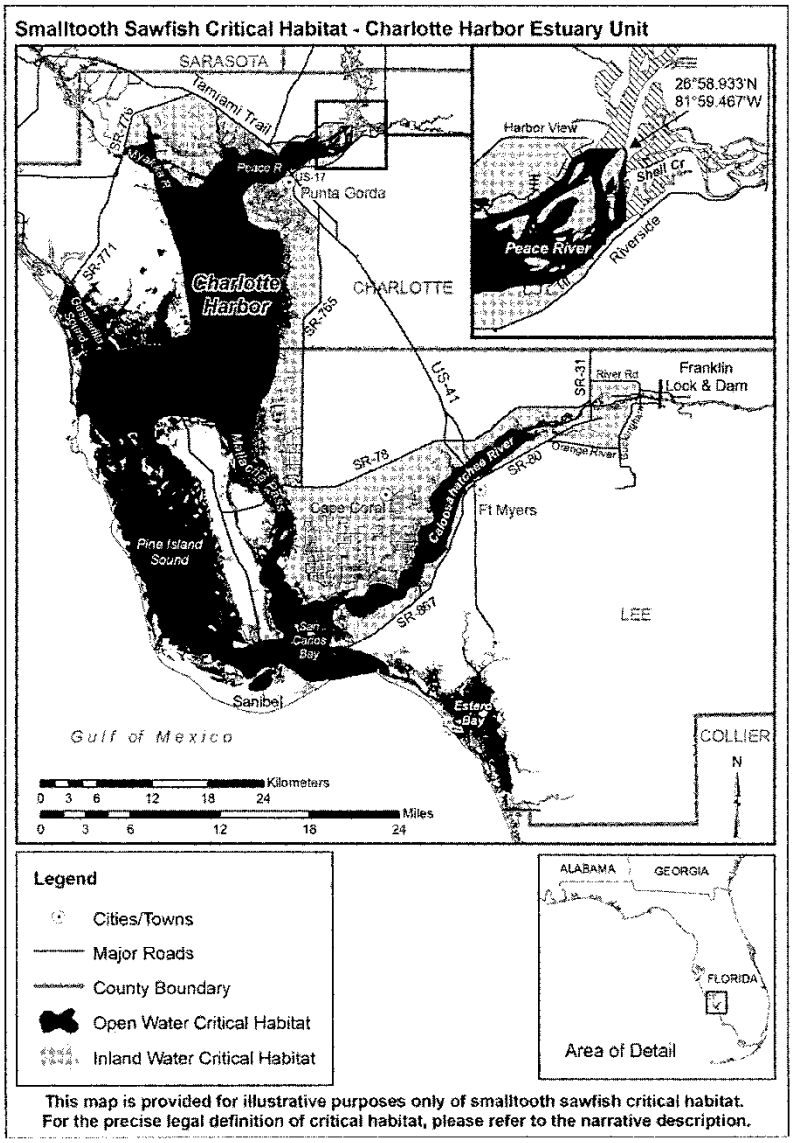
ATTACHMENT 11 TO SPGP V
PAGE 1 OF 2

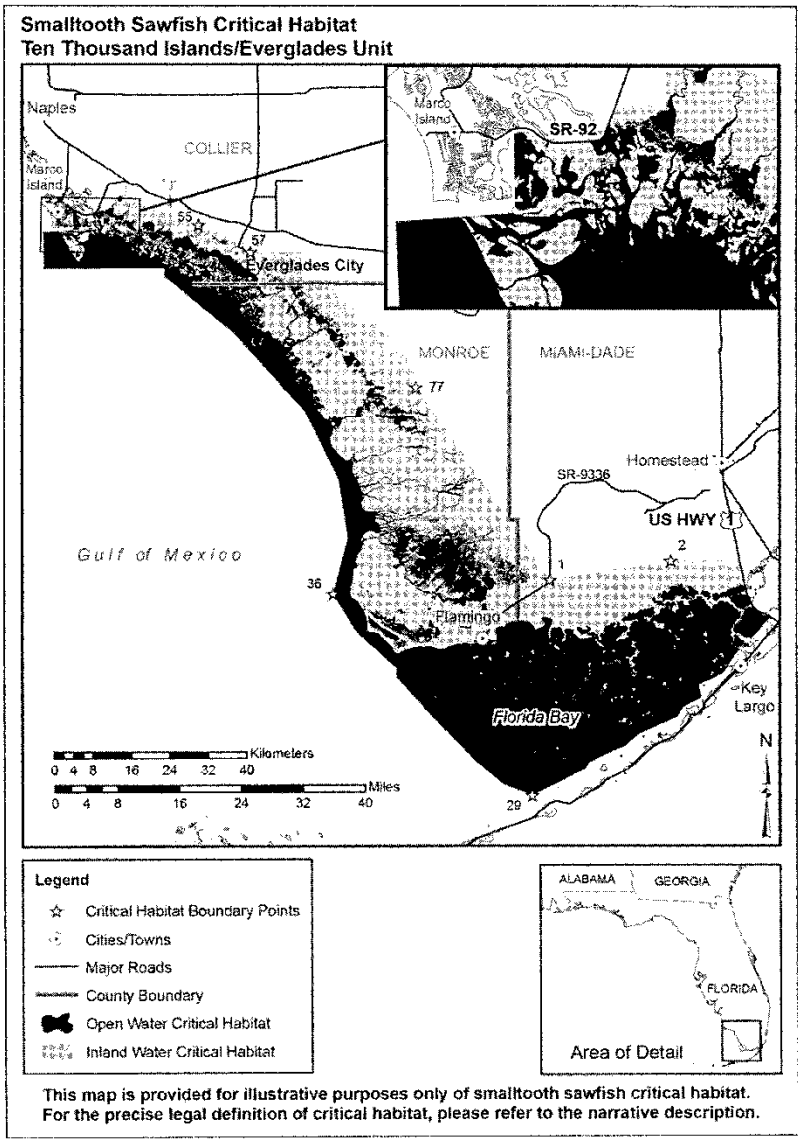



Elkhorn and Staghorn Coral Critical Habitat - Florida Area
West Palm Beach
Boynton Beach
Boca Raton
Pompano Beach
Fort Lauderdale
Miami
Key Largo
Marathon
Key West
FLORIDA
Lake Okeechobee
State Waters
Federal Waters
Index Map
Waters
Federal
Nautical Miles
0 10 20 40 60 80 100
N
S
E
W
NOAA
28°N
27°N
26°N
25°N
24°N
80°W
81°W
82°W
83°W
84°W

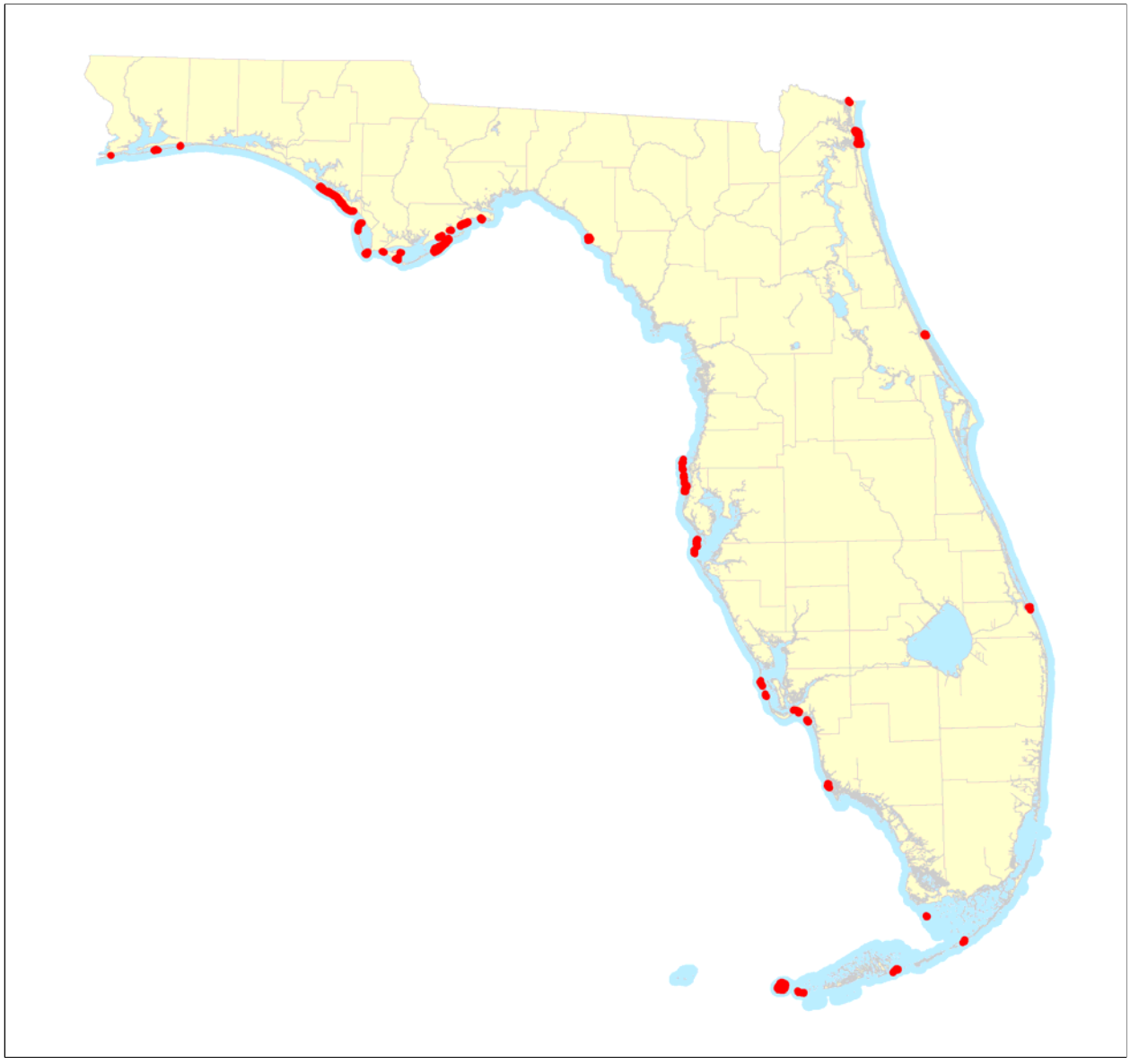

Pembroke Pines
Hollywood
Miami
Homestead
Big Cypress National Preserve
Everglades National Park
41
1
Key West

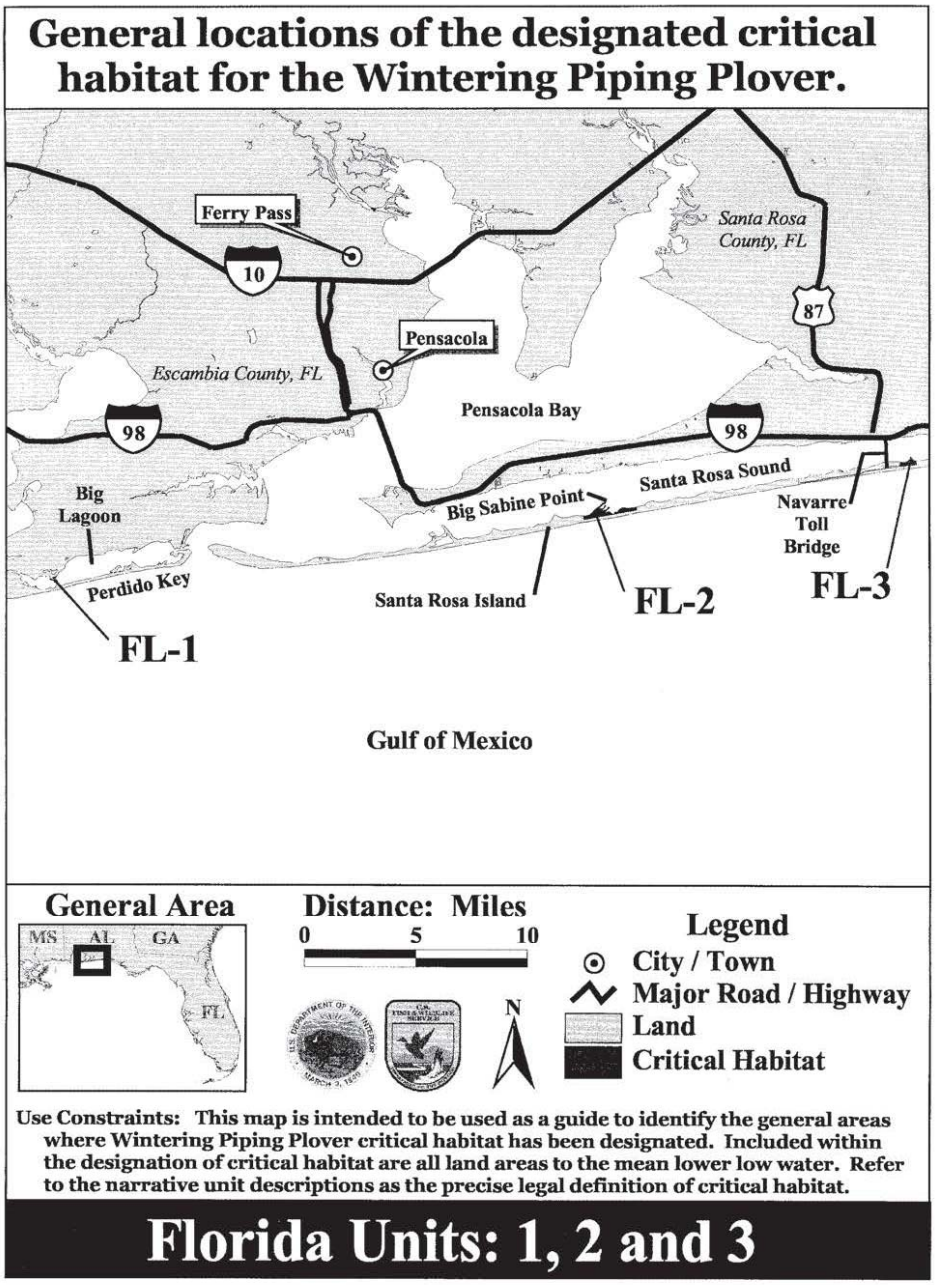

Smalltooth Sawfish Critical Habitat
Index Map
Waters
Federal
FLORIDA
Lake Okeechobee
State Waters
Federal Waters
Miami
Homestead
Key Largo
Bonita Springs
Naples
Fort Myers
Port Charlotte
Punta Gorda
Venice
Sarasota
Nautical Miles
0 5 10 20 30 40 50
N
W
E
S
80°W
81°W
82°W
27°N
26°N
25°N
NOAA

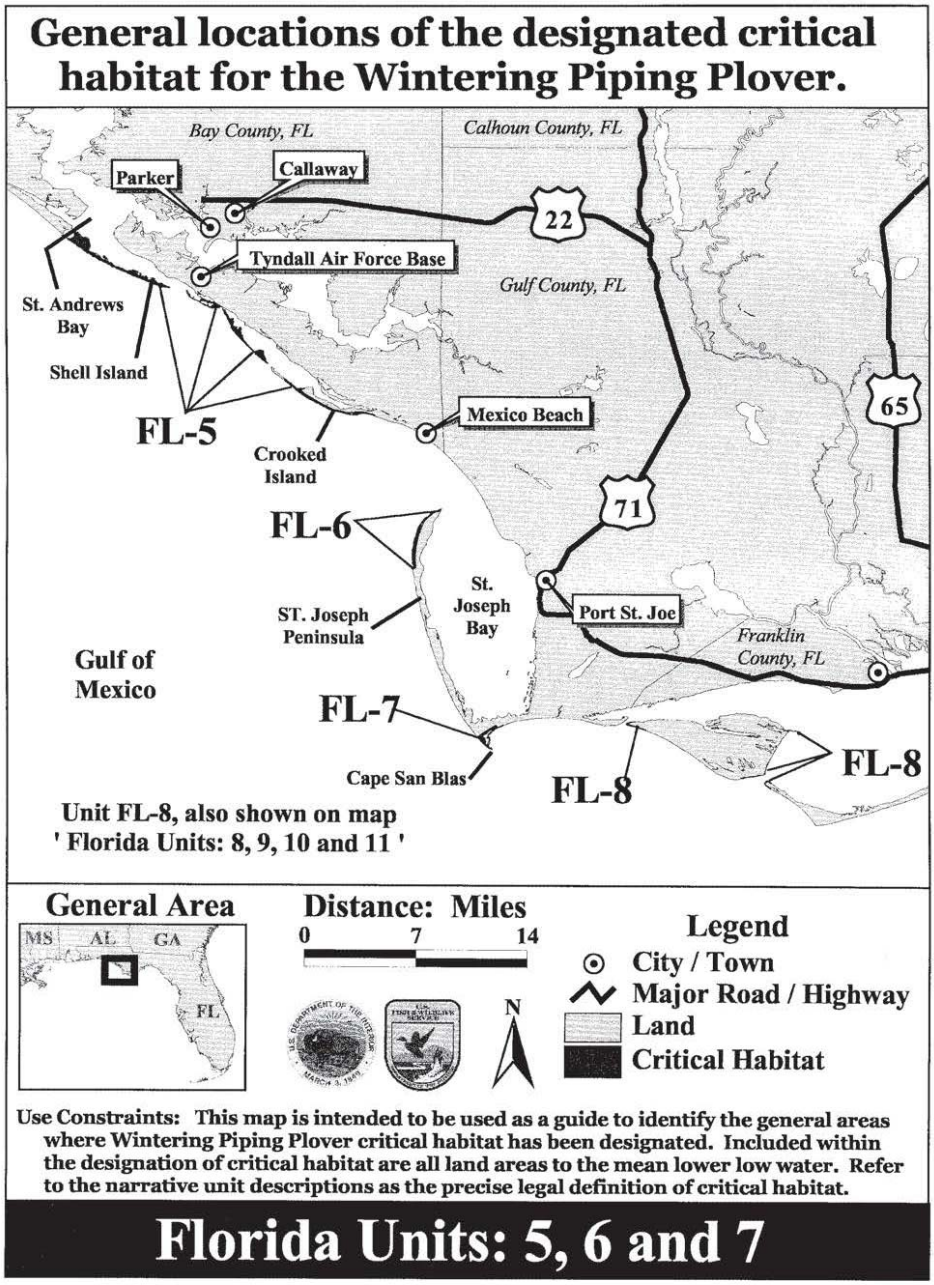

Smalltooth Sawfish Critical Habitat - Charlotte Harbor Estuary Unit
SARASOTA
Tamiami Trail
SR-776
Myakka R.
Peace R.
US-17
Punta Gorda
26°58.933'N
81°59.467'W
Harbor View
Shell Cr.
Peace River
Riverside
SR-771
Gasparilla Sound
Charlotte Harbor
CHARLOTTE
SR-765
US-41
SR-31
River Rd.
Franklin Lock & Dam
SR-78
Orange River
SR-80
Caloosa Hatchee River
Cape Coral
Ft Myers
Pine Island Sound
San Carlos Bay
SR-867
LEE
Sanibel
Estero Bay
Gulf of Mexico
COLLIER
N
Kilometers
0 3 6 12 18 24
Miles
0 3 6 12 18 24
Legend
Cities/Towns
Major Roads
County Boundary
Open Water Critical Habitat
Inland Water Critical Habitat
ALABAMA
GEORGIA
FLORIDA
Area of Detail
This map is provided for illustrative purposes only of smalltooth sawfish critical habitat.
For the precise legal definition of critical habitat, please refer to the narrative description.

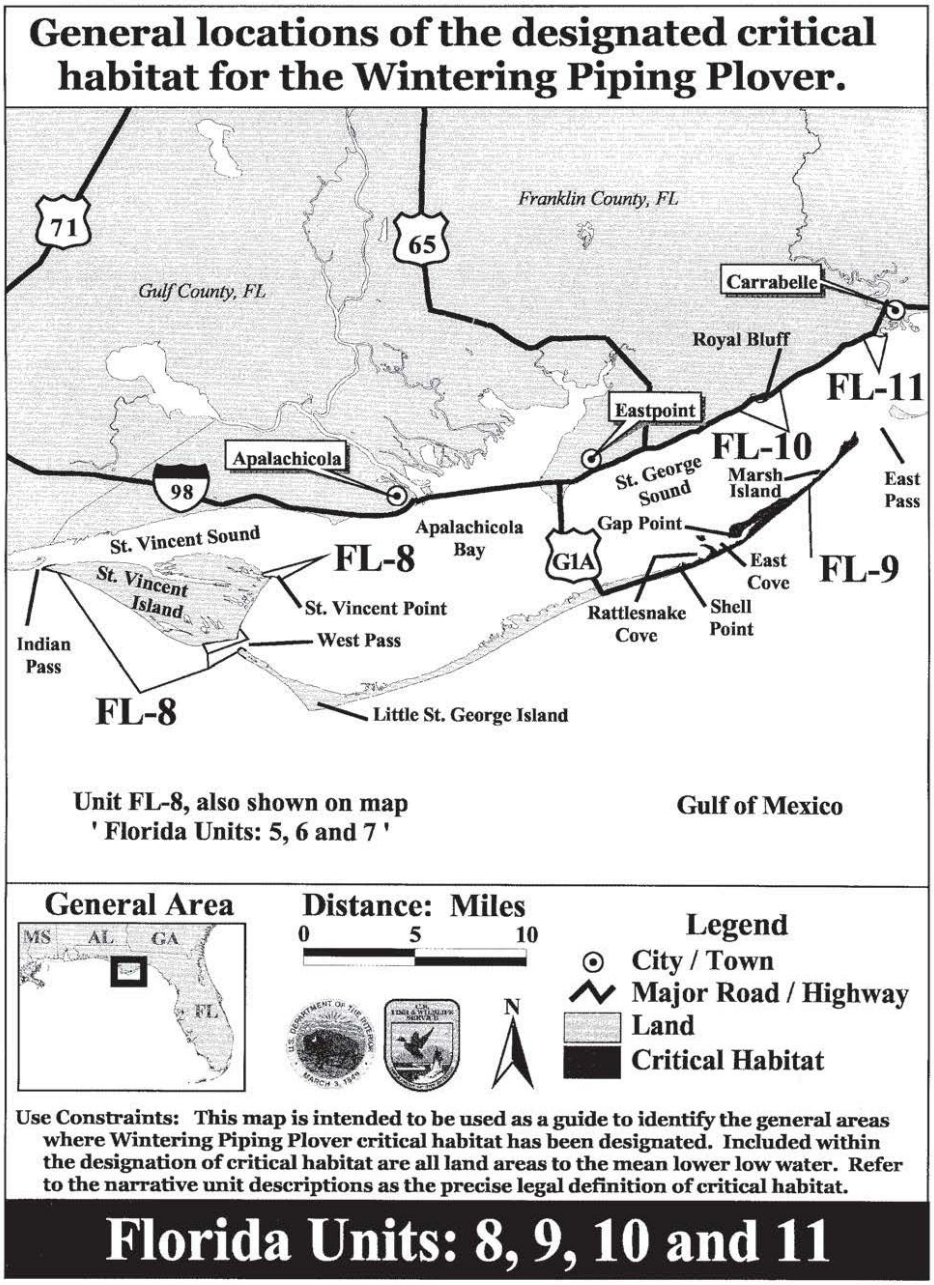

Smalltooth Sawfish Critical Habitat
Ten Thousand Islands/Everglades Unit
Naples
COLLIER
Marco Island
55
57
Everglades City
Marco Island
SR-92
MONROE
MIAMI-DADE
77
Homestead
SR-9336
US HWY 1
2
1
36
Gulf of Mexico
Flamingo
Florida Bay
Key Largo
29
N
Kilometers
0 4 8 16 24 32 40
Miles
0 4 8 16 24 32 40
Legend
Critical Habitat Boundary Points
Cities/Towns
Major Roads
County Boundary
Open Water Critical Habitat
Inland Water Critical Habitat
ALABAMA
GEORGIA
FLORIDA
Area of Detail
This map is provided for illustrative purposes only of smalltooth sawfish critical habitat.
For the precise legal definition of critical habitat, please refer to the narrative description.

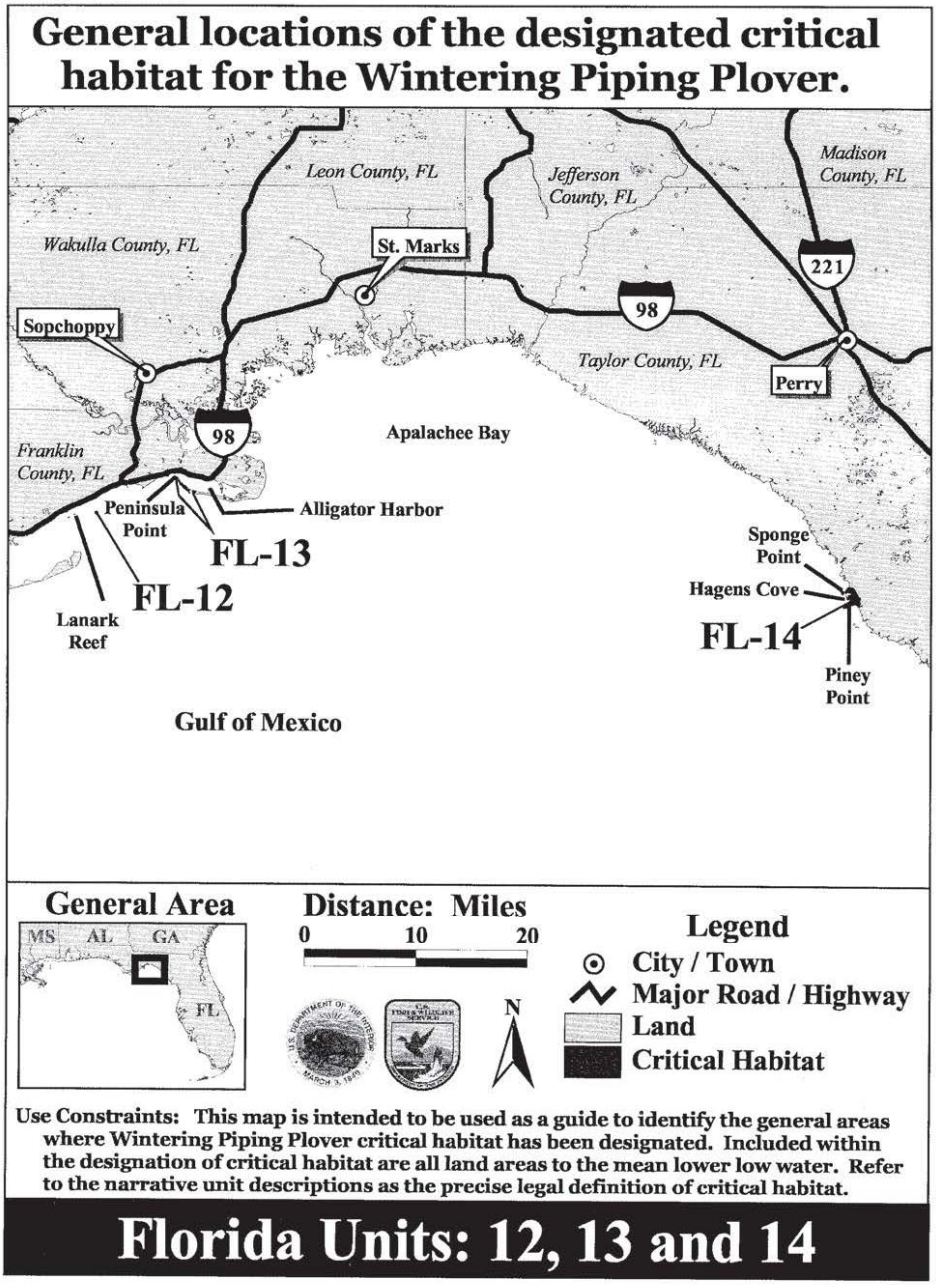
Pipng Plover Critical Habitat

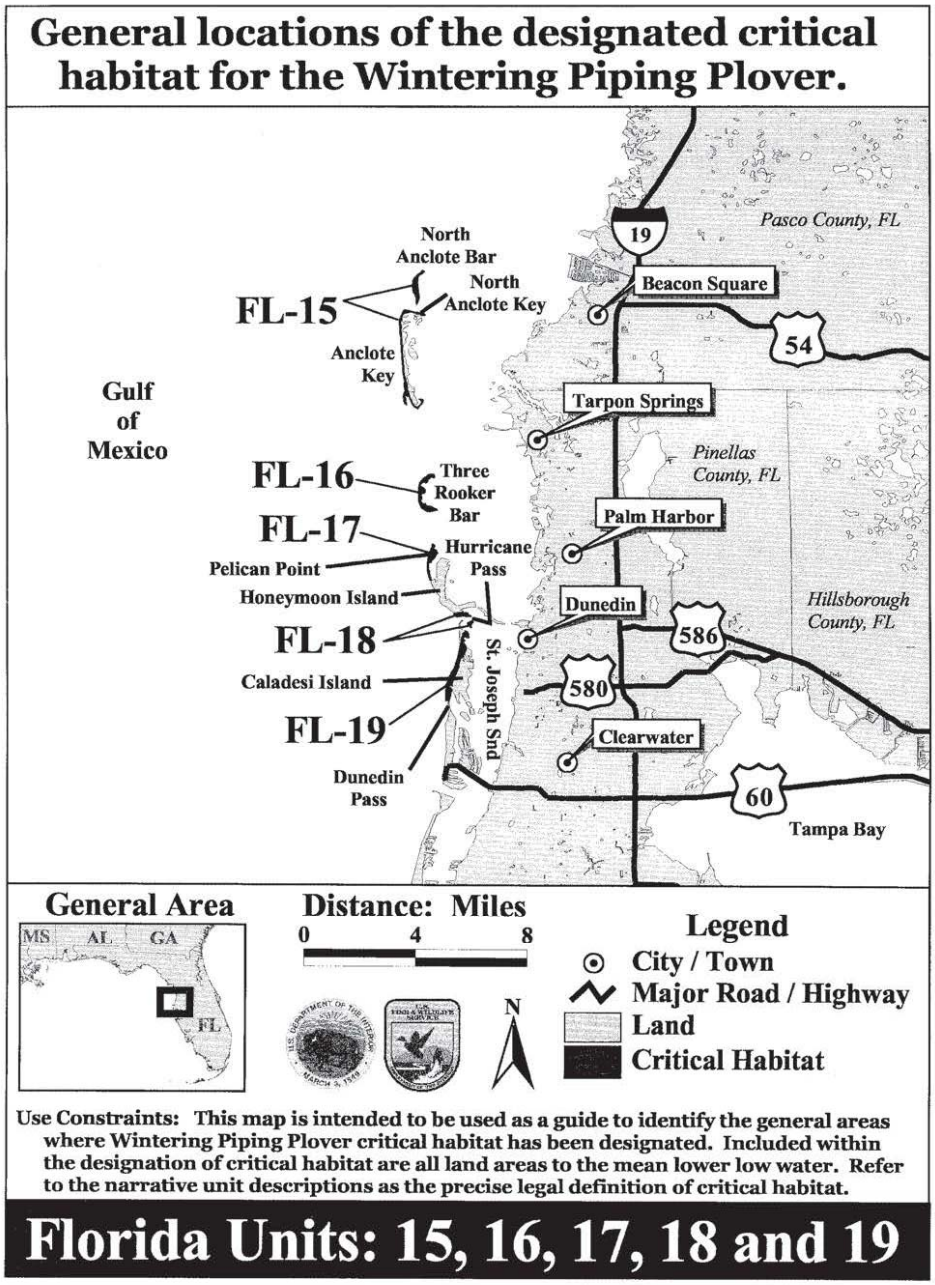


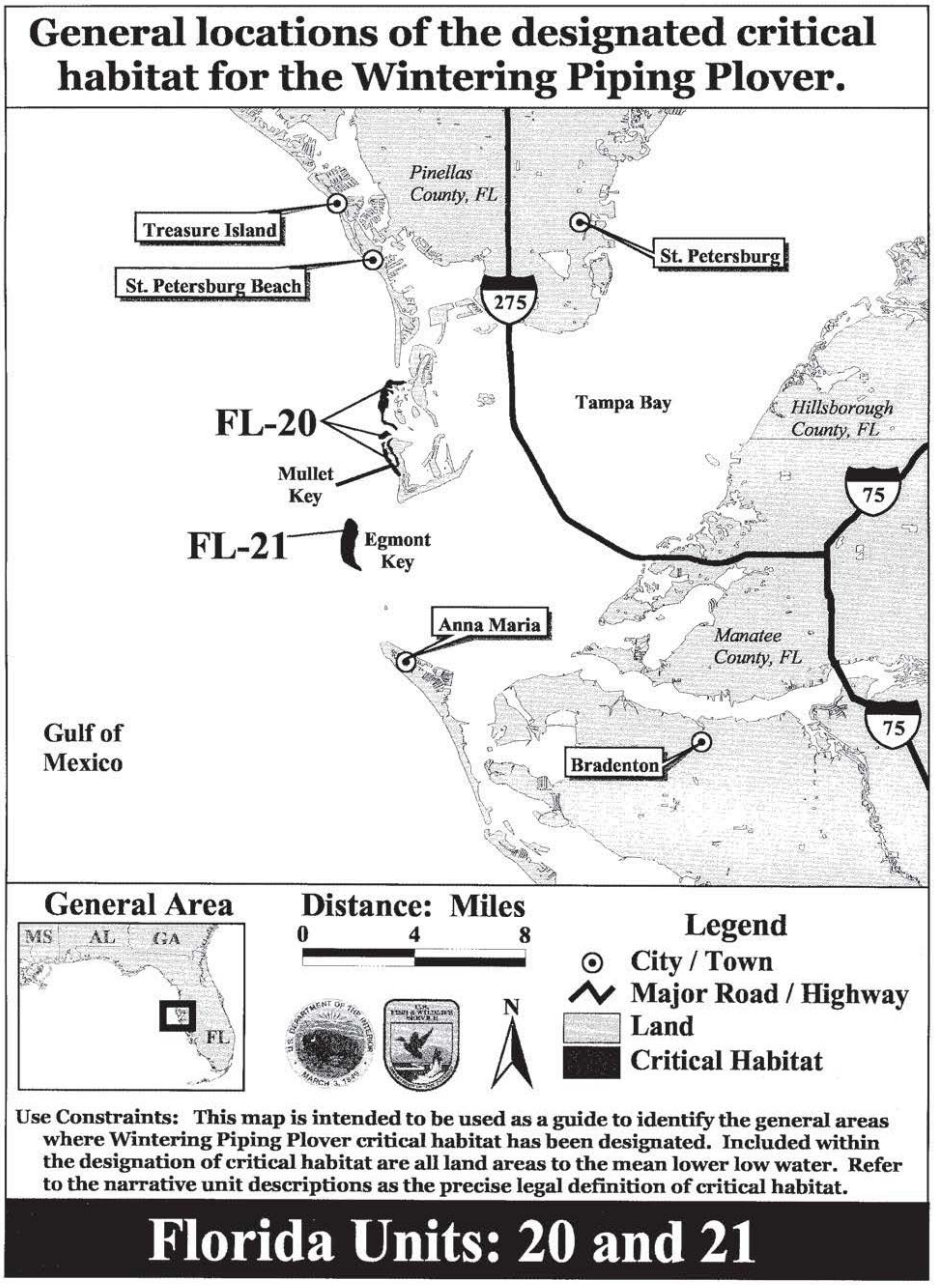

General locations of the designated critical habitat for the Wintering Piping Plover.
Ferry Pass
10
Pensacola
Escambia County, FL
Santa Rosa County, FL
87
98
98
Pensacola Bay
Big Lagoon
Perdido Key
FL-1
Big Sabine Point
Santa Rosa Sound
Santa Rosa Island
FL-2
Navarre Toll Bridge
FL-3
Gulf of Mexico
General Area
MS
AL
GA
FL
Distance: Miles
0
5
10
N
Legend
City / Town
Major Road / Highway
Land
Critical Habitat
Use Constraints: This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.
Florida Units: 1, 2 and 3

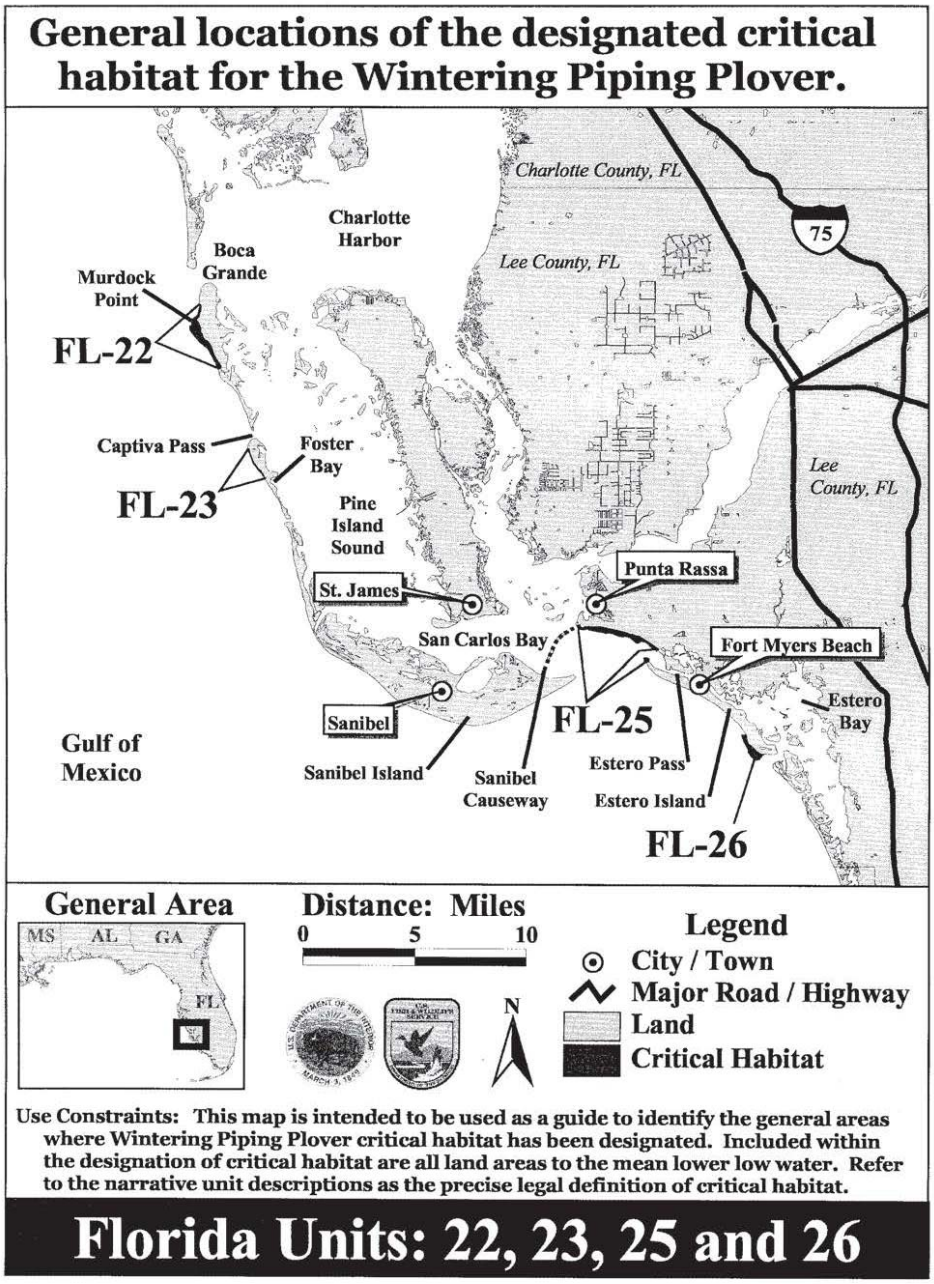

General locations of the designated critical habitat for the Wintering Piping Plover.
Bay County, FL
Calhoun County, FL
Parker
Callaway
22
Tyndall Air Force Base
Gulf County, FL
St. Andrews Bay
Shell Island
FL-5
Crooked Island
Mexico Beach
65
71
FL-6
St. Joseph Peninsula
St. Joseph Bay
Port St. Joe
Franklin County, FL
Gulf of Mexico
FL-7
Cape San Blas
FL-8
FL-8
Unit FL-8, also shown on map ' Florida Units: 8, 9, 10 and 11 '
General Area
MS
AL
GA
FL
Distance: Miles
0
7
14
N
Legend
City / Town
Major Road / Highway
Land
Critical Habitat
Use Constraints: This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.
Florida Units: 5, 6 and 7

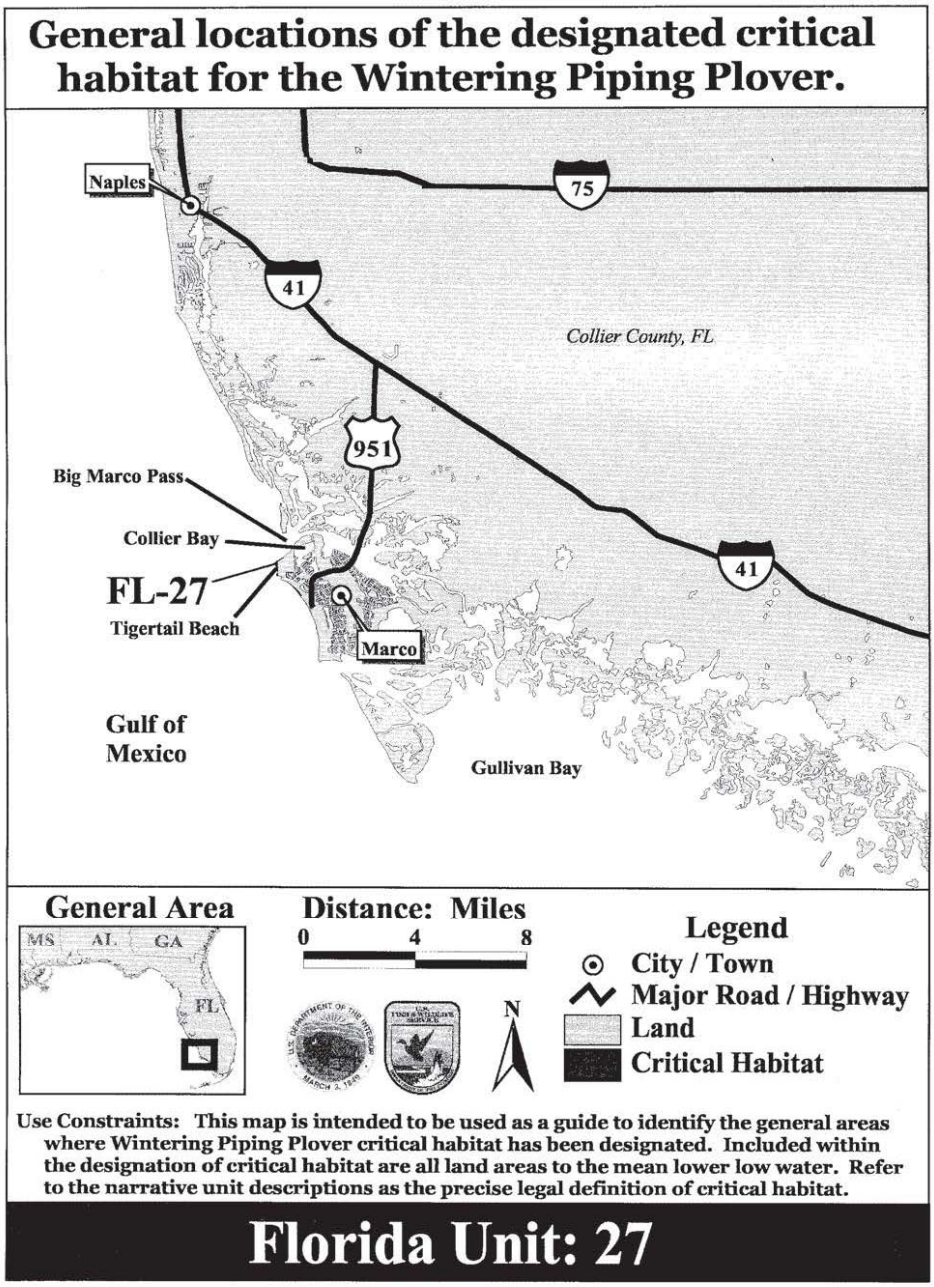

General locations of the designated critical habitat for the Wintering Piping Plover.
71
65
Franklin County, FL
Gulf County, FL
Carrabelle
Royal Bluff
FL-11
Eastpoint
FL-10
Apalachicola
98
St. George Sound
Marsh Island
East Pass
Gap Point
St. Vincent Sound
Apalachicola Bay
FL-8
G1A
East Cove
FL-9
St. Vincent Island
St. Vincent Point
Rattlesnake Cove
Shell Point
Indian Pass
West Pass
FL-8
Little St. George Island
Unit FL-8, also shown on map
' Florida Units: 5, 6 and 7 '
Gulf of Mexico
General Area
MS
AL
GA
FL
Distance: Miles
0
5
10
N
Legend
City / Town
Major Road / Highway
Land
Critical Habitat
Use Constraints: This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.
Florida Units: 8, 9, 10 and 11

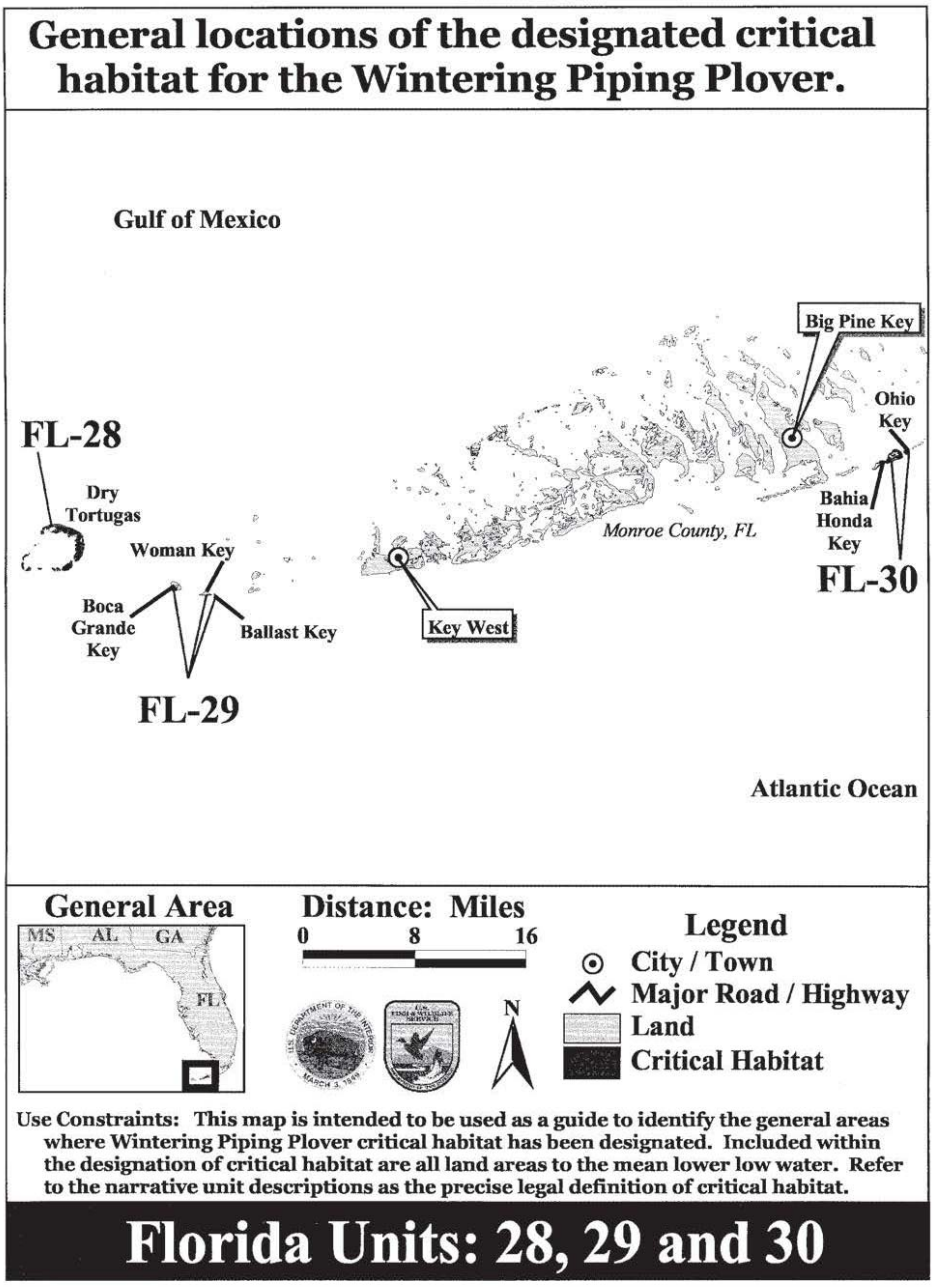

General locations of the designated critical habitat for the Wintering Piping Plover.
Leon County, FL
Jefferson County, FL
Madison County, FL
Wakulla County, FL
St. Marks
221
98
Sopchoppy
Taylor County, FL
Perry
98
Apalachee Bay
Franklin County, FL
Peninsula Point
Alligator Harbor
FL-13
FL-12
Lanark Reef
Sponge Point
Hagens Cove
FL-14
Piney Point
Gulf of Mexico
General Area
MS
AL
GA
FL
Distance: Miles
0
10
20
N
Legend
City / Town
Major Road / Highway
Land
Critical Habitat
Use Constraints: This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.
Florida Units: 12, 13 and 14

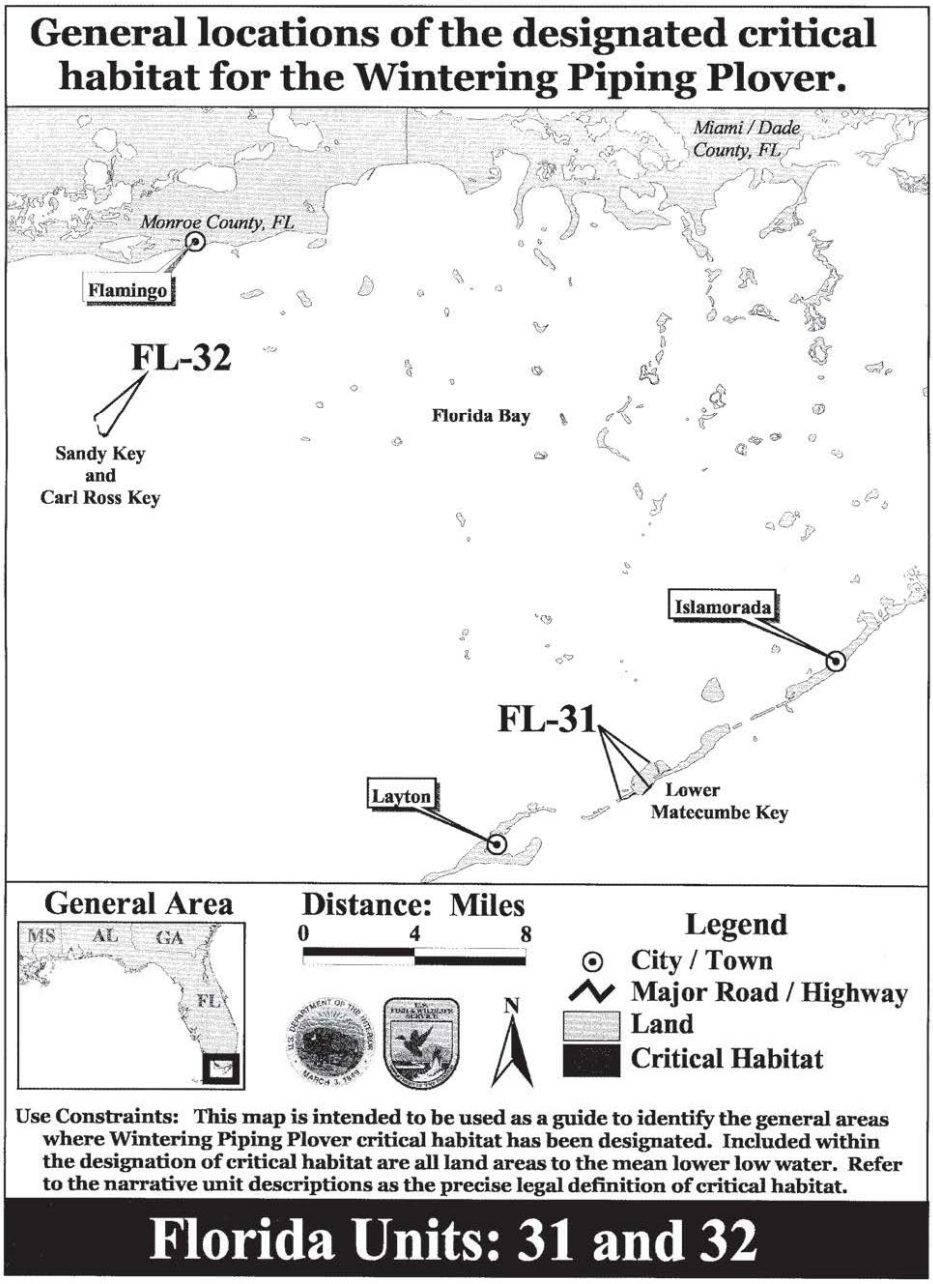

General locations of the designated critical habitat for the Wintering Piping Plover.
North Anclote Bar
North Anclote Key
FL-15
Anclote Key
Gulf of Mexico
FL-16
Three Rooker Bar
FL-17
Hurricane Pass
Pelican Point
Honeymoon Island
FL-18
Caladesi Island
FL-19
Dunedin Pass
St. Joseph Snd
19
Pasco County, FL
Beacon Square
54
Tarpon Springs
Pinellas County, FL
Palm Harbor
Dunedin
586
Hillsborough County, FL
580
Clearwater
60
Tampa Bay
General Area
MS
AL
GA
FL
Distance: Miles
0
4
8
N
Legend
City / Town
Major Road / Highway
Land
Critical Habitat
Use Constraints: This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.
Florida Units: 15, 16, 17, 18 and 19

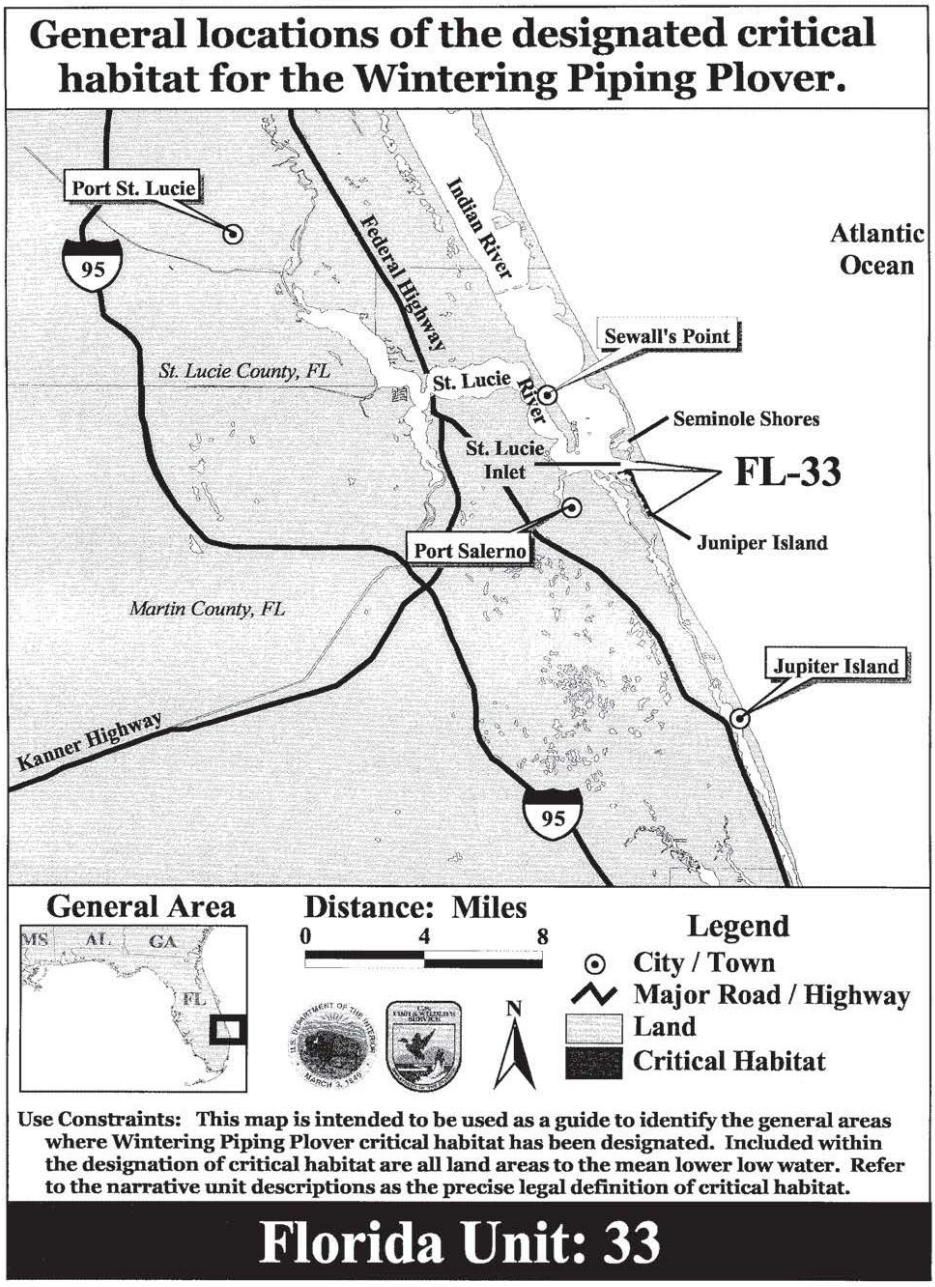

General locations of the designated critical habitat for the Wintering Piping Plover.
Pinellas County, FL
Treasure Island
St. Petersburg
St. Petersburg Beach
275
Tampa Bay
Hillsborough County, FL
FL-20
Mullet Key
75
FL-21
Egmont Key
Anna Maria
Manatee County, FL
Gulf of Mexico
75
Bradenton
General Area
MS
AL
GA
FL
Distance: Miles
0
4
8
N
Legend
City / Town
Major Road / Highway
Land
Critical Habitat
Use Constraints: This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.
Florida Units: 20 and 21

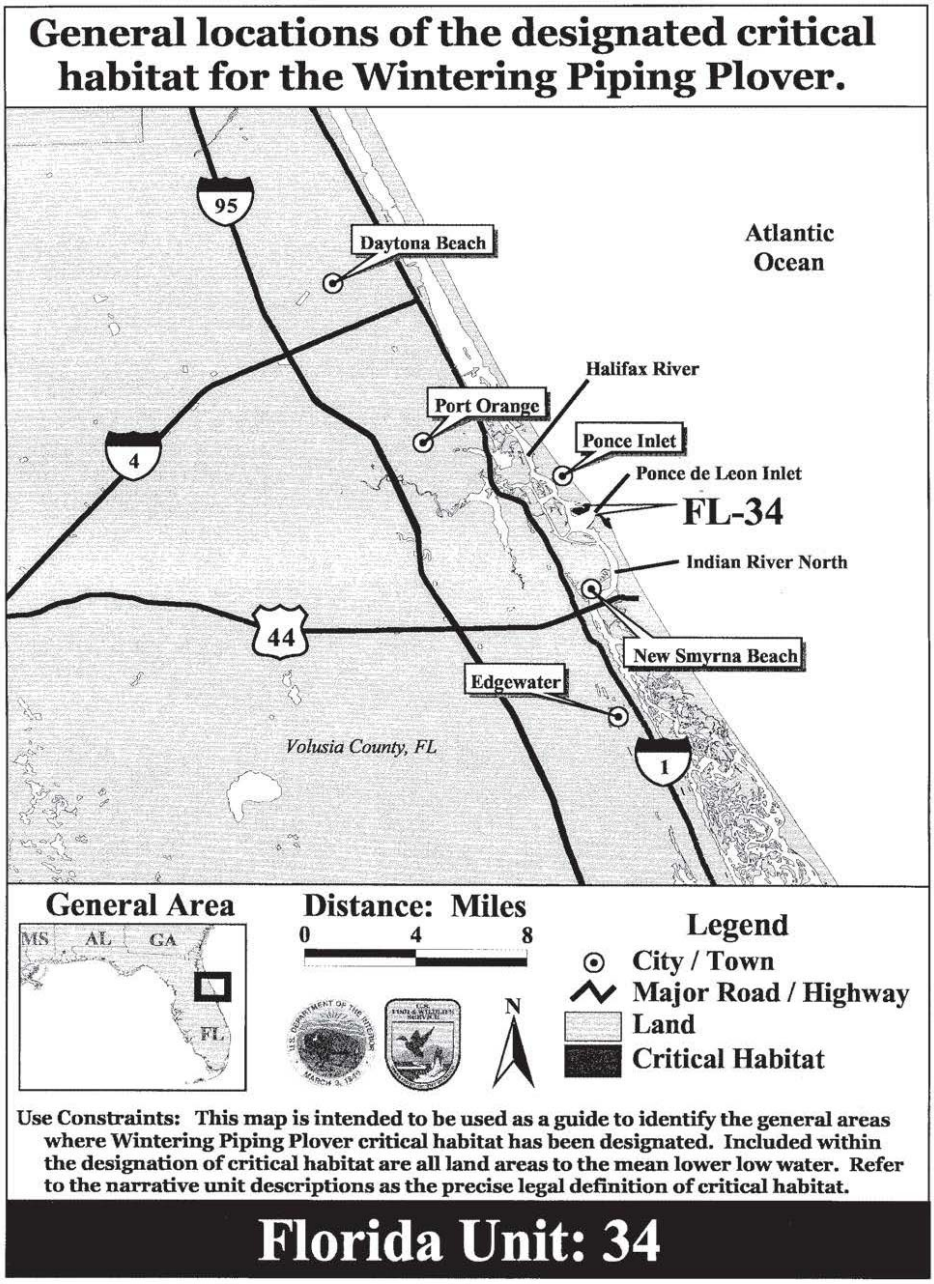

General locations of the designated critical habitat for the Wintering Piping Plover.
Charlotte County, FL
Charlotte Harbor
Boca Grande
Murdock Point
FL-22
Lee County, FL
75
Captiva Pass
Foster Bay
FL-23
Pine Island Sound
Lee County, FL
Punta Rassa
St. James
San Carlos Bay
Fort Myers Beach
Estero Bay
Sanibel
FL-25
Gulf of Mexico
Sanibel Island
Sanibel Causeway
Estero Pass
Estero Island
FL-26
General Area
MS
AL
GA
FL
Distance: Miles
0
5
10
N
Legend
City / Town
Major Road / Highway
Land
Critical Habitat
Use Constraints: This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.
Florida Units: 22, 23, 25 and 26

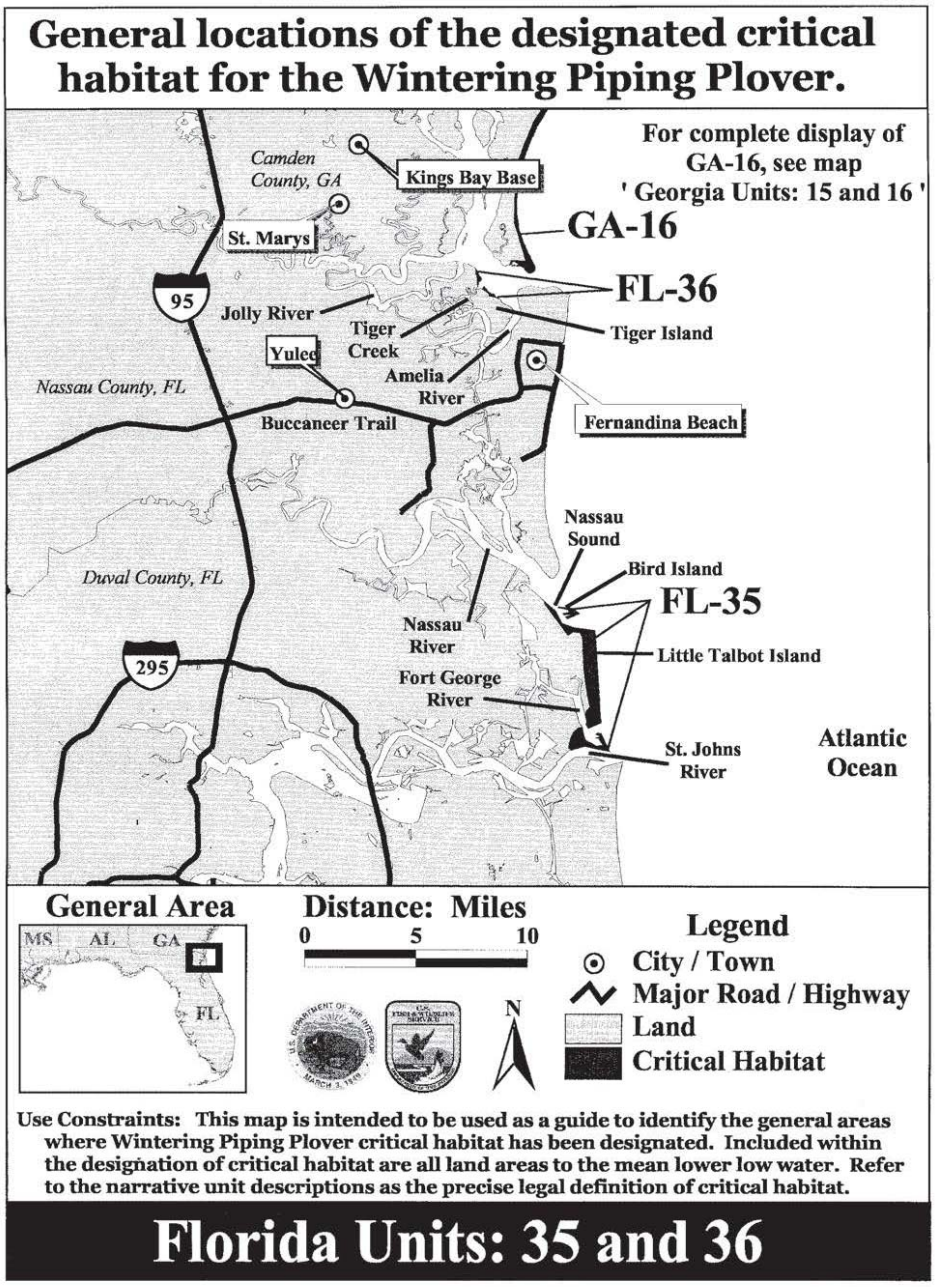

General locations of the designated critical habitat for the Wintering Piping Plover.
Naples
75
41
Collier County, FL
951
Big Marco Pass
Collier Bay
FL-27
Tigertail Beach
Marco
41
Gulf of Mexico
Gullivan Bay
General Area
MS
AL
GA
FL
Distance: Miles
0
4
8
N
Legend
City / Town
Major Road / Highway
Land
Critical Habitat
Use Constraints: This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.
Florida Unit: 27


General locations of the designated critical habitat for the Wintering Piping Plover.
Gulf of Mexico
Big Pine Key
Ohio Key
FL-28
Dry Tortugas
Woman Key
Boca Grande Key
Ballast Key
Monroe County, FL
Bahia Honda Key
FL-30
Key West
FL-29
Atlantic Ocean
General Area
MS
AL
GA
FL
Distance: Miles
0
8
16
N
Legend
City / Town
Major Road / Highway
Land
Critical Habitat
Use Constraints: This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.
Florida Units: 28, 29 and 30

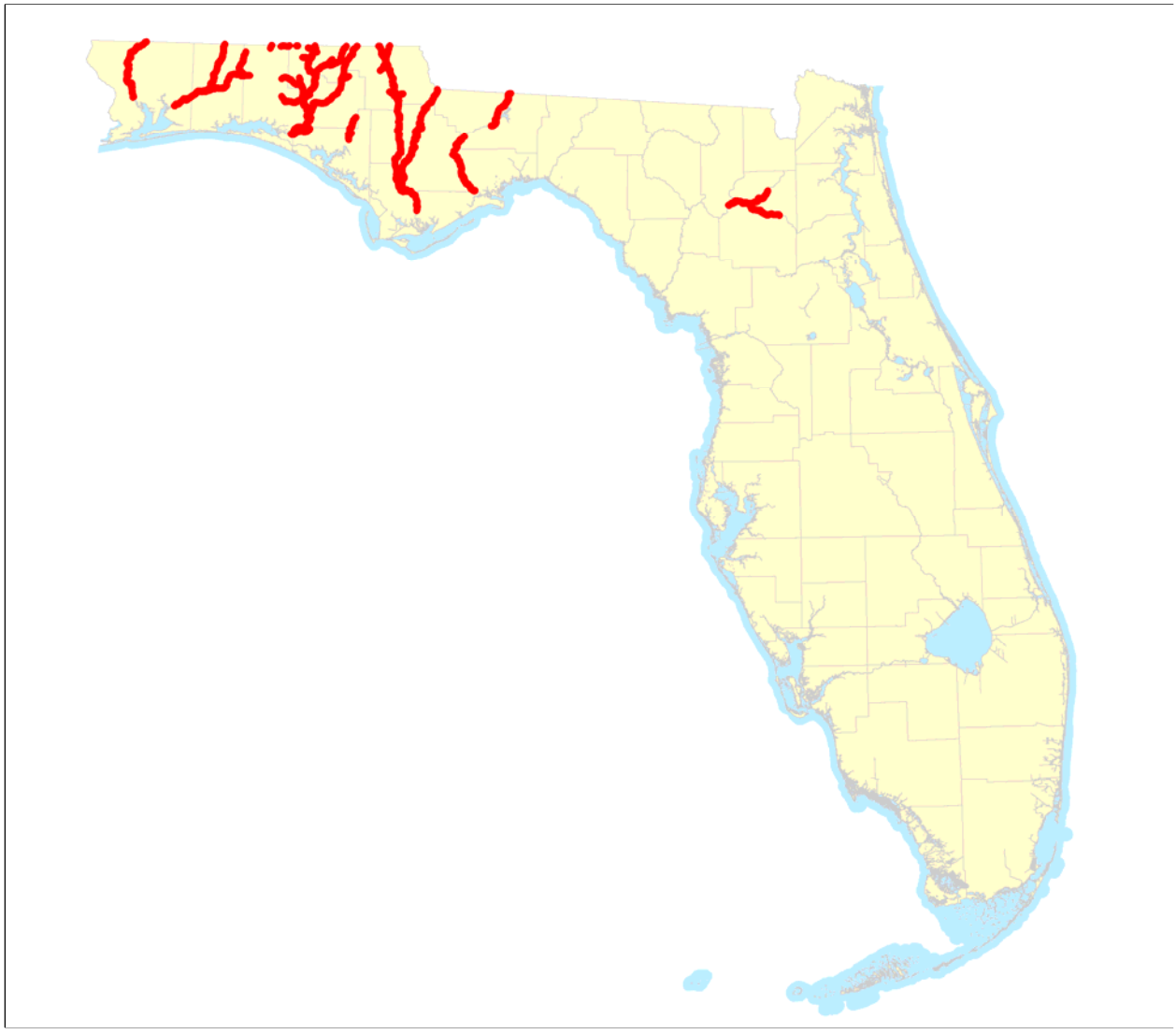

General locations of the designated critical habitat for the Wintering Piping Plover.
Miami / Dade County, FL
Monroe County, FL
Flamingo
FL-32
Florida Bay
Sandy Key and Carl Ross Key
Islamorada
FL-31
Lower Matecumbe Key
Layton
General Area
MS
AL
GA
FL
Distance: Miles
0
4
8
N
Legend
City / Town
Major Road / Highway
Land
Critical Habitat
Use Constraints: This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.
Florida Units: 31 and 32

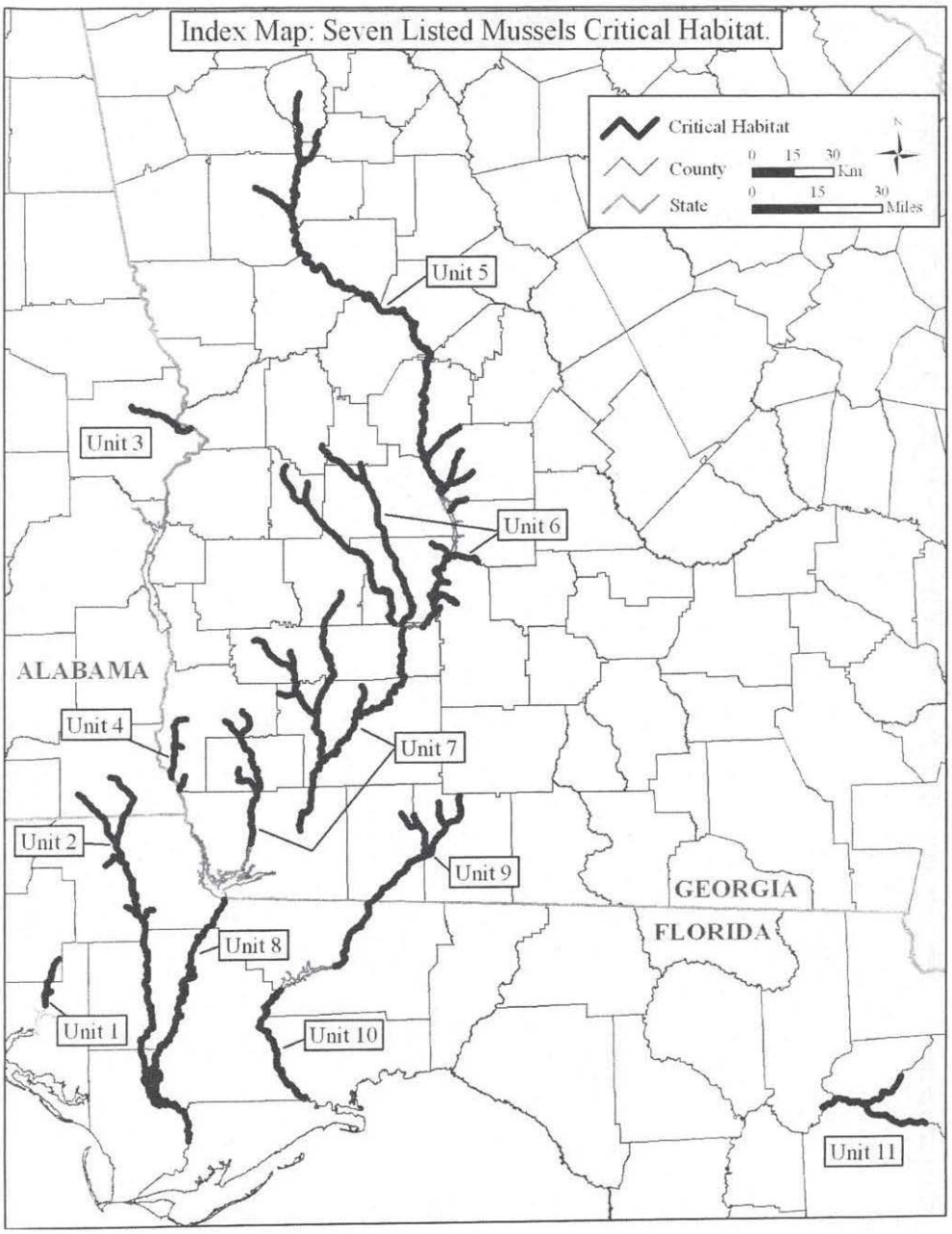

General locations of the designated critical habitat for the Wintering Piping Plover.
Port St. Lucie
95
Federal Highway
Indian River
Atlantic Ocean
Sewall's Point
St. Lucie County, FL
St. Lucie River
Seminole Shores
St. Lucie Inlet
FL-33
Juniper Island
Port Salerno
Martin County, FL
Jupiter Island
Kanner Highway
95
General Area
MS
AL
GA
FL
Distance: Miles
0
4
8
N
Legend
City / Town
Major Road / Highway
Land
Critical Habitat
Use Constraints: This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.
Florida Unit: 33

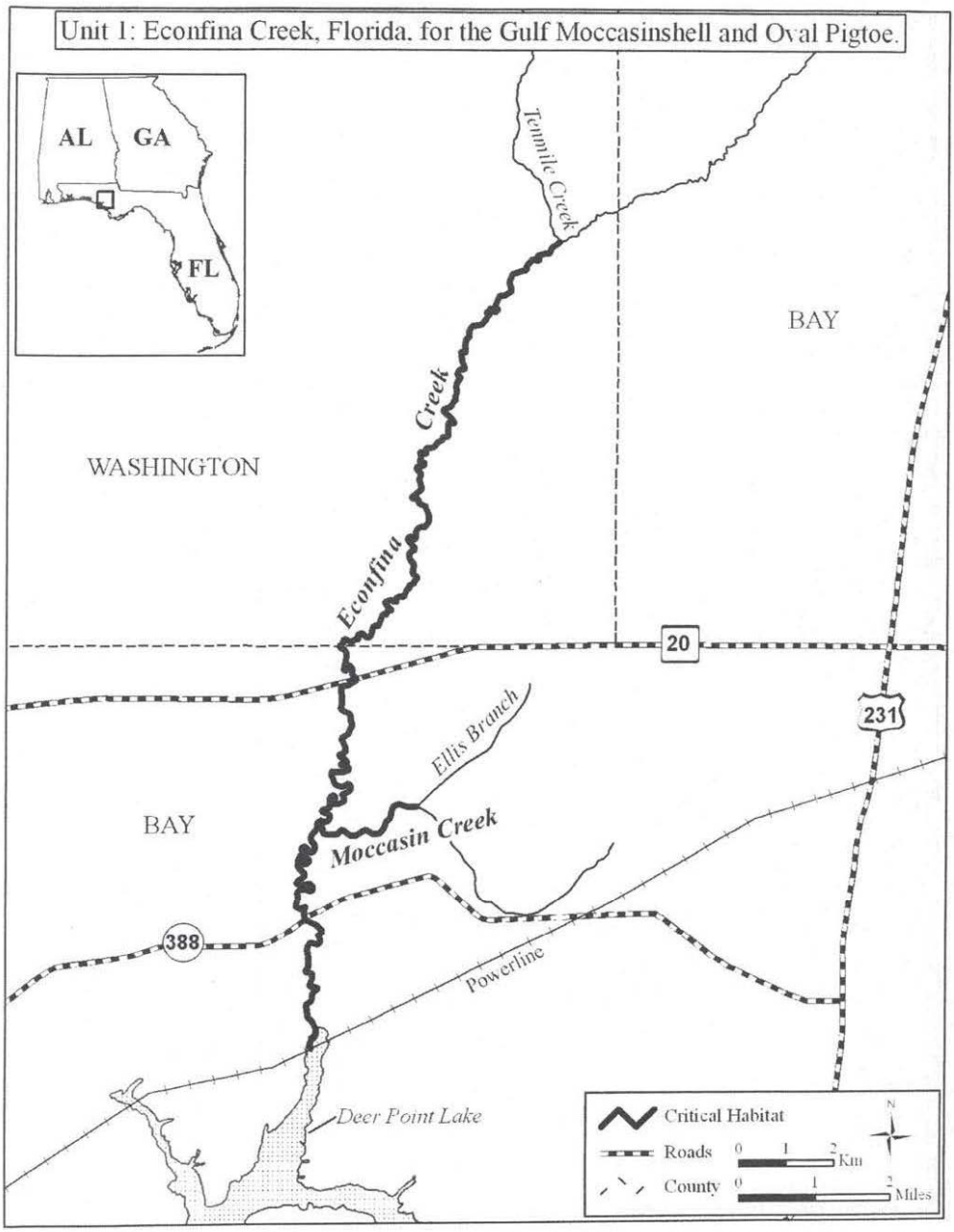

General locations of the designated critical habitat for the Wintering Piping Plover.
95
Daytona Beach
Atlantic Ocean
Halifax River
Port Orange
Ponce Inlet
Ponce de Leon Inlet
FL-34
4
Indian River North
44
New Smyrna Beach
Edgewater
Volusia County, FL
1
General Area
MS
AL
GA
FL
Distance: Miles
0
4
8
N
Legend
City / Town
Major Road / Highway
Land
Critical Habitat
Use Constraints: This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.
Florida Unit: 34


General locations of the designated critical habitat for the Wintering Piping Plover.
Camden County, GA
Kings Bay Base
St. Marys
For complete display of GA-16, see map ' Georgia Units: 15 and 16 '
GA-16
FL-36
95
Jolly River
Tiger Creek
Tiger Island
Yulee
Amelia River
Nassau County, FL
Buccaneer Trail
Fernandina Beach
Nassau Sound
Bird Island
Duval County, FL
FL-35
Nassau River
Little Talbot Island
295
Fort George River
St. Johns River
Atlantic Ocean
General Area
MS
AL
GA
FL
Distance: Miles
0
5
10
N
Legend
City / Town
Major Road / Highway
Land
Critical Habitat
Use Constraints: This map is intended to be used as a guide to identify the general areas where Wintering Piping Plover critical habitat has been designated. Included within the designation of critical habitat are all land areas to the mean lower low water. Refer to the narrative unit descriptions as the precise legal definition of critical habitat.
Florida Units: 35 and 36

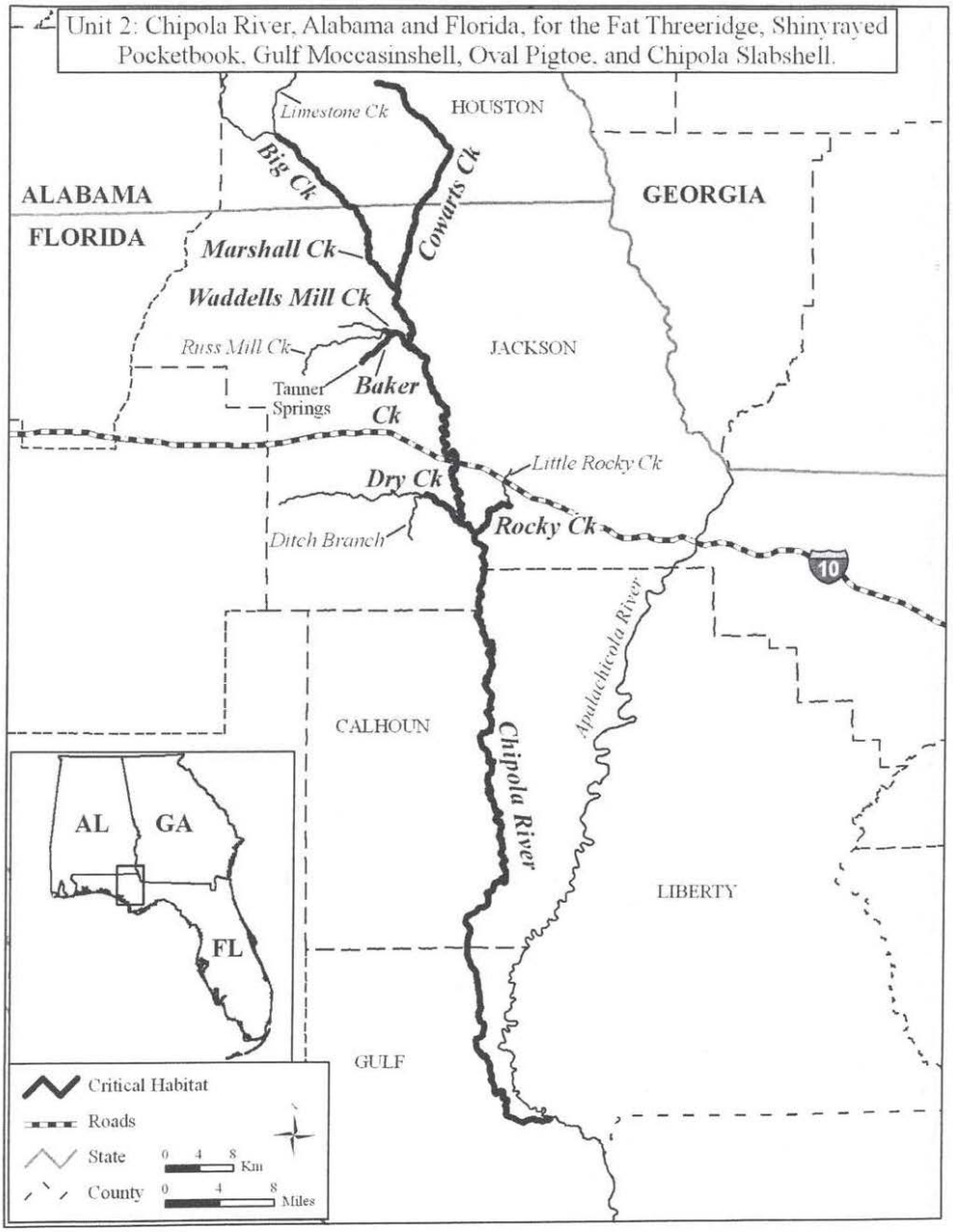
Freshwater Mussels Critical Habitat

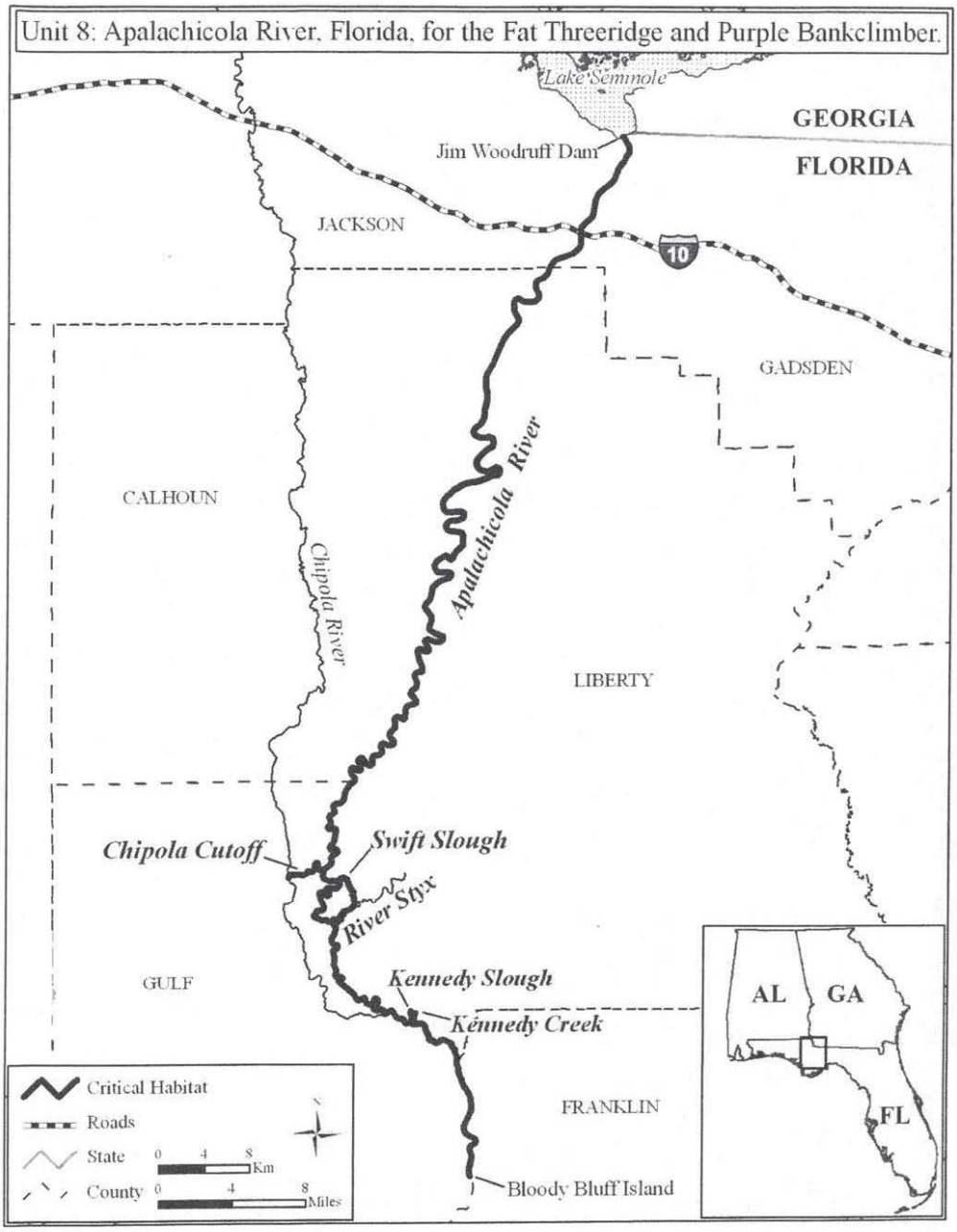



Index Map: Seven Listed Mussels Critical Habitat.
Critical Habitat
County
State
0 15 30 Km
0 15 30 Miles
Unit 5
Unit 3
Unit 6
ALABAMA
Unit 4
Unit 7
Unit 2
Unit 9
GEORGIA
FLORIDA
Unit 8
Unit 1
Unit 10
Unit 11

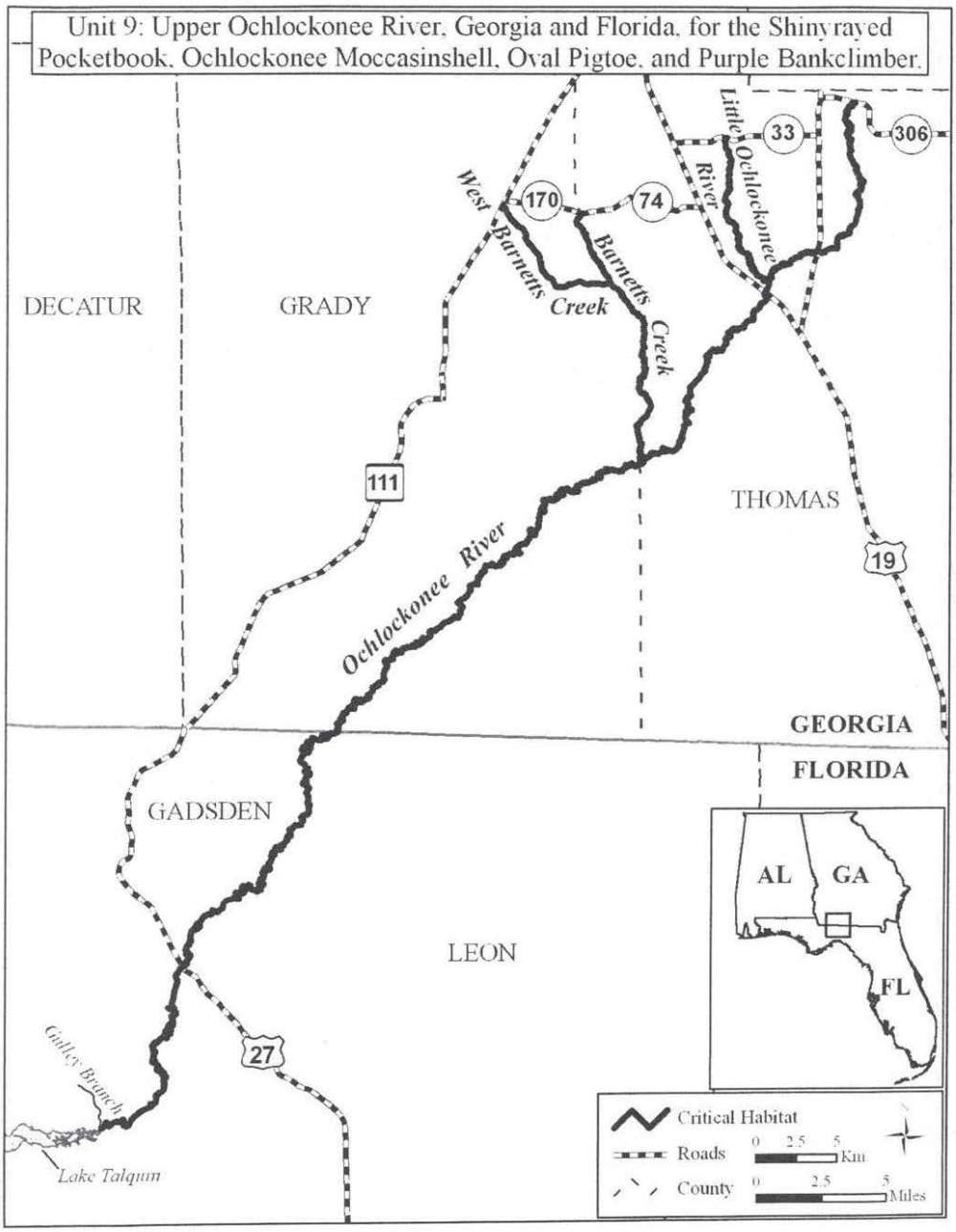


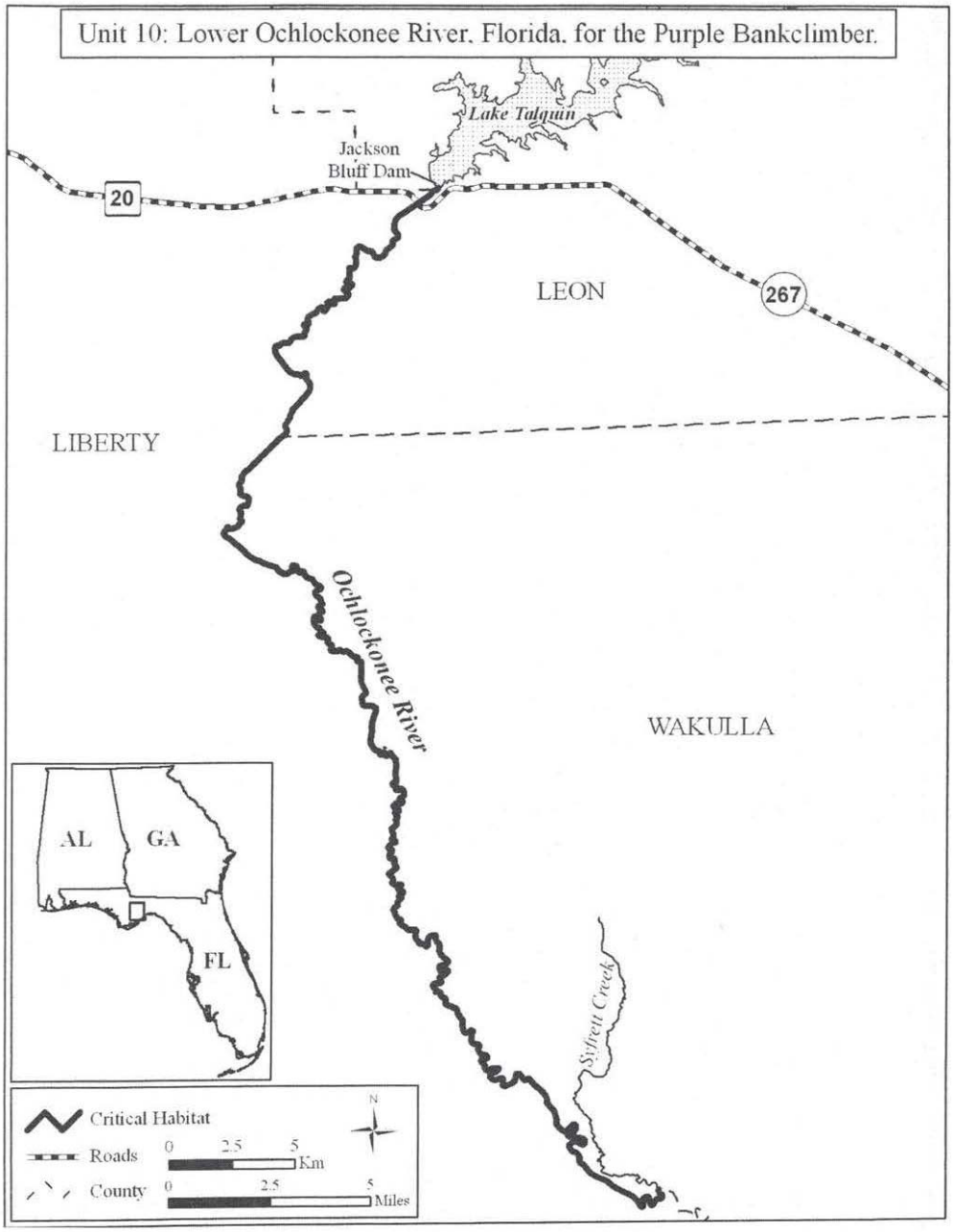
BILLING CODE 4310–55–C


Unit 2: Chipola River, Alabama and Florida, for the Fat Threeridge, Shinyrayed Pocketbook, Gulf Moccasinshell, Oval Pigtoe, and Chipola Slabshell.
Limestone Ck
HOUSTON
Big Ck
Cowarts Ck
ALABAMA
GEORGIA
FLORIDA
Marshall Ck
Waddells Mill Ck
Russ Mill Ck
JACKSON
Tanner Springs
Baker Ck
Little Rocky Ck
Dry Ck
Rocky Ck
Ditch Branch
10
Apalachicola River
CALHOUN
Chipola River
AL
GA
FL
LIBERTY
GULF
Critical Habitat
Roads
State
County
0 4 8 Km
0 4 8 Miles



BILLING CODE 4310–55–C


Unit 9: Upper Ochlockonee River, Georgia and Florida, for the Shinyrayed Pocketbook, Ochlockonee Moccasinshell, Oval Pigtoe, and Purple Bankclimber.
DECATUR
GRADY
THOMAS
LEON
GADSDEN
GEORGIA
FLORIDA
West Bametts Creek
Barnetts Creek
Little Ochlockonee River
Ochlockonee River
Gaitley Branch
Lake Talquin
111
170
74
33
306
19
27
AL
GA
FL
Critical Habitat
Roads
County
0 2.5 5 Km
0 2.5 5 Miles


Unit 10: Lower Ochlockonee River, Florida, for the Purple Bankclimber.
Lake Talquin
Jackson Bluff Dam
20
LEON
267
LIBERTY
Ochlockonee River
WAKULLA
Sitrett Creek
AL
GA
FL
Critical Habitat
Roads
County
0 2.5 5 Km
0 2.5 5 Miles
N

* * * * *

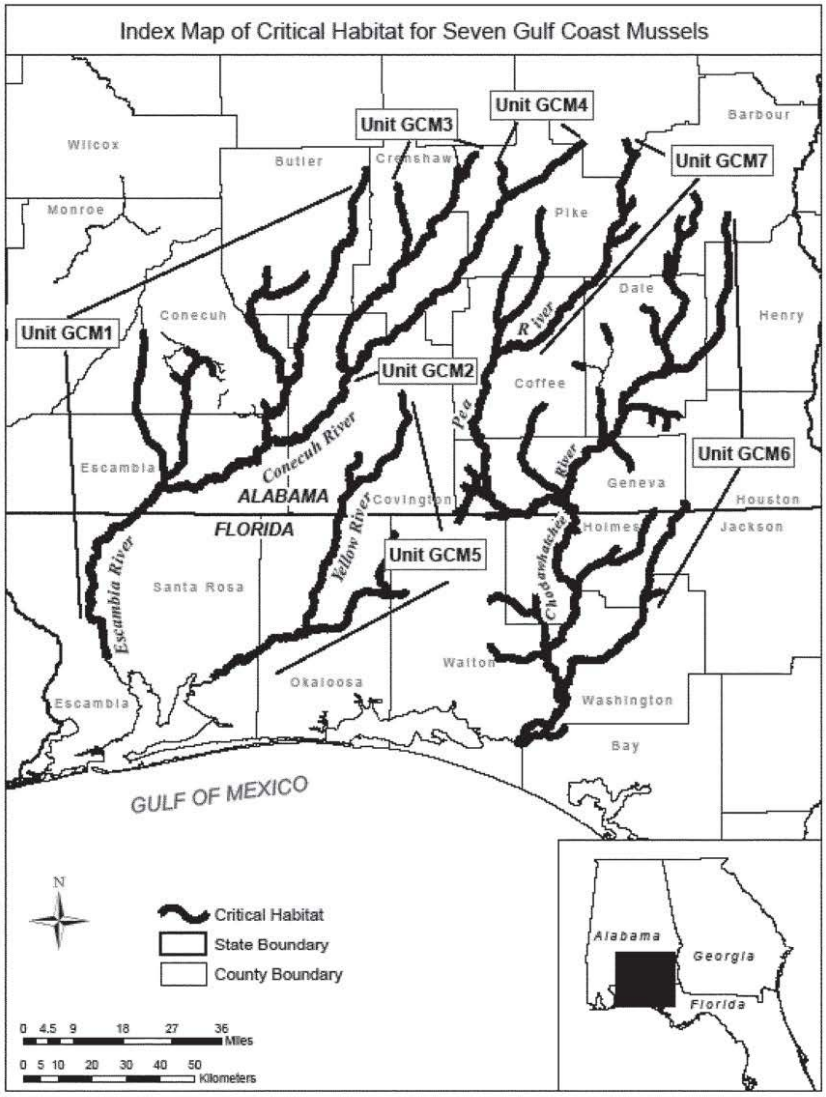
Dated: October 31, 2007.

David M. Verhey,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 07–5551 Filed 11–14–07; 8:45 am]

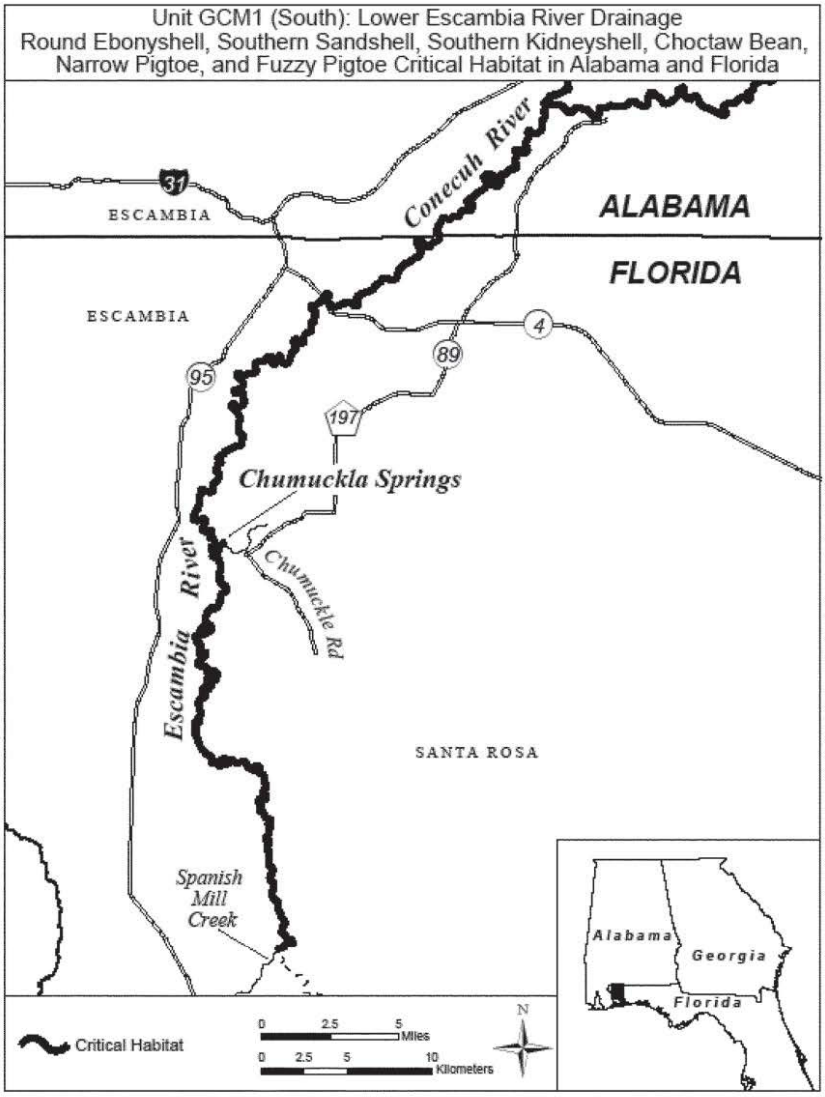
BILLING CODE 4310–55–C

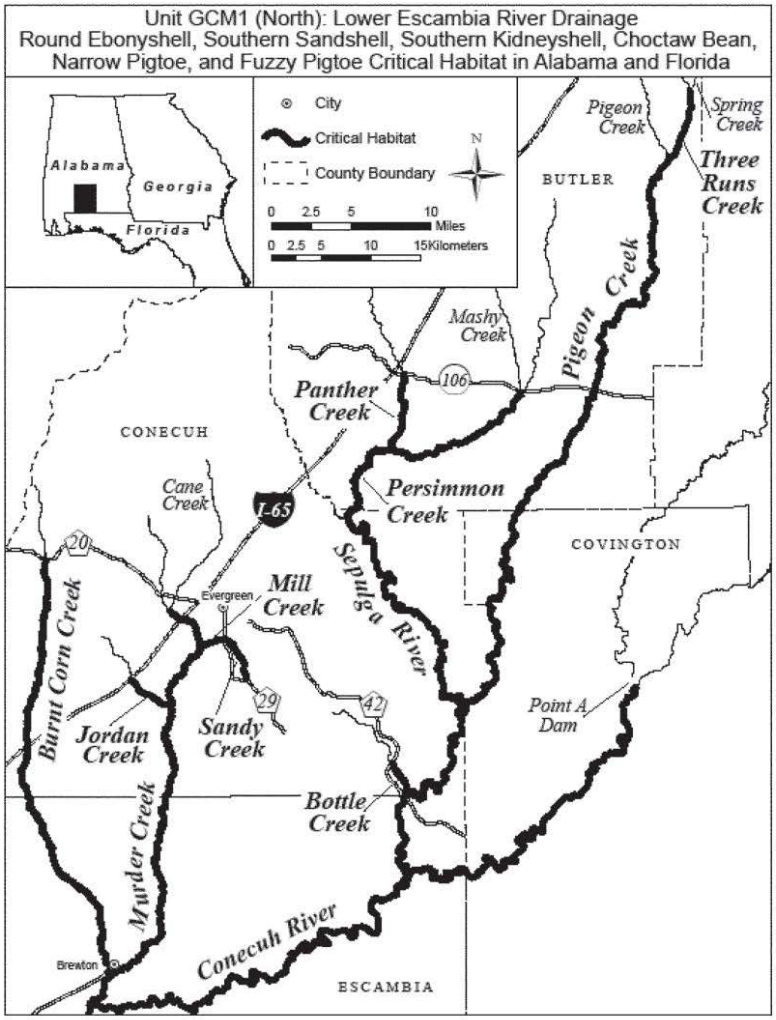


(6) Unit AP1: Big Flat Creek Drainage, Monroe and Wilcox Counties, AL. This unit is critical habitat for the Alabama pearlshell.

(i) The unit includes the mainstem of Big Flat Creek from State Route 41 upstream 56 kilometers (km) (35 miles (mi)), Monroe County, AL; Flat Creek from its confluence with Big Flat Creek upstream 20 km (12 mi), Monroe County, AL; and Dailey Creek from its confluence Flat Creek upstream 17 km (11 mi), Monroe and Wilcox Counties, AL.

(ii) Map of Unit AP1, Big Flat Creek Drainage, and Unit AP2, Burnt Corn Creek, Murder Creek, and Sepulga River drainages, follows:

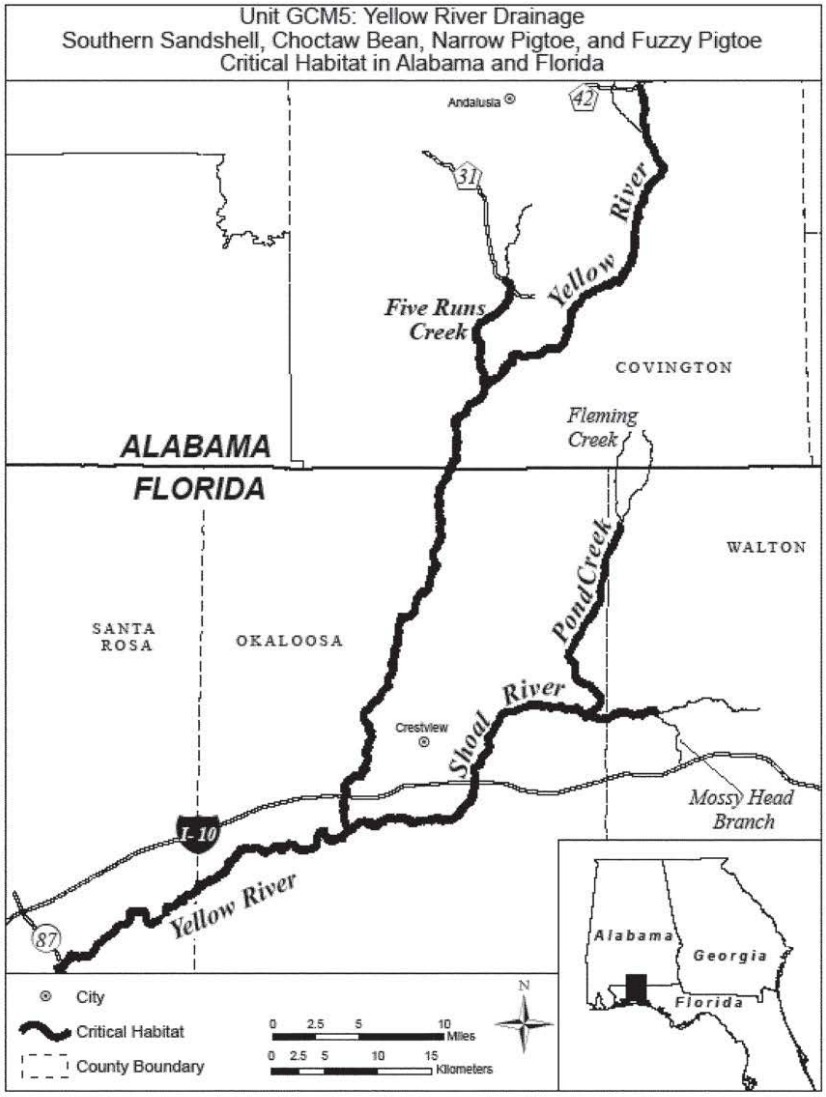

Unit GCM1 (South): Lower Escambia River Drainage
Round Ebonyshell, Southern Sandshell, Southern Kidneyshell, Choctaw Bean, Narrow Pigtoe, and Fuzzy Pigtoe Critical Habitat in Alabama and Florida
Conecuh River
ALABAMA
FLORIDA
ESCAMBIA
ESCAMBIA
31
95
89
4
197
Chumuckla Springs
Chumuckla Rd
Escambia River
SANTA ROSA
Spanish Mill Creek
Critical Habitat
0 2.5 5 Miles
0 2.5 5 10 Kilometers
N
Alabama
Georgia
Florida



(9) Unit GCM2: Point A Lake and Gantt Lake Reservoirs in Covington County, AL. This unit is critical habitat for the narrow pigtoe.

(i) The unit extends from Point A Dam, Covington County, upstream 21 km (13 mi) to the Covington-Crenshaw County line, AL.

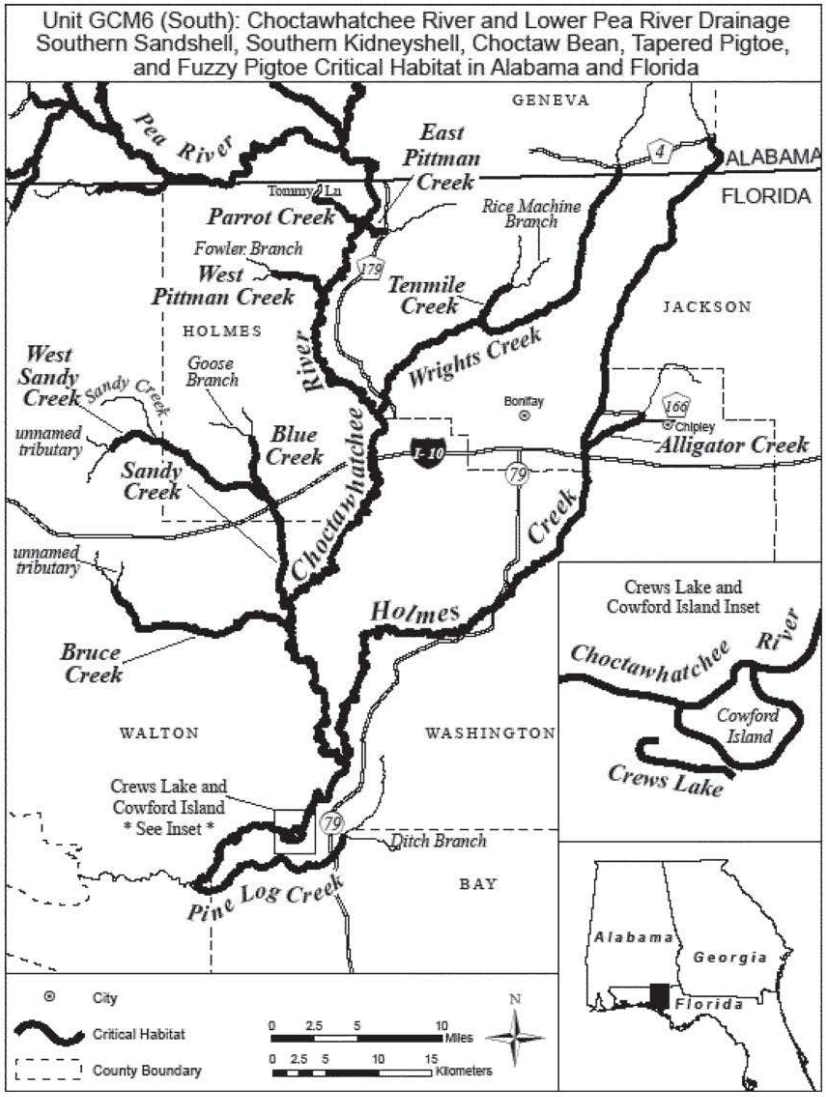
(ii) Map of Unit GCM2, Point A Lake and Gantt Lake Reservoirs, follows:

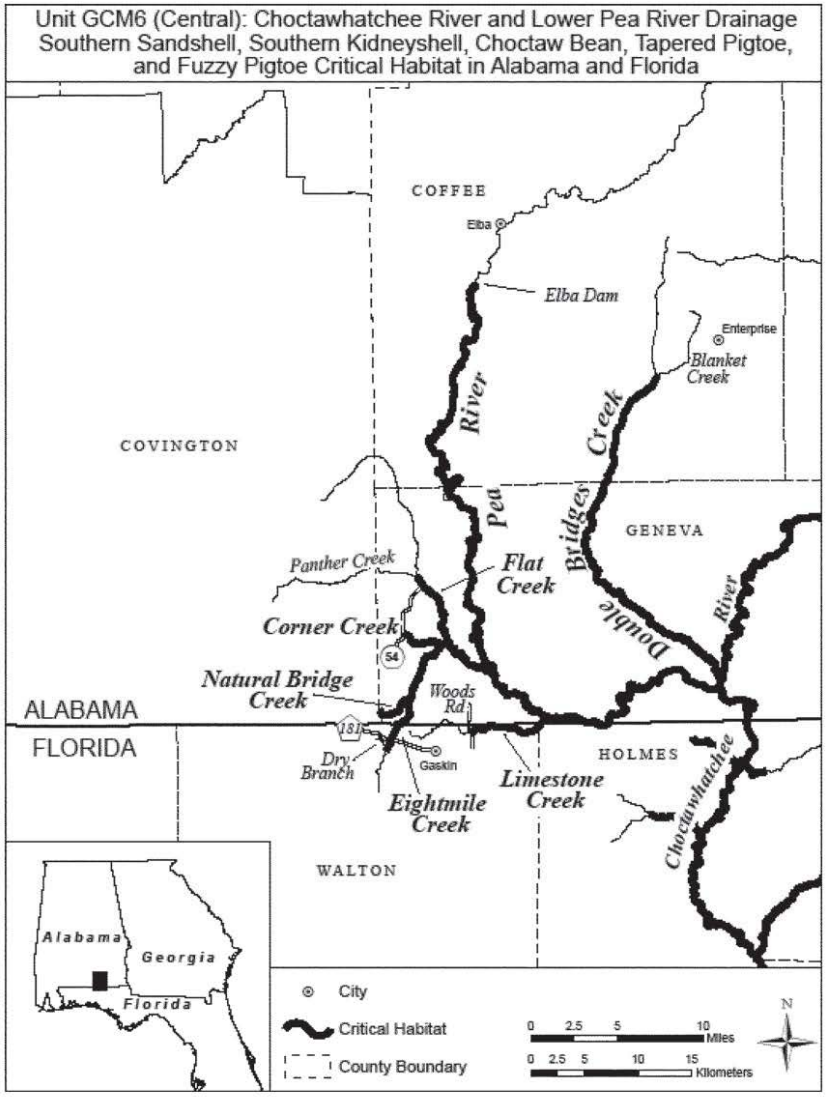


BILLING CODE 4310–55–C

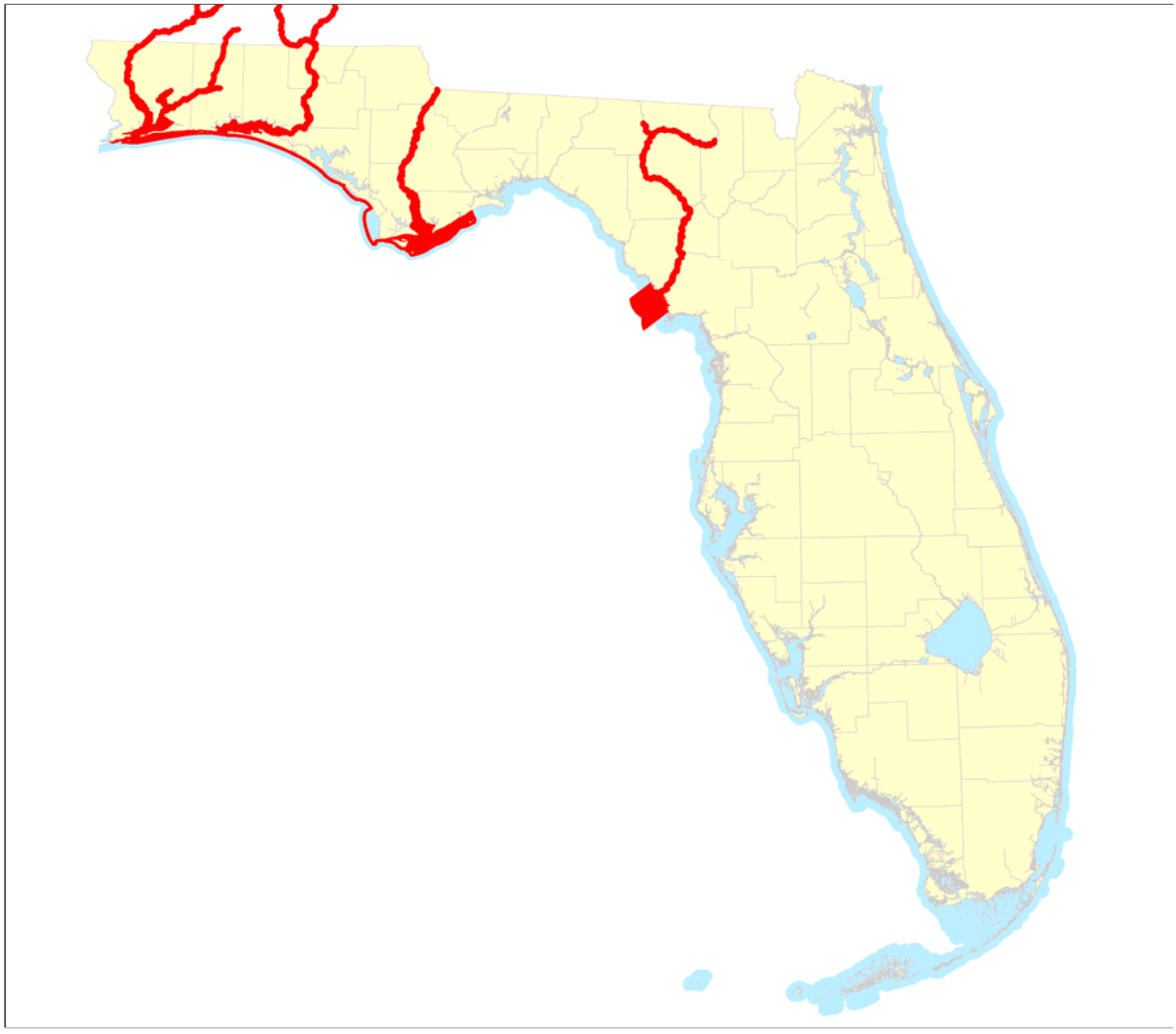
(13) Unit GCM6: Choctawhatchee River and Lower Pea River Drainages in Walton, Washington, Bay, Holmes, and Jackson Counties, FL, and Geneva, Coffee, Dale, Houston, Henry, Pike, and Barbour Counties, AL. This unit is critical habitat for the southern kidneyshell, Choctaw bean, tapered pigtoe, southern sandshell, and fuzzy pigtoe.

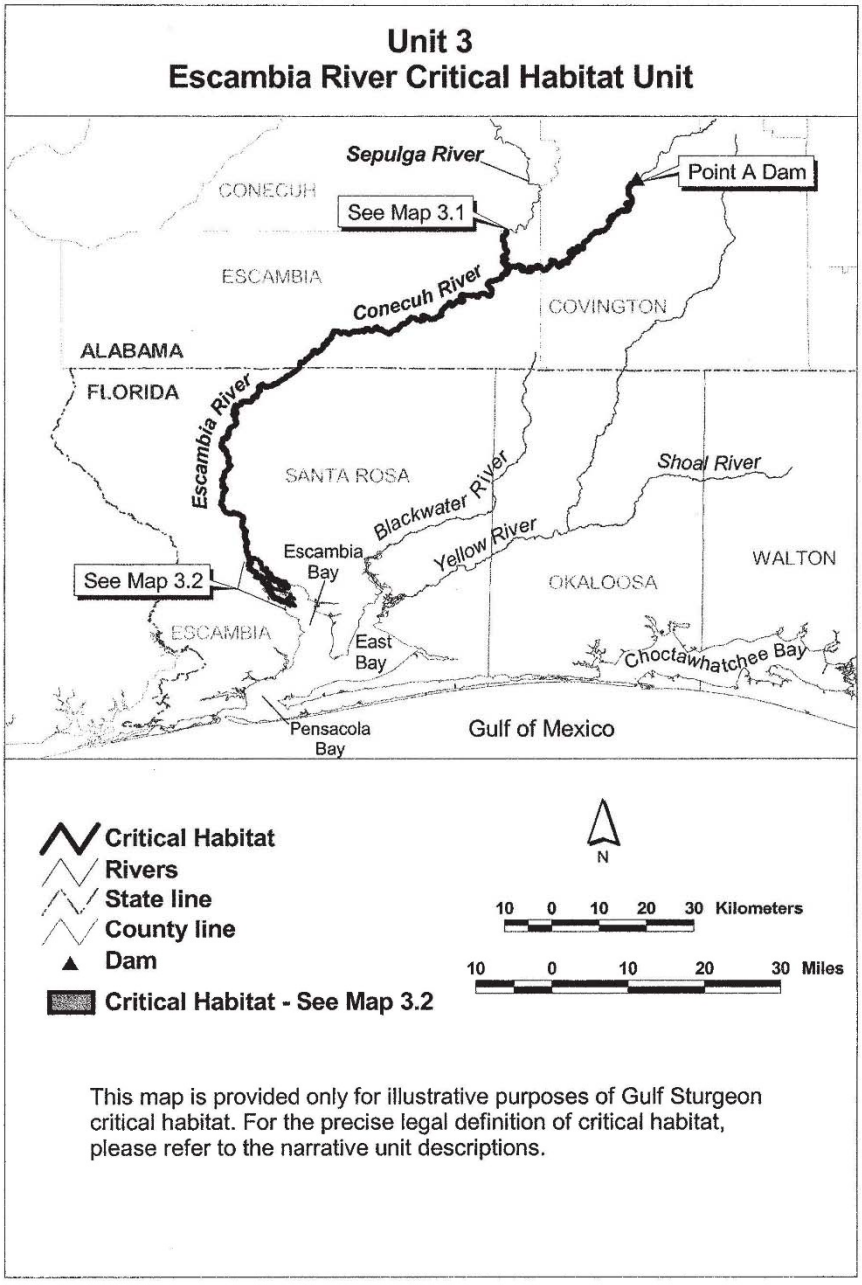
(i) The unit includes the Choctawhatchee River mainstem from the confluence of Pine Log Creek, Walton County, FL, upstream 200 km (125 mi) to the point the river splits into the West Fork Choctawhatchee and East Fork Choctawhatchee rivers, Barbour County, AL; Pine Log Creek from its confluence with the Choctawhatchee River, Walton County, upstream 19 km (12 mi) to Ditch Branch, Washington and Bay Counties, FL; an unnamed channel forming Cowford Island from its downstream confluence with the Choctawhatchee River upstream 3 km (2 mi) to its upstream confluence with the river, Washington County, FL; Crews Lake from its western terminus 1.5 km (1 mi) to its eastern terminus, Washington County, FL (Crews Lake is a relic channel southwest of Cowford Island, and is disconnected from the Cowford Island channel, except during high flows); Holmes Creek from its

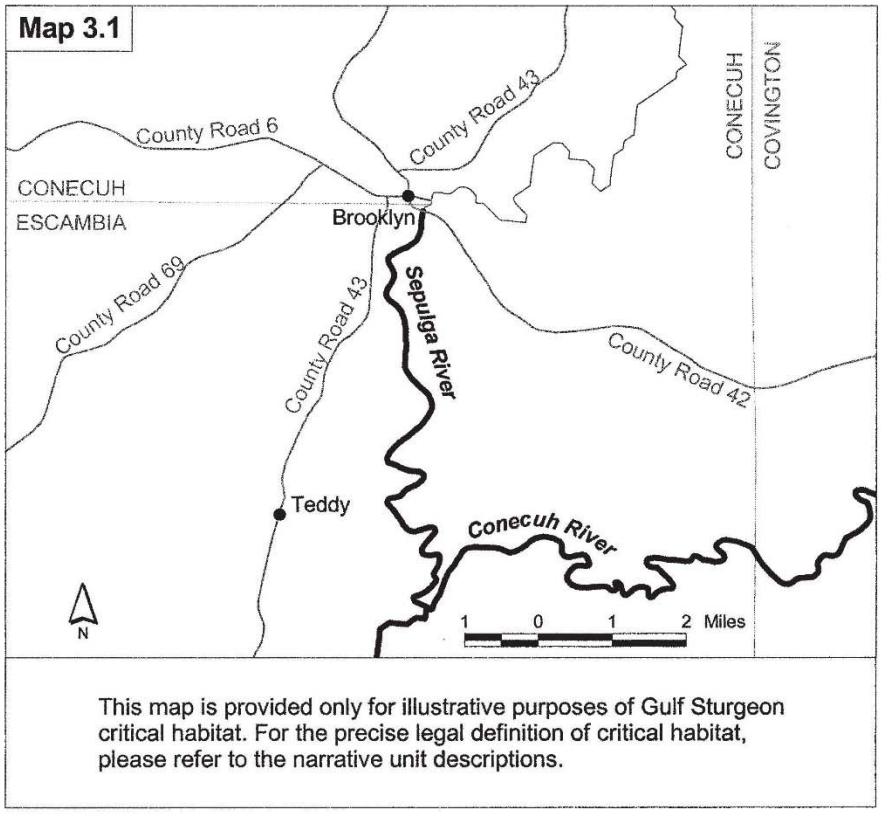

Unit GCM6 (South): Choctawhatchee River and Lower Pea River Drainage
Southern Sandshell, Southern Kidneyshell, Choctaw Bean, Tapered Pigtoe,
and Fuzzy Pigtoe Critical Habitat in Alabama and Florida
GENEVA
ALABAMA
FLORIDA
JACKSON
HOLMES
WALTON
WASHINGTON
BAY
Pea River
East Pittman Creek
Parrot Creek
Tommy Ln
Rice Machine Branch
Fowler Branch
West Pittman Creek
Tenmile Creek
West Sandy Creek
Sandy Creek
Goose Branch
Wrights Creek
Bonifay
Chipley
Alligator Creek
unnamed tributary
Blue Creek
Sandy Creek
Choctawhatchee River
Holmes Creek
Bruce Creek
Crews Lake and Cowford Island * See Inset *
Ditch Branch
Pine Log Creek
I-10
Crews Lake and Cowford Island Inset
Choctawhatchee River
Cowford Island
Crews Lake
Alabama
Georgia
Florida
City
Critical Habitat
County Boundary
0 2.5 5 10 Miles
0 2.5 5 10 15 Kilometers
N


Unit GCM6 (Central): Choctawhatchee River and Lower Pea River Drainage
Southern Sandshell, Southern Kidneyshell, Choctaw Bean, Tapered Pigtoe,
and Fuzzy Pigtoe Critical Habitat in Alabama and Florida
COFFEE
Elba
Elba Dam
Enterprise
Blanket Creek
Pea River
Bridges Creek
COVINGTON
GENEVA
Panther Creek
Flat Creek
Double River
Corner Creek
54
Natural Bridge Creek
Woods Rd
ALABAMA
FLORIDA
181
Dry Branch
Gaskin
Eightmile Creek
Limestone Creek
HOLMES
Choctawhatchee
WALTON
Alabama
Georgia
Florida
City
Critical Habitat
County Boundary
0 2.5 5 10 Miles
0 2.5 5 10 15 Kilometers
N

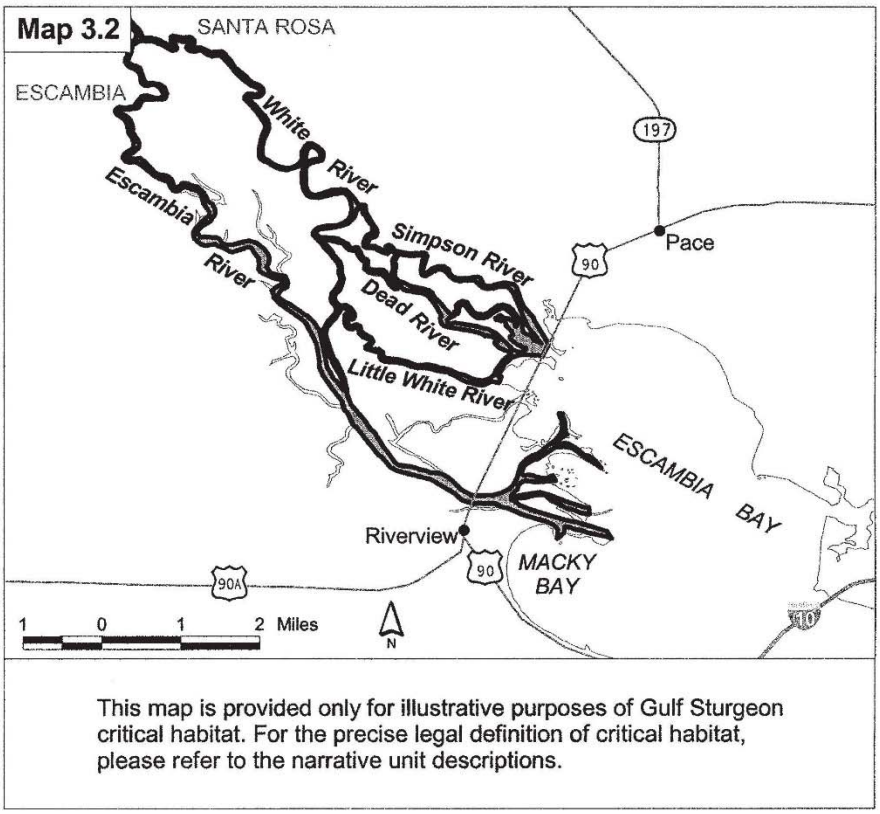
Gulf Sturgeon Critical Habitat




Unit 3
Escambia River Critical Habitat Unit
Sepulga River
Point A Dam
CONECUH
See Map 3.1
ESCAMBIA
Conecuh River
COVINGTON
ALABAMA
FLORIDA
Escambia River
SANTA ROSA
Blackwater River
Shoal River
Escambia Bay
Yellow River
WALTON
See Map 3.2
OKALOOSA
ESCAMBIA
East Bay
Choctawhatchee Bay
Pensacola Bay
Gulf of Mexico
Critical Habitat
Rivers
State line
County line
Dam
Critical Habitat - See Map 3.2
N
10 0 10 20 30 Kilometers
10 0 10 20 30 Miles
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



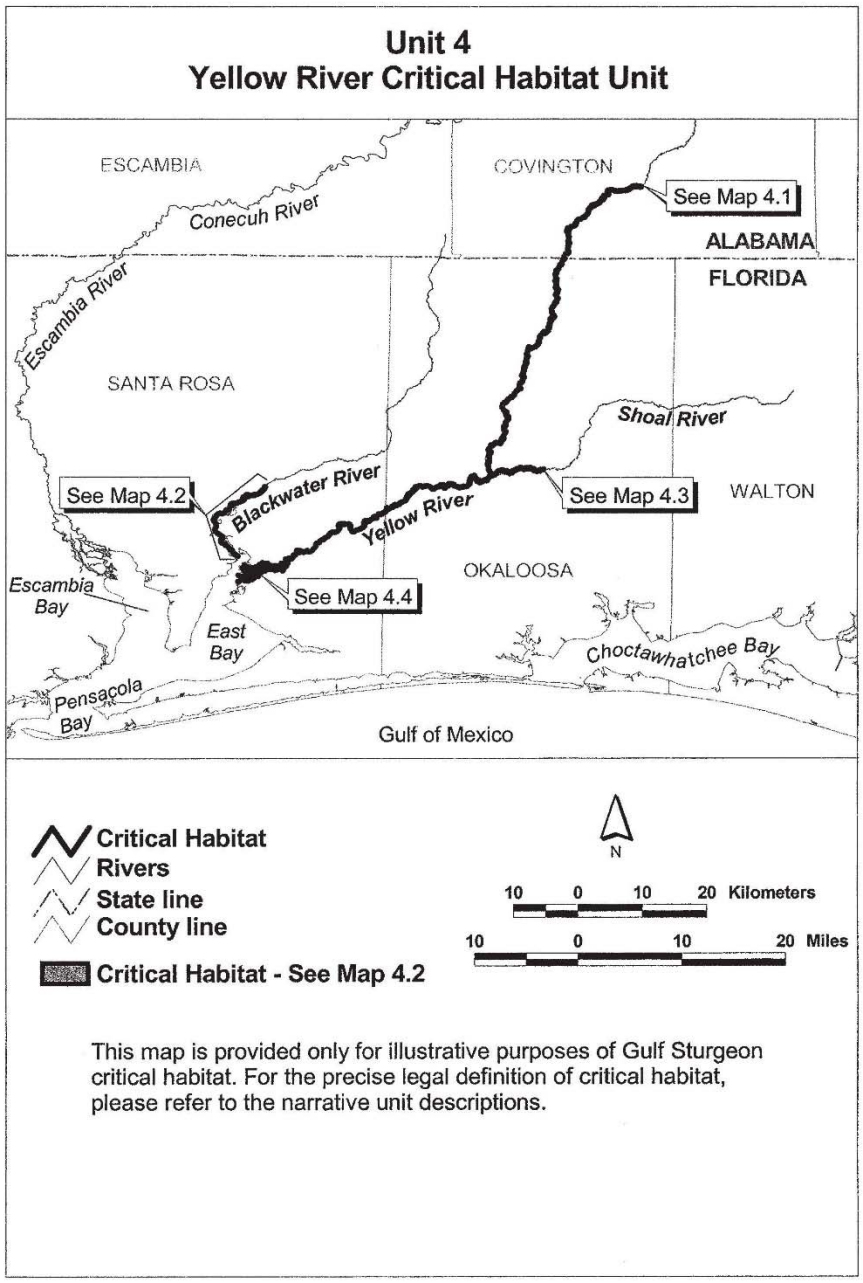
BILLING CODE 3510–22–C

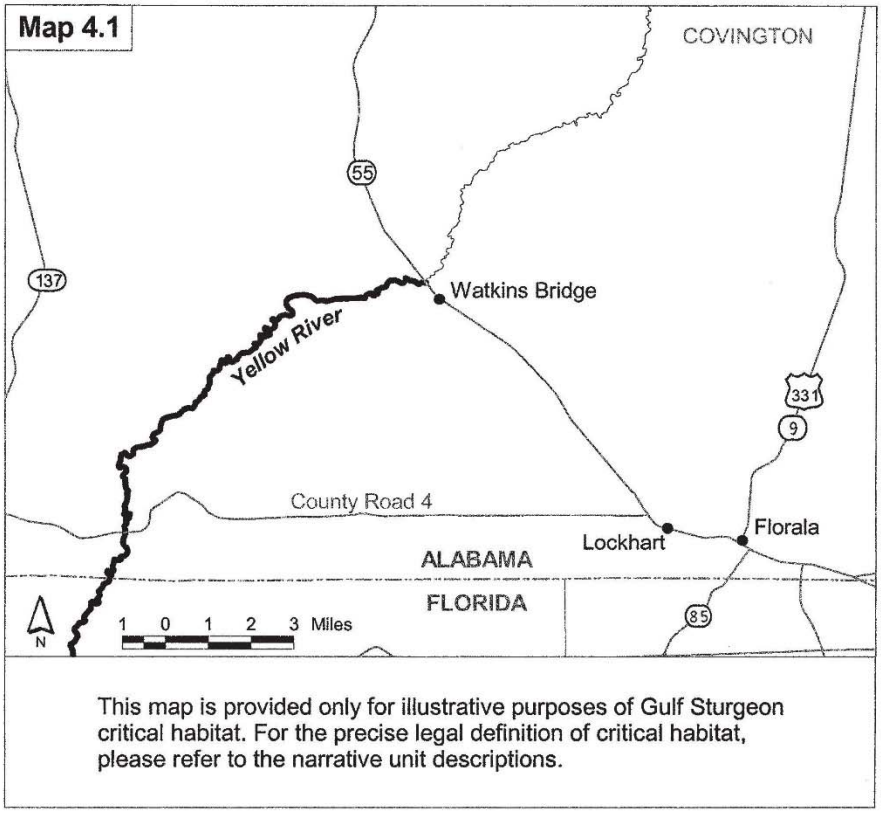
(8) *Unit 4:* Yellow River System in Santa Rosa and Okaloosa Counties, Florida and Covington County, Alabama.

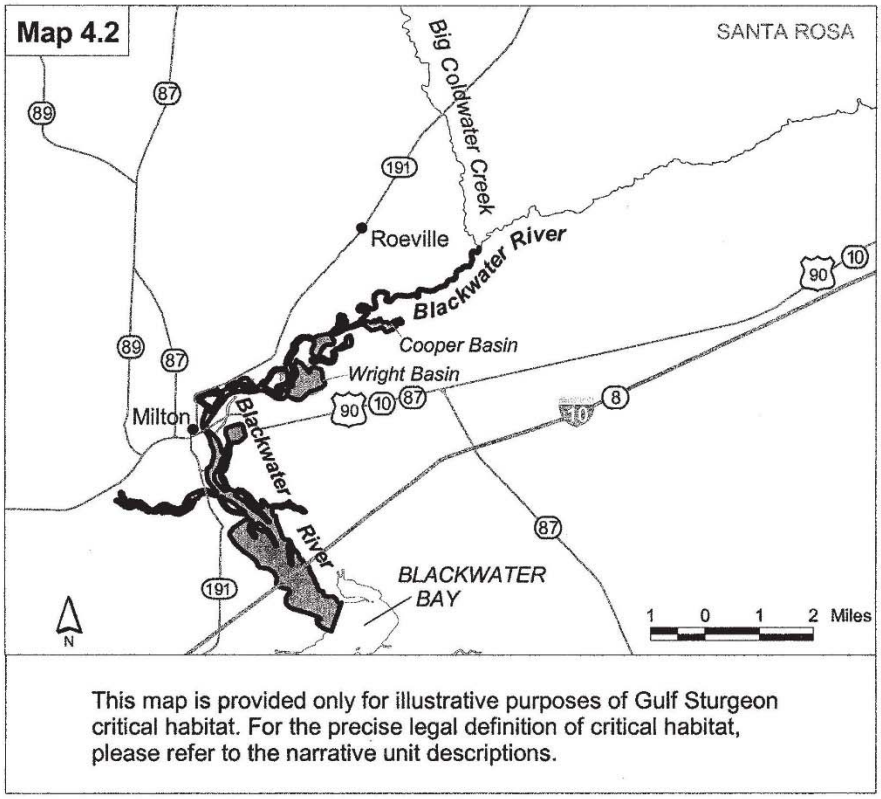
(i) Unit 4 includes the Yellow River main stem from Alabama State Highway 55, Covington County, Alabama, downstream to its discharge at Blackwater Bay, Santa Rosa County, Florida. All Yellow River distributaries (including Weaver River and Skim Lake) discharging into Blackwater Bay are included. The Shoal River main stem, a Yellow River tributary, from Florida Highway 85, Okaloosa County, Florida, to its confluence with the Yellow River, is included. The Blackwater River from its confluence with Big Coldwater Creek, Santa Rosa County, Florida, downstream to its discharge into Blackwater Bay is included. Wright Basin and Cooper Basin, Santa Rosa County, on the Blackwater River are included. The lateral extent of Unit 4 is the ordinary high water line on each bank of the associated lakes, rivers, and shorelines.

(ii) Maps of Unit 4 follow:

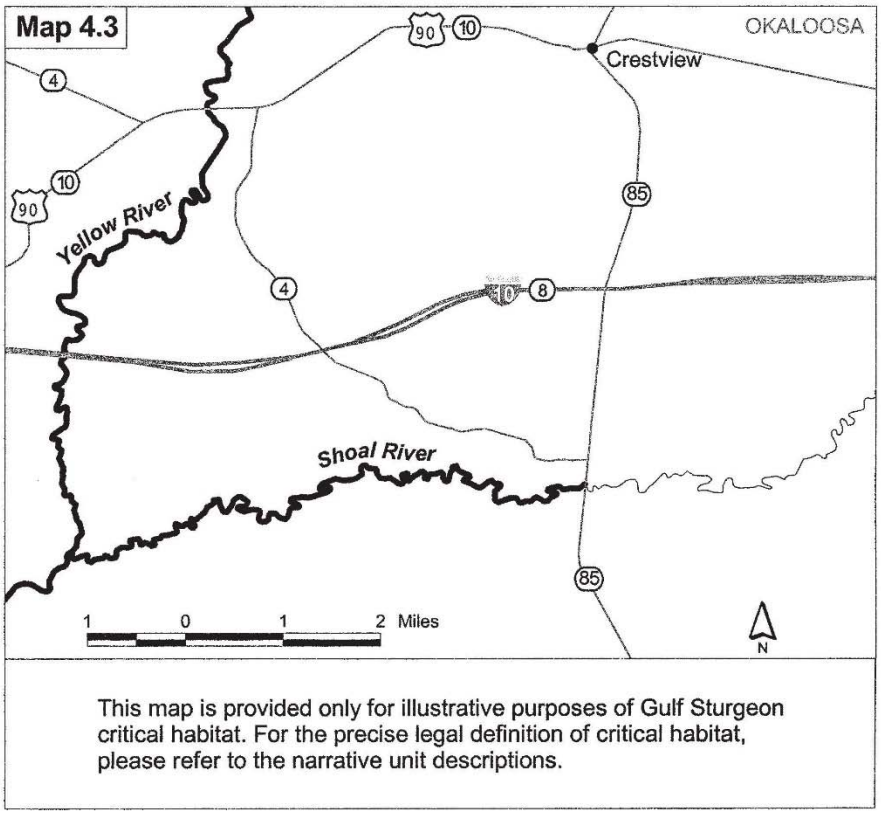
BILLING CODE 3510–22–P


Unit 4
Yellow River Critical Habitat Unit
ESCAMBIA
COVINGTON
Conecuh River
See Map 4.1
ALABAMA
FLORIDA
Escambia River
SANTA ROSA
Shoal River
See Map 4.2
Blackwater River
Yellow River
See Map 4.3
WALTON
OKALOOSA
Escambia Bay
See Map 4.4
East Bay
Choctawhatchee Bay
Pensacola Bay
Gulf of Mexico
Critical Habitat
Rivers
State line
County line
Critical Habitat - See Map 4.2
N
10 0 10 20 Kilometers
10 0 10 20 Miles
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.

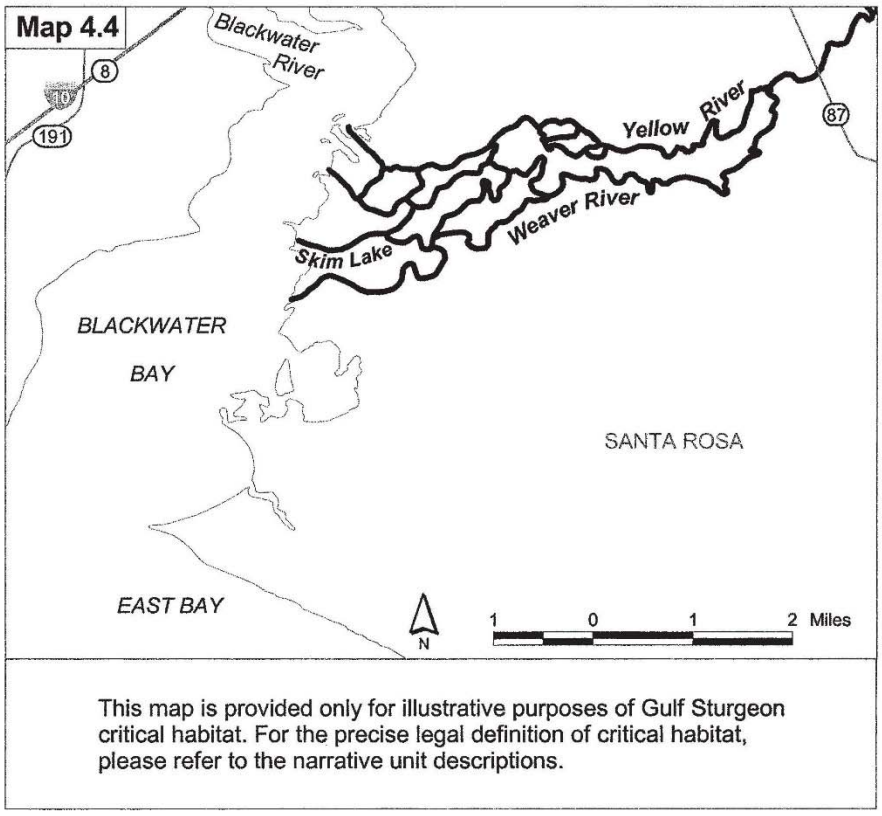

Map 4.1
COVINGTON
55
137
Watkins Bridge
Yellow River
331
9
County Road 4
Lockhart
Florala
ALABAMA
FLORIDA
85
N
1 0 1 2 3 Miles
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



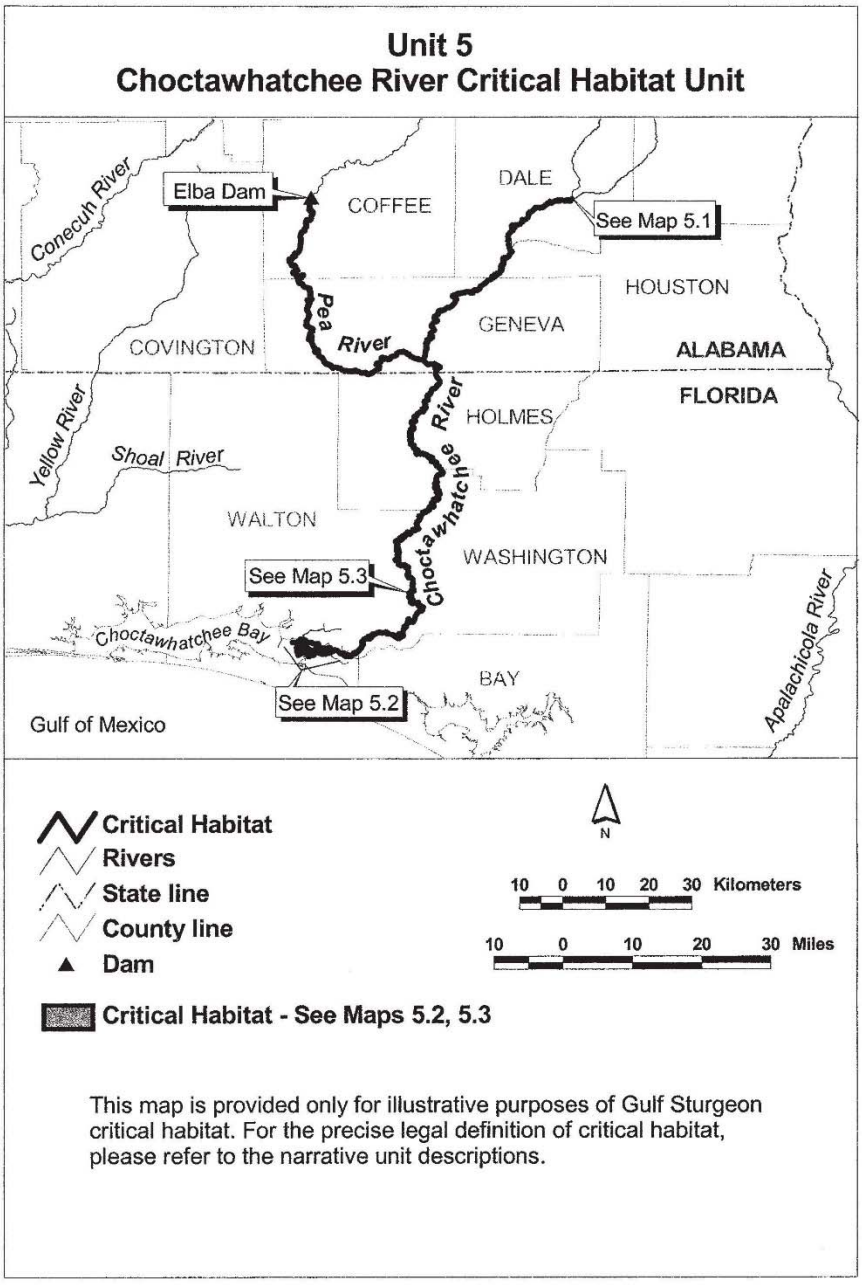
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.

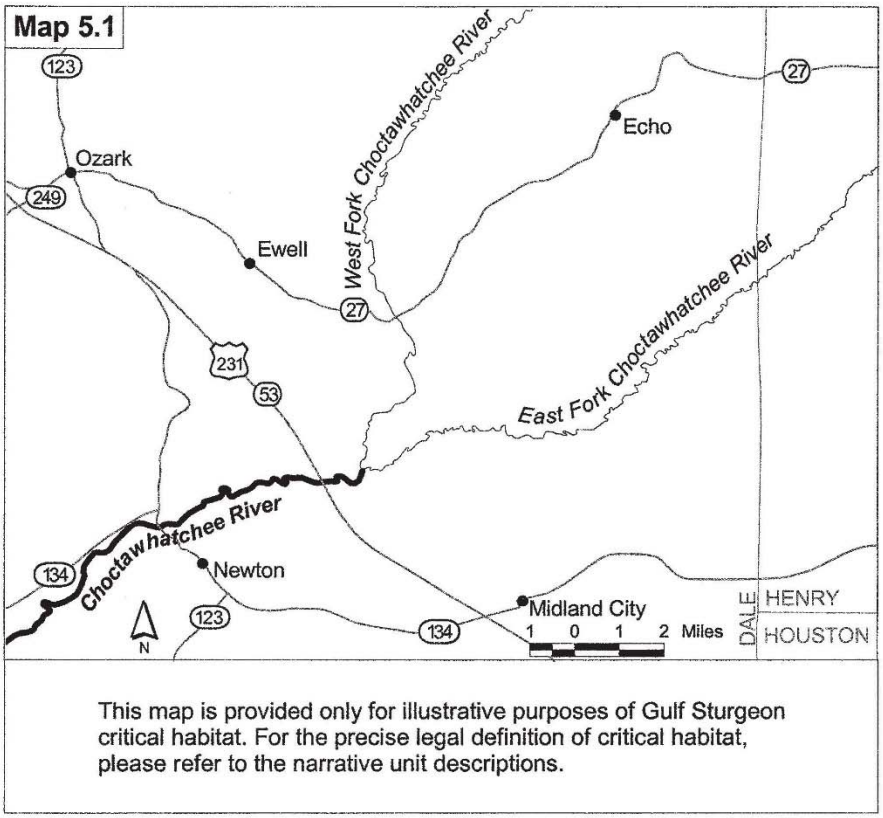


This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.

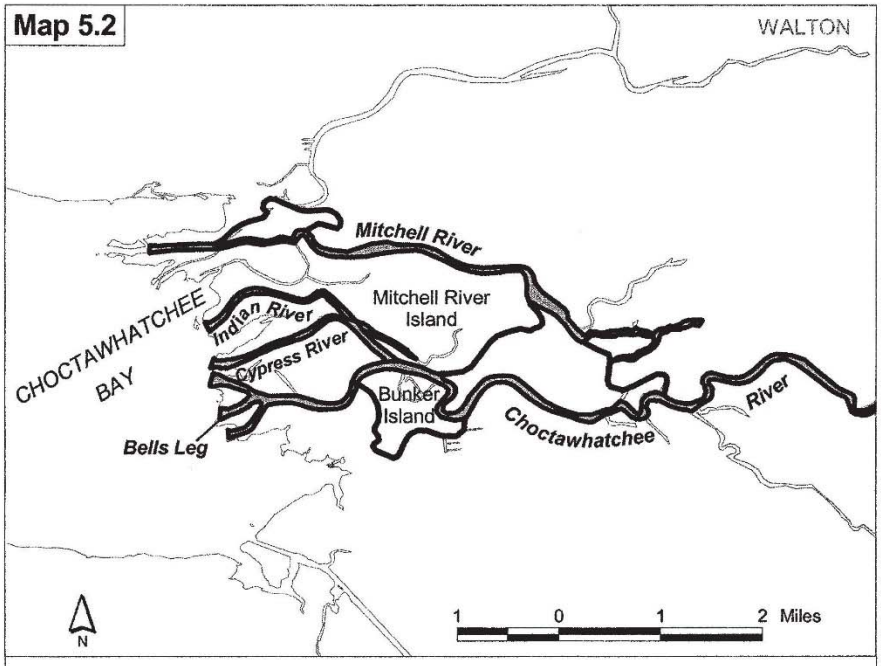


BILLING CODE 3510–22–C

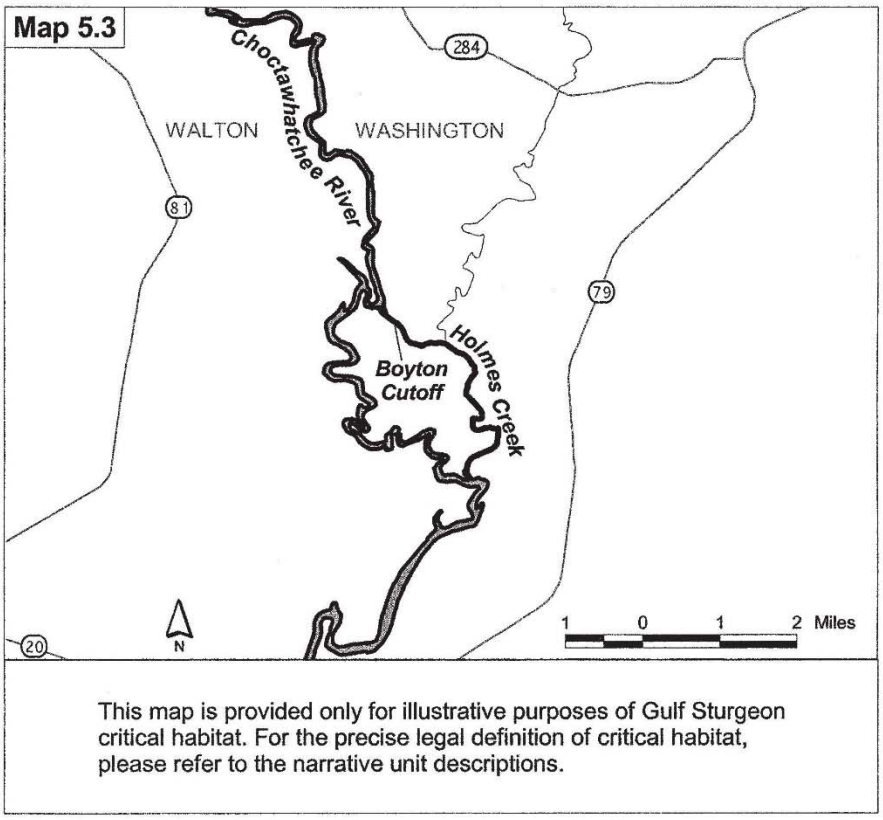

Unit 5
Choctawhatchee River Critical Habitat Unit
Conecuh River
Elba Dam
COFFEE
DALE
See Map 5.1
HOUSTON
Pea River
GENEVA
COVINGTON
ALABAMA
FLORIDA
Yellow River
Shoal River
HOLMES
Choctawhatchee River
WALTON
WASHINGTON
See Map 5.3
Choctawhatchee Bay
BAY
See Map 5.2
Gulf of Mexico
Apalachicola River
Critical Habitat
Rivers
State line
County line
Dam
N
10 0 10 20 30 Kilometers
10 0 10 20 30 Miles
Critical Habitat - See Maps 5.2, 5.3
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



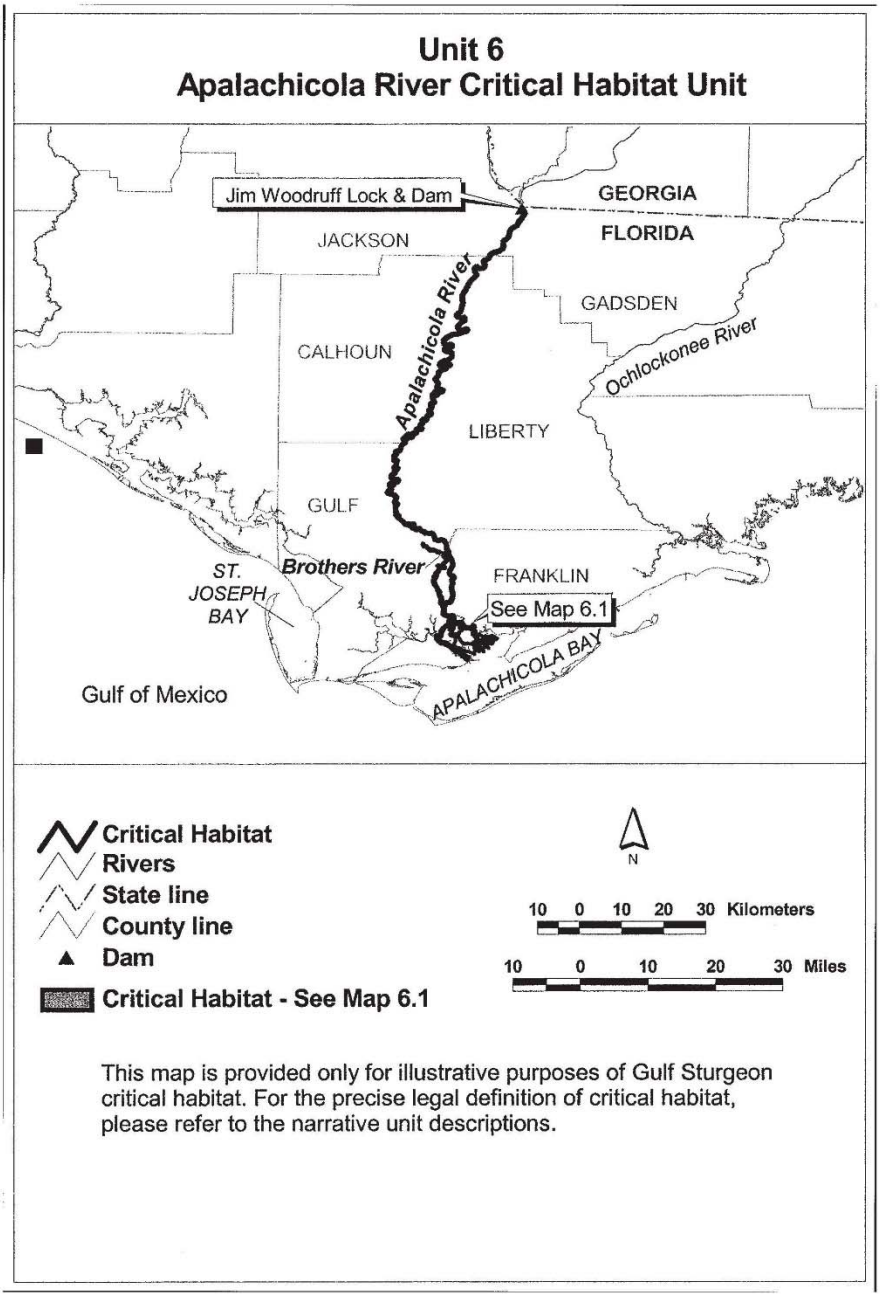
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.

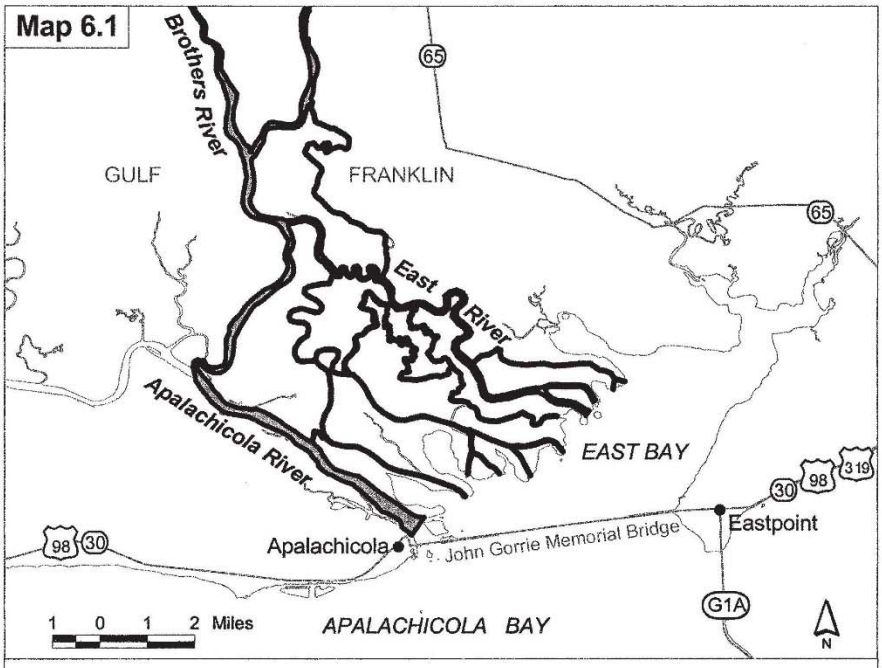


This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



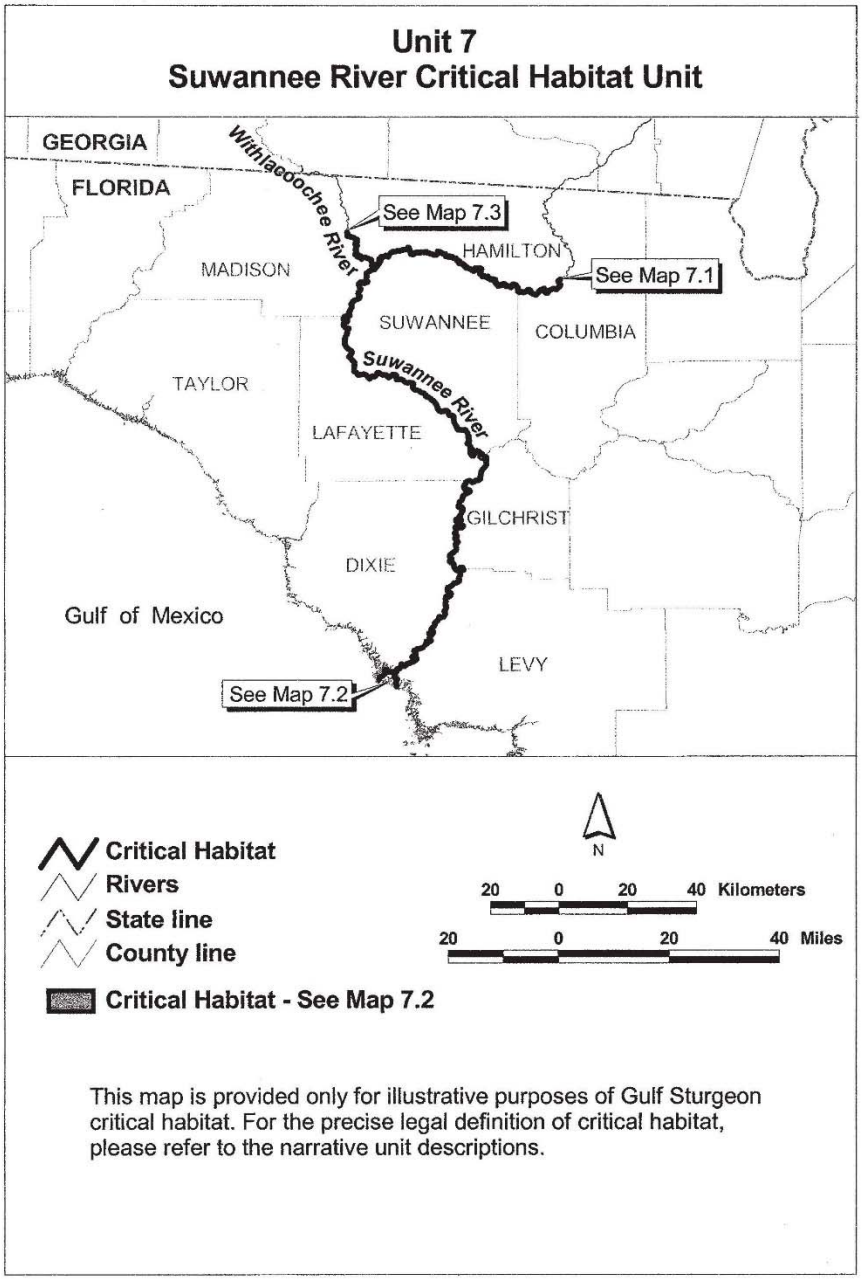
BILLING CODE 3510–22–C

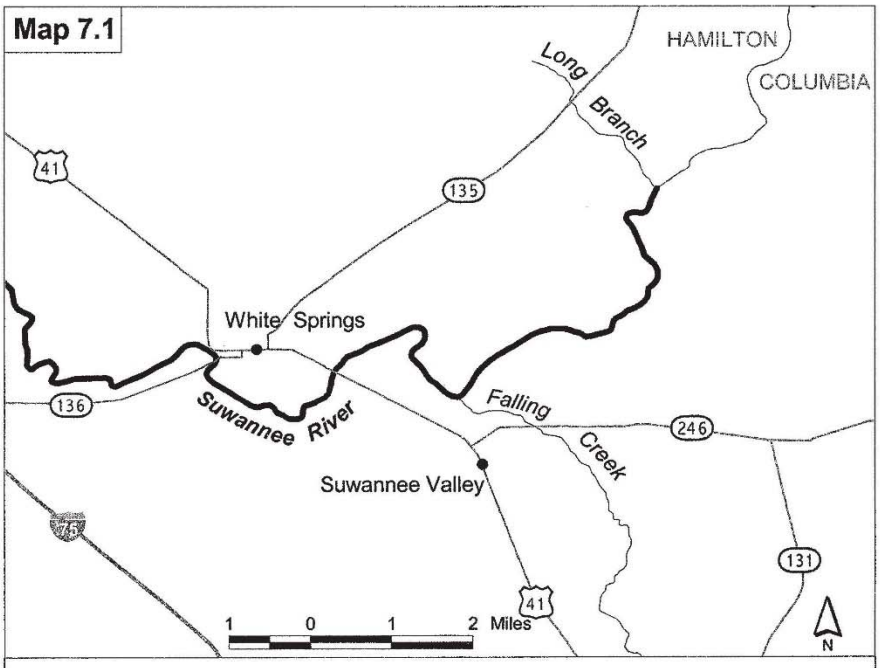

Unit 6
Apalachicola River Critical Habitat Unit
Jim Woodruff Lock & Dam
GEORGIA
FLORIDA
JACKSON
GADSDEN
CALHOUN
Apalachicola River
Ochlockonee River
LIBERTY
GULF
Brothers River
FRANKLIN
ST. JOSEPH BAY
See Map 6.1
APALACHICOLA BAY
Gulf of Mexico
Critical Habitat
Rivers
State line
County line
Dam
Critical Habitat - See Map 6.1
N
10 0 10 20 30 Kilometers
10 0 10 20 30 Miles
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



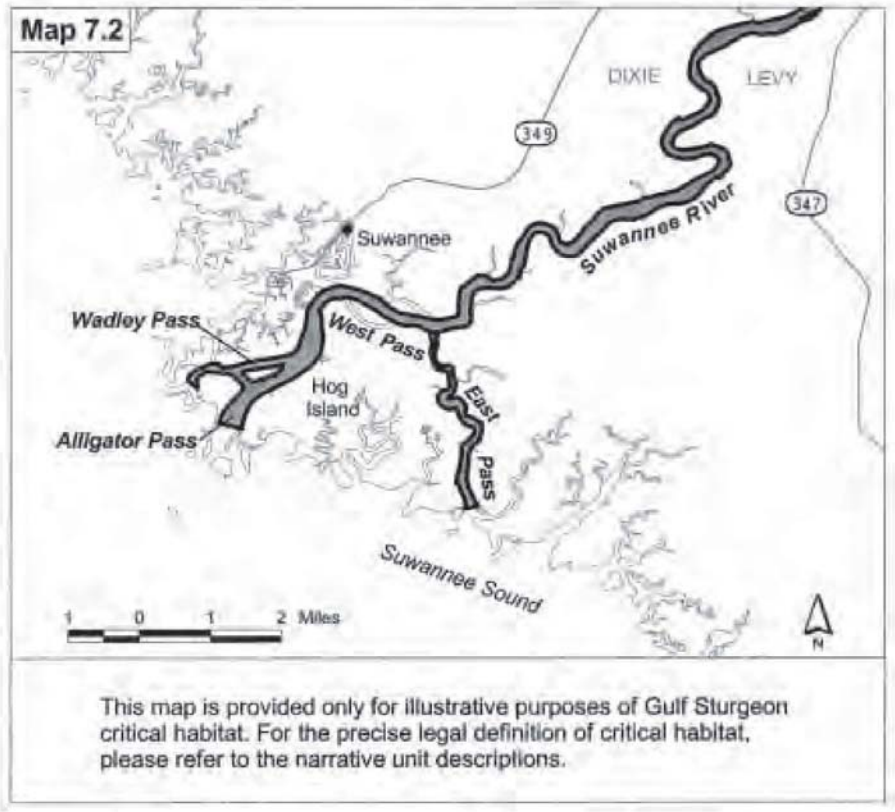
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.

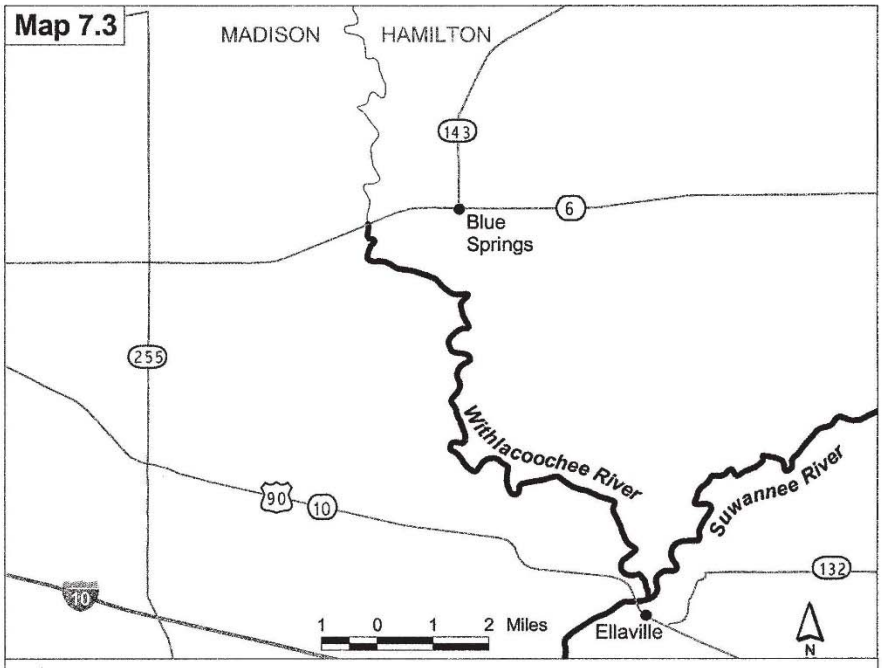
BILLING CODE 3510–22–C


Unit 7
Suwannee River Critical Habitat Unit
GEORGIA
FLORIDA
Withlacoochee River
See Map 7.3
HAMILTON
See Map 7.1
MADISON
SUWANNEE
COLUMBIA
Suwannee River
TAYLOR
LAFAYETTE
GILCHRIST
DIXIE
Gulf of Mexico
LEVY
See Map 7.2
Critical Habitat
Rivers
State line
County line
Critical Habitat - See Map 7.2
N
20 0 20 40 Kilometers
20 0 20 40 Miles
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.


Map 7.2
DIXIE
LEVY
349
347
Suwannee
Suwannee River
Wadley Pass
West Pass
Hog Island
East Pass
Alligator Pass
Suwannee Sound
1 0 1 2 Miles
N
This map is provided only for illustrative purposes of Gulf Sturgeon critical habitat. For the precise legal definition of critical habitat, please refer to the narrative unit descriptions.



BILLING CODE 3510–22–C

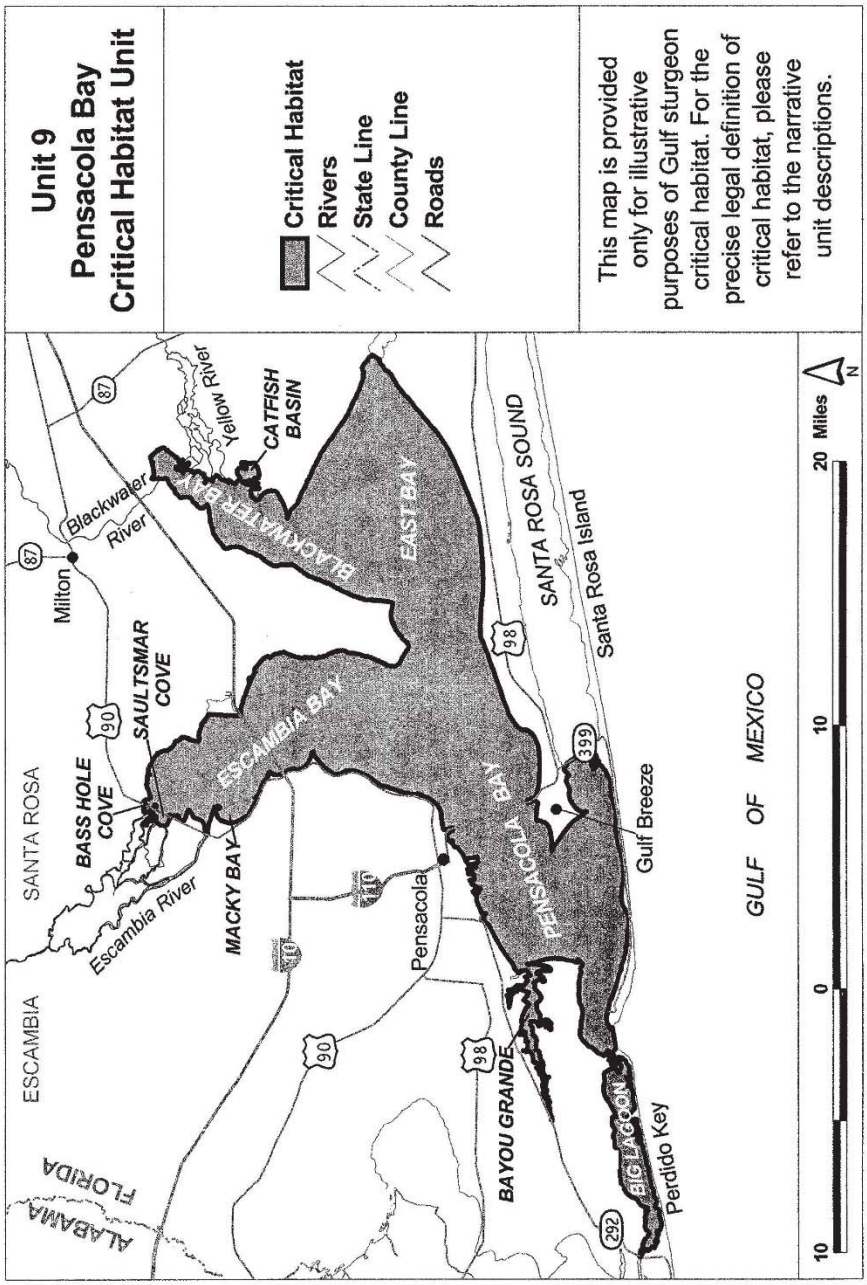
(12) *Unit 8:* Lake Pontchartrain, Lake St. Catherine, The Rigolets, Little Lake, Lake Borgne, and Mississippi Sound in Jefferson, Orleans, St. Tammany, and St. Bernard Parish, Louisiana, Hancock, Jackson, and Harrison Counties in Mississippi, and in Mobile County, Alabama.

(i) Unit 8 encompasses Lake Pontchartrain east of the Lake Pontchartrain Causeway, all of Little Lake, The Rigolets, Lake St. Catherine, Lake Borgne, including Heron Bay, and the Mississippi Sound. Critical habitat follows the shorelines around the perimeters of each included lake. The Mississippi Sound includes adjacent open bays including Pascagoula Bay, Point aux Chenes Bay, Grand Bay, Sandy Bay, and barrier island passes, including Ship Island Pass, Dog Keys Pass, Horn Island Pass, and Petit Bois Pass. The northern boundary of the Mississippi Sound is the shorelines of the mainland between Heron Bay Point, Mississippi and Point aux Pins, Alabama. Critical habitat excludes St. Louis Bay, north of the railroad bridge across its mouth; Biloxi Bay, north of the U.S. Highway 90 bridge; and Back Bay of Biloxi. The southern boundary follows along the broken shoreline of Lake Borgne created by low swampy islands from Malheureux Point to Isle au Pitre. From the northeast point of Isle au Pitre, the boundary continues in a straight north-northeast line to the point 1 nautical mile (nm) (1.9 kilometers (km)) seaward of the western most extremity of Cat Island (30°13′N, 89°10′W). The southern boundary continues 1 nm (1.9 km) offshore of the barrier islands and offshore of the 72 COLREGS lines at barrier island passes (defined at 33 CFR 80.815 (c), (d) and (e)) to the eastern boundary. Between Cat Island and Ship Island there is no 72 COLREGS line. We therefore, have defined that section of the southern boundary as 1 nm (1.9 km) offshore of a straight line drawn from the southern tip of Cat Island to the western tip of Ship Island. The eastern boundary is the line of longitude 88°18.8′W from its intersection with the shore (Point aux Pins) to its intersection with the southern boundary. The lateral extent of Unit 8 is the mean (average) high water (MHW) line on each shoreline of the included water bodies or the entrance to rivers, bayous, and creeks.

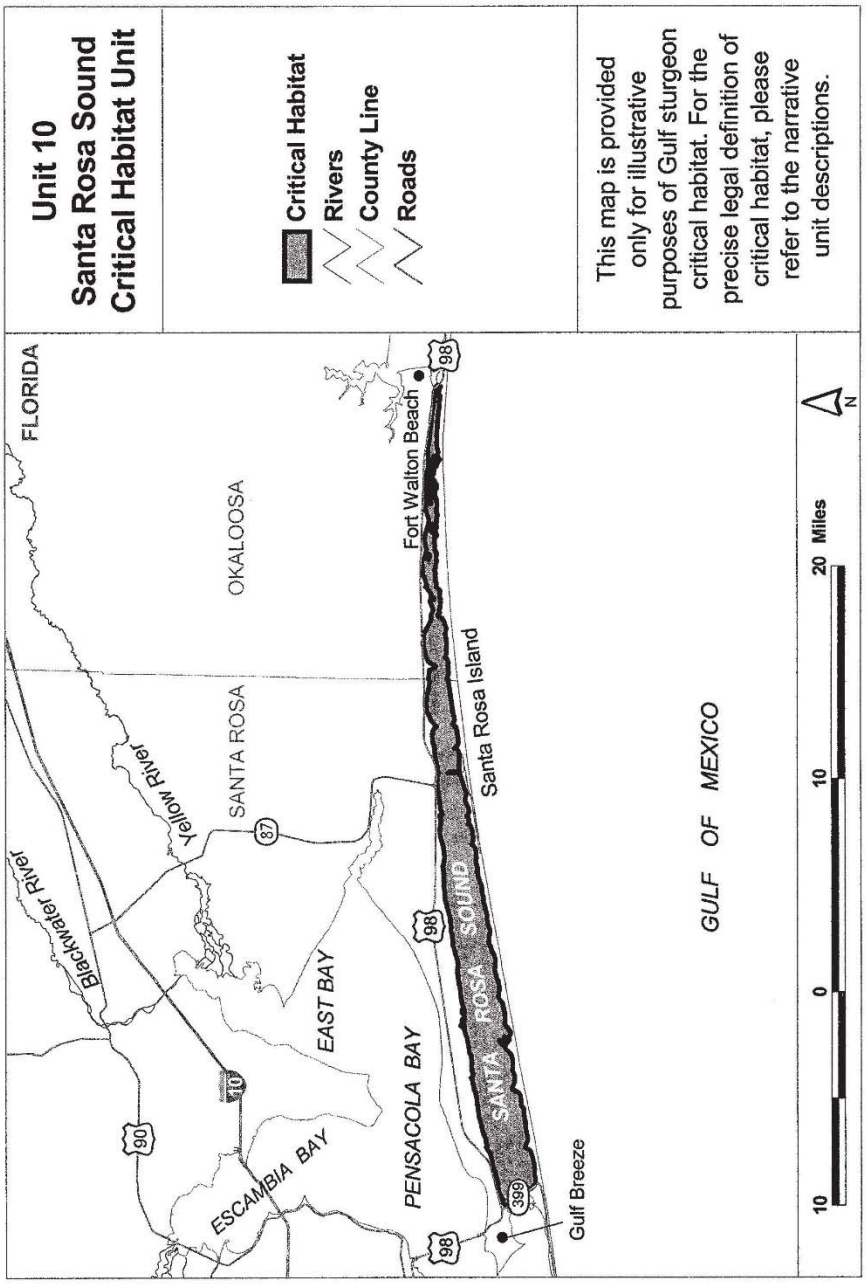
(ii) Major shipping channels in this unit, as identified on standard navigation charts and marked by buoys, are excluded under section 4(b)(2) of the Act.

(iii) Maps of Unit 8 follow:

BILLING CODE 3510–22–P



BILLING CODE 3510–22–C



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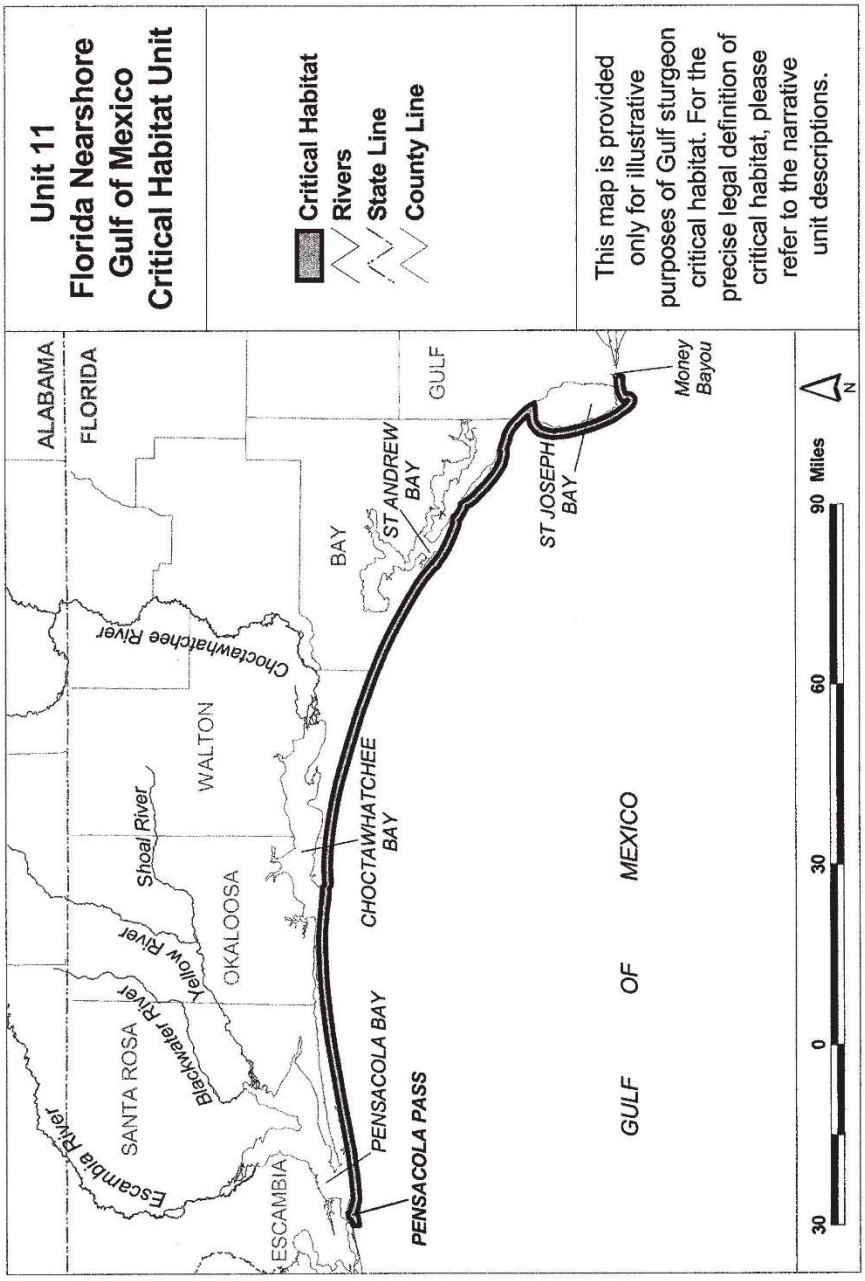
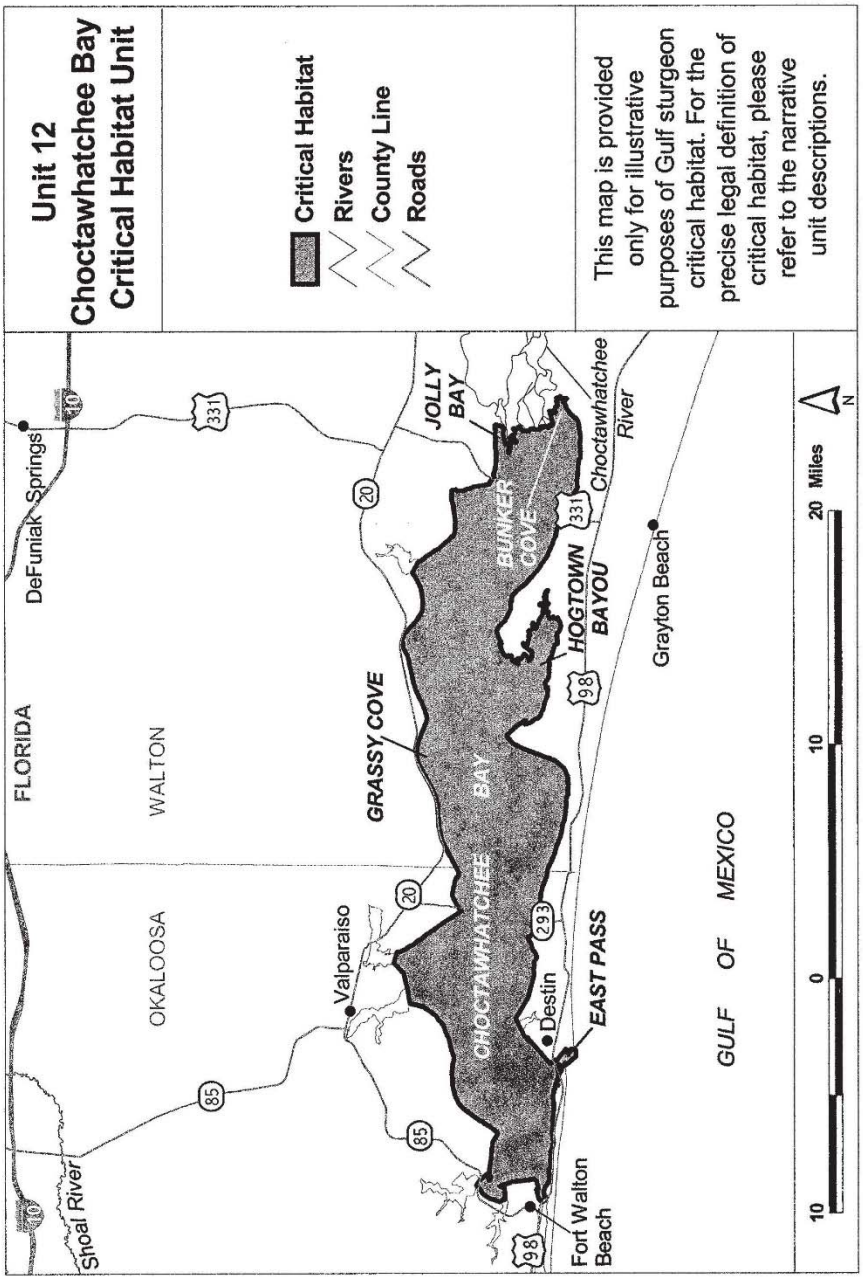


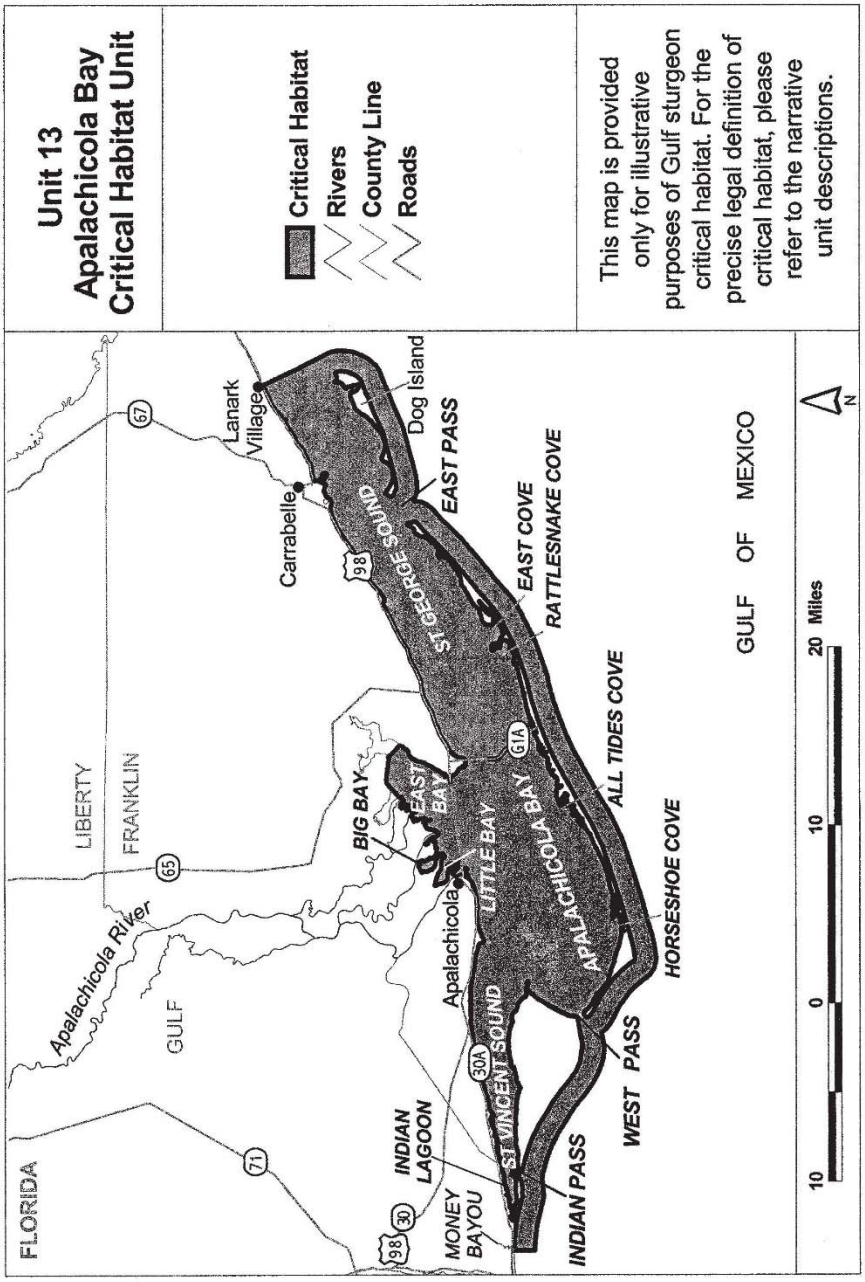
BILLING CODE 3510–22–C



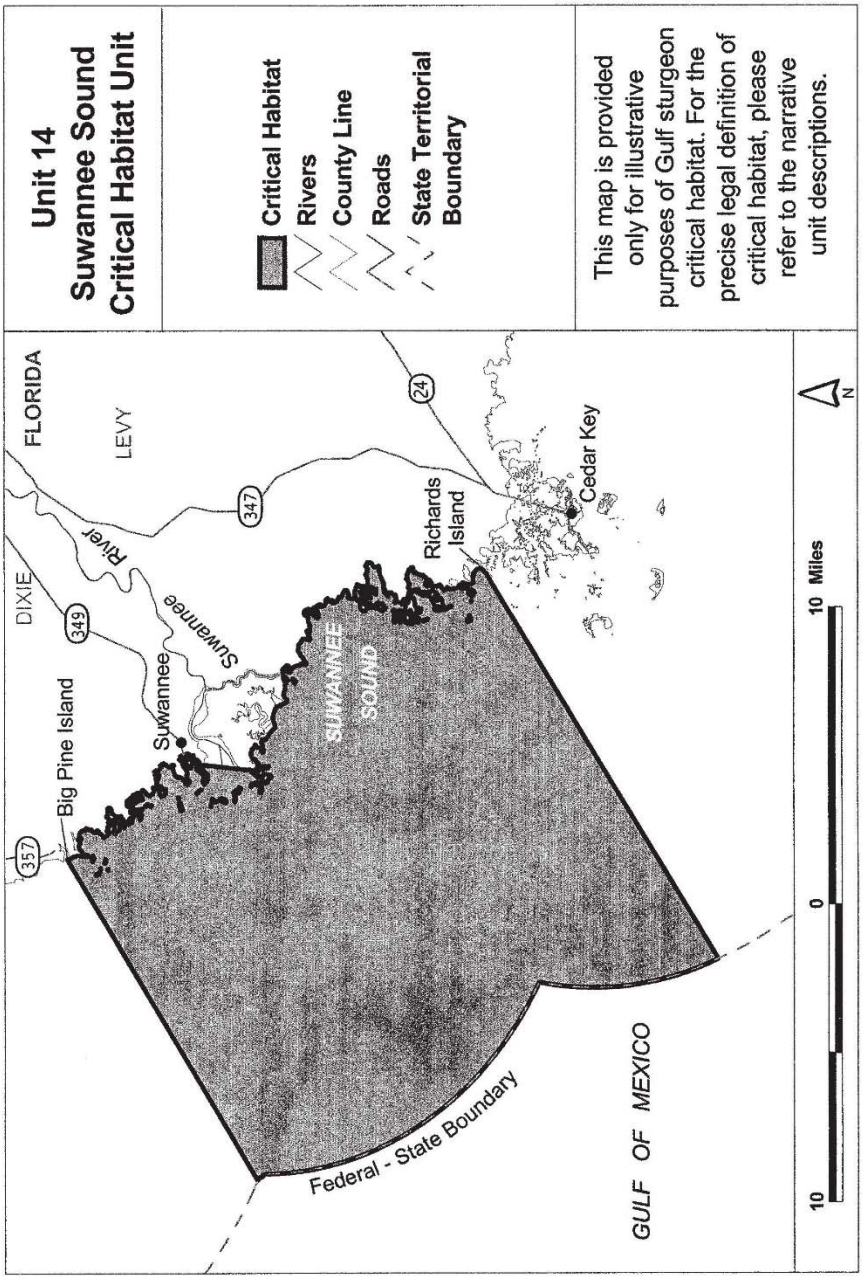
BILLING CODE 3510–22–P

(17) *Unit 13:* Apalachicola Bay in Gulf and Franklin County, Florida.

(i) Unit 13 includes the main body of Apalachicola Bay and its adjacent



BILLING CODE 3510–22–C



<FNP>

(19)(i) The river reaches within Units 1 to 7 as critical habitat lie within the ordinary high water line. As defined in 33 CFR 32.911, the ordinary high water

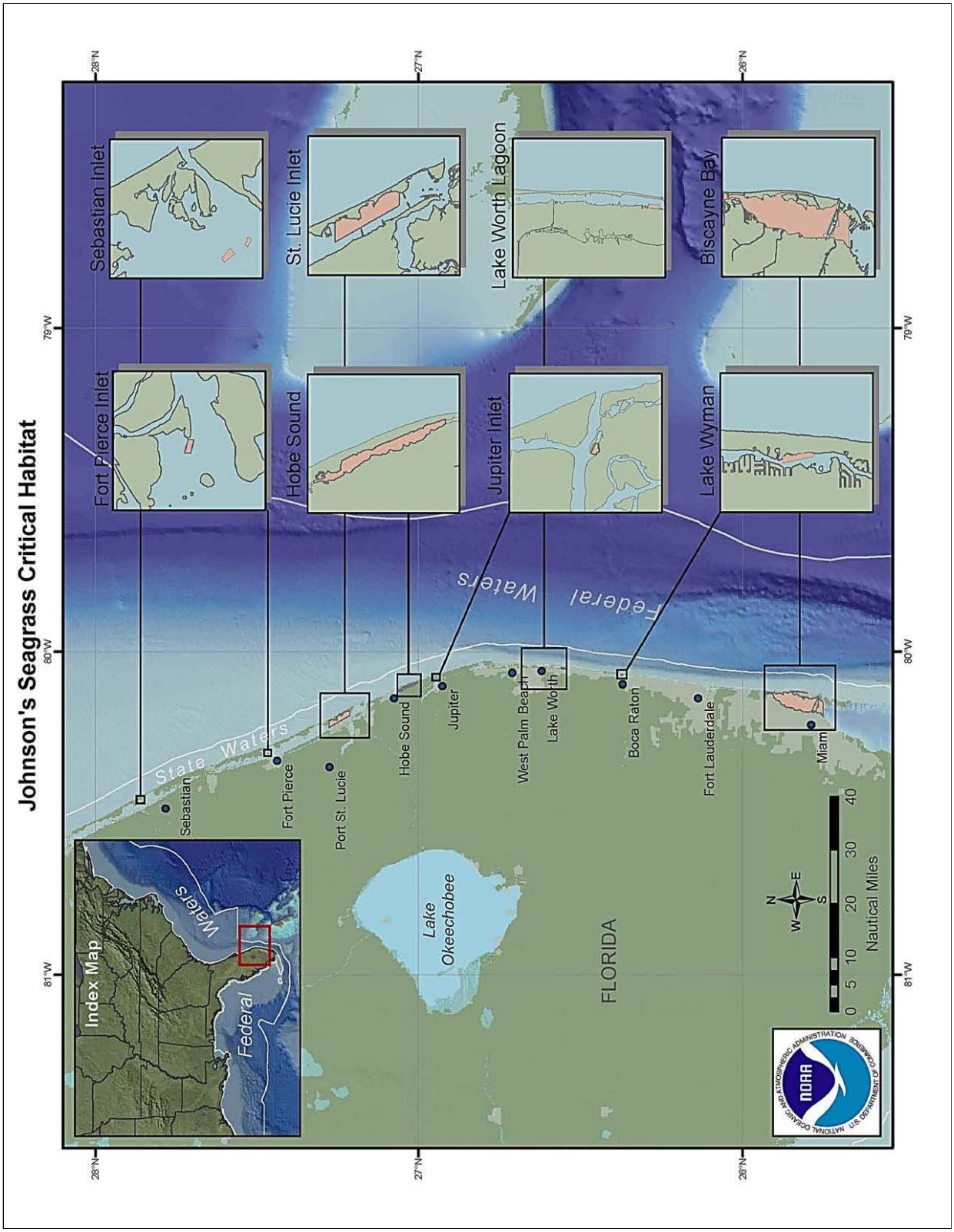

Johnson's Seagrass Critical Habitat
Sebastian Inlet
St. Lucie Inlet
Lake Worth Lagoon
Biscayne Bay
Fort Pierce Inlet
Hobe Sound
Jupiter Inlet
Lake Wyman
State Waters
Federal Waters
Sebastian
Fort Pierce
Port St. Lucie
Hobe Sound
Jupiter
West Palm Beach
Lake Worth
Boca Raton
Fort Lauderdale
Miami
Lake Okeechobee
FLORIDA
Index Map
Nautical Miles
0 5 10 20 30 40
N
S
E
W
81°W
80°W
79°W
28°N
27°N
26°N

Figure 1

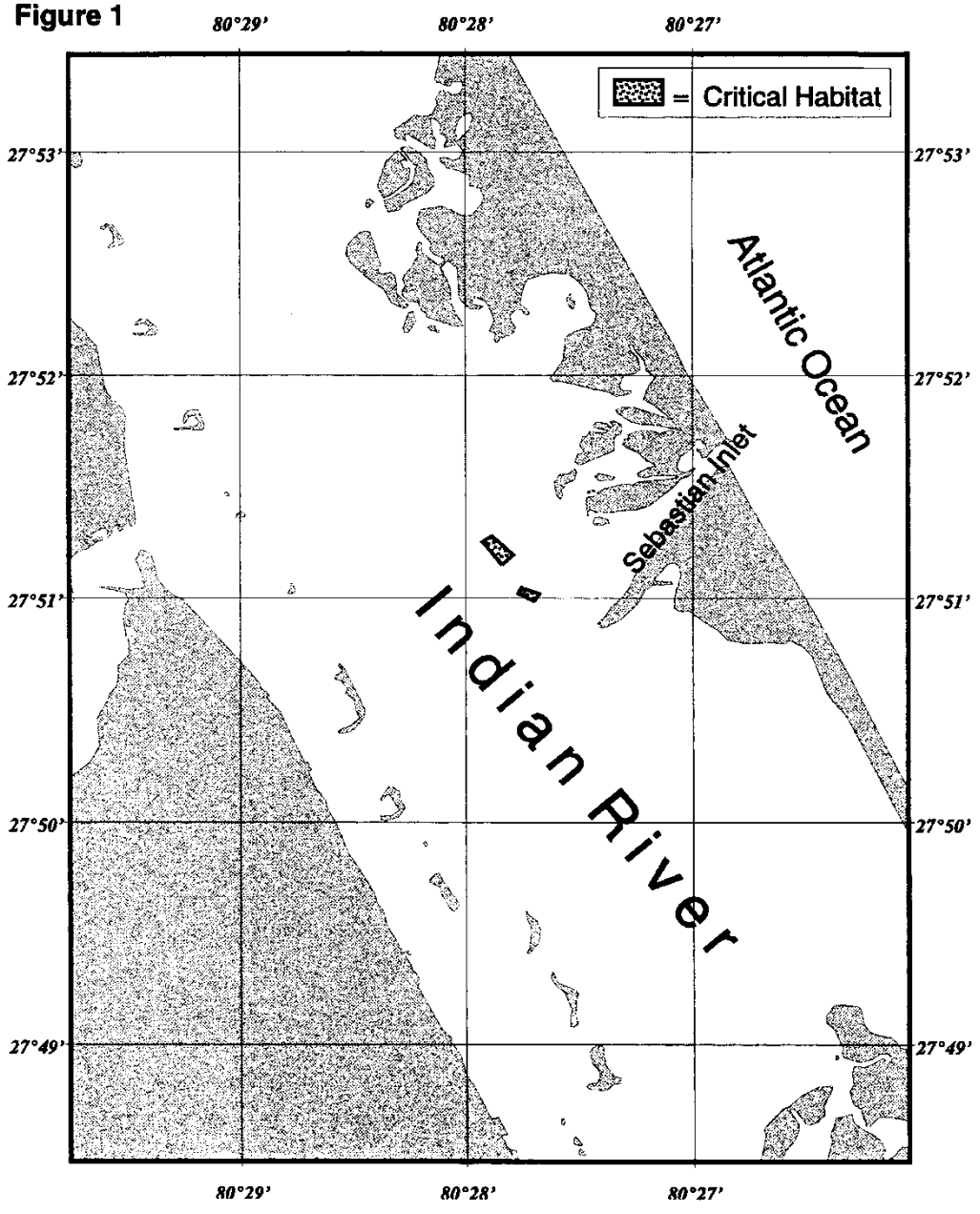

80°29'
80°28'
80°27'
= Critical Habitat
27°53'
27°52'
27°51'
27°50'
27°49'
Atlantic Ocean
Sebastian Inlet
Indian River

Figure 2

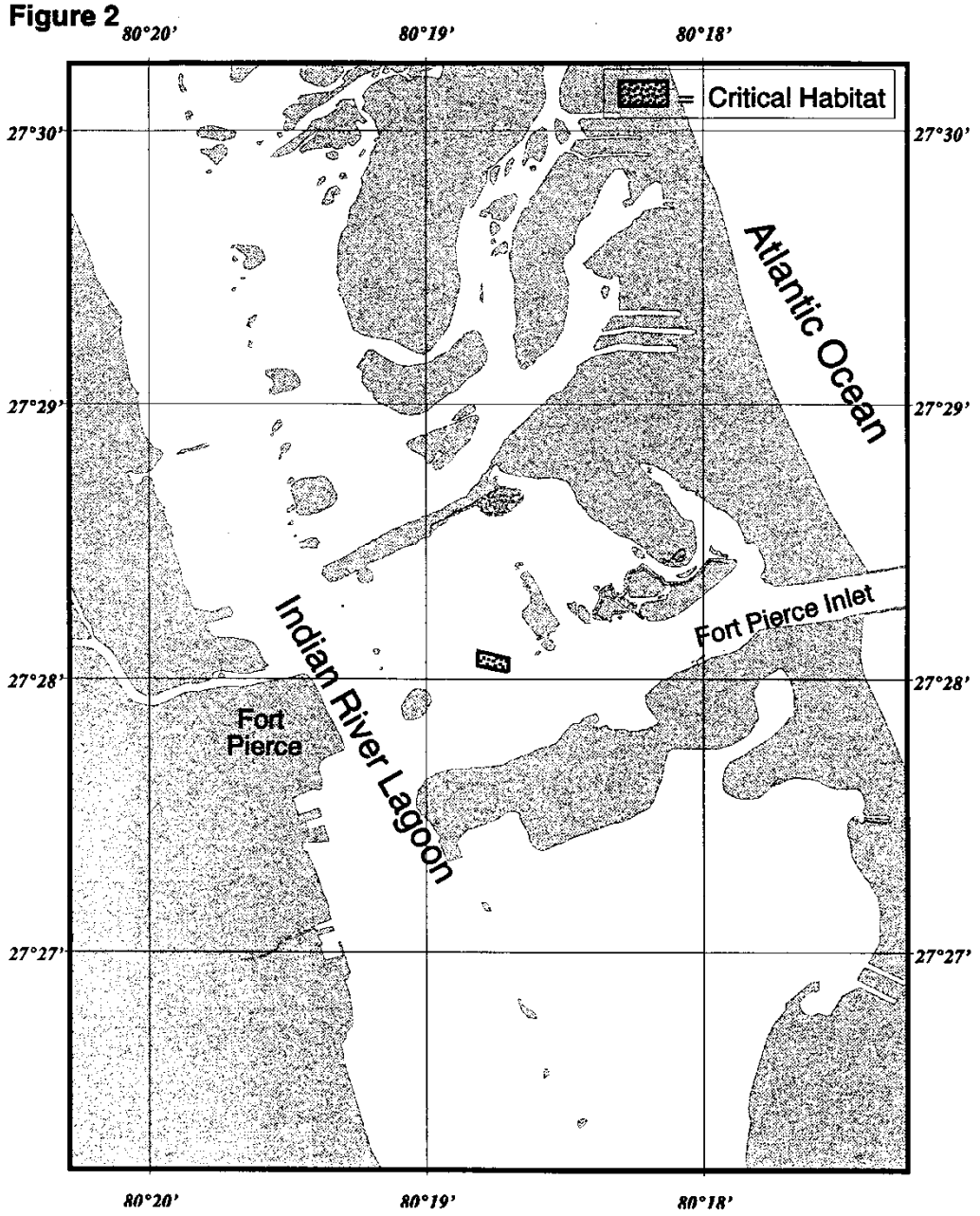

80°20'
80°19'
80°18'
= Critical Habitat
27°30'
27°29'
27°28'
27°27'
Atlantic Ocean
Fort Pierce Inlet
Indian River Lagoon
Fort Pierce

Figure 3

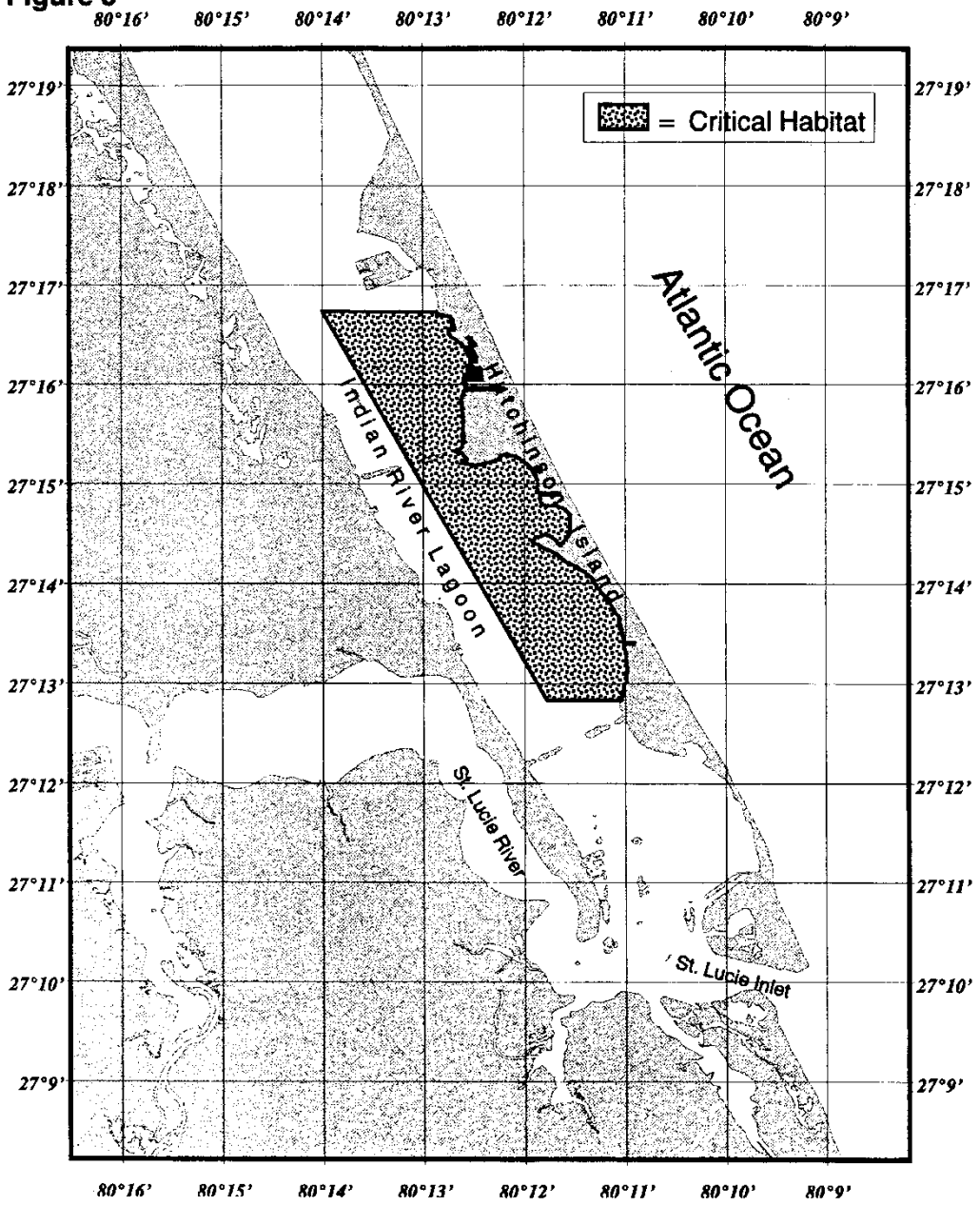

80°16'
80°15'
80°14'
80°13'
80°12'
80°11'
80°10'
80°9'
27°19'
27°18'
27°17'
27°16'
27°15'
27°14'
27°13'
27°12'
27°11'
27°10'
27°9'
= Critical Habitat
Atlantic Ocean
Hutchinson Island
Indian River Lagoon
St. Lucie River
St. Lucie Inlet

Figure 4

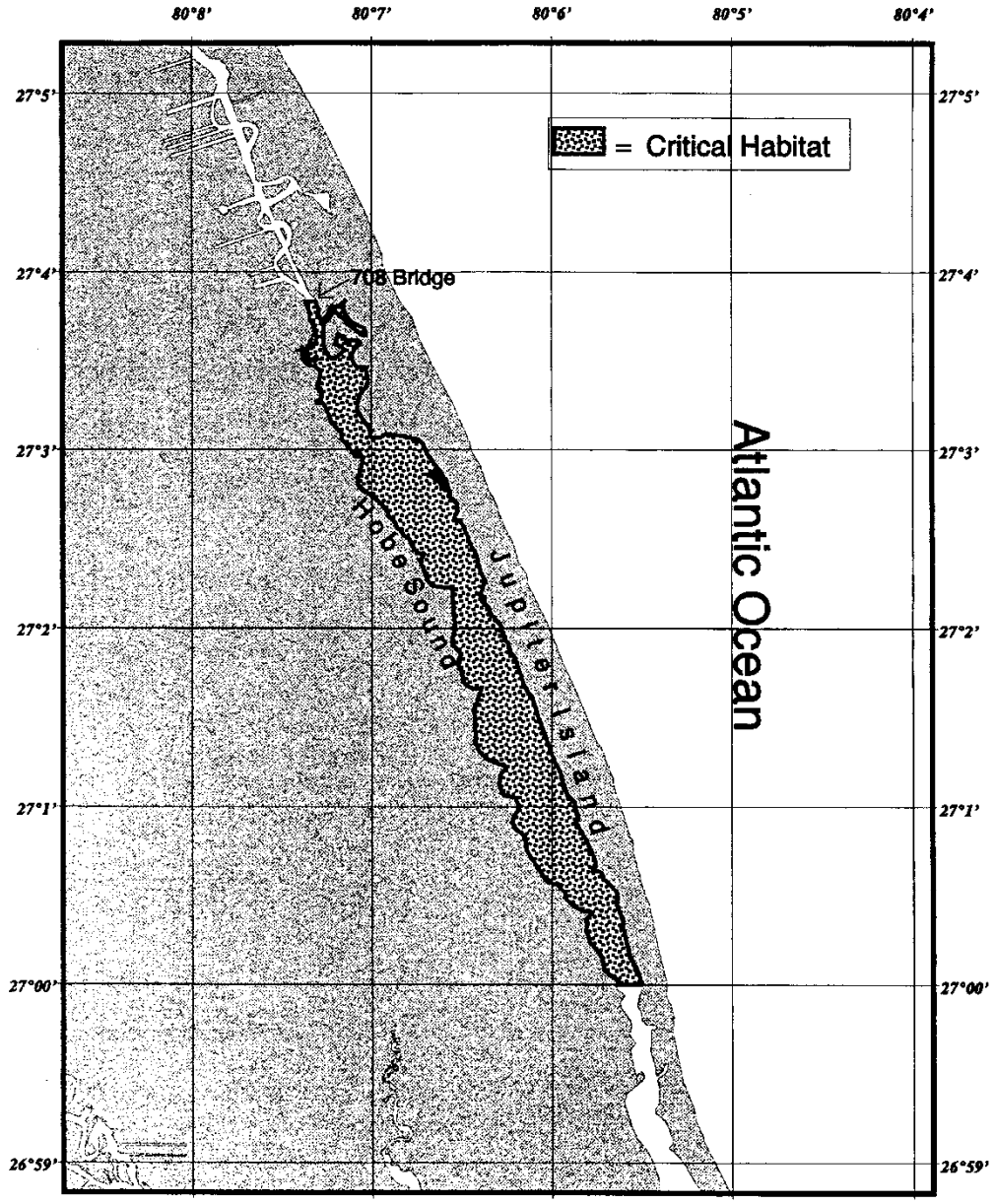

80°8'
80°7'
80°6'
80°5'
80°4'
27°5'
27°4'
27°3'
27°2'
27°1'
27°00'
26°59'
= Critical Habitat
708 Bridge
Hobe Sound
Jupiter Island
Atlantic Ocean

Figure 5

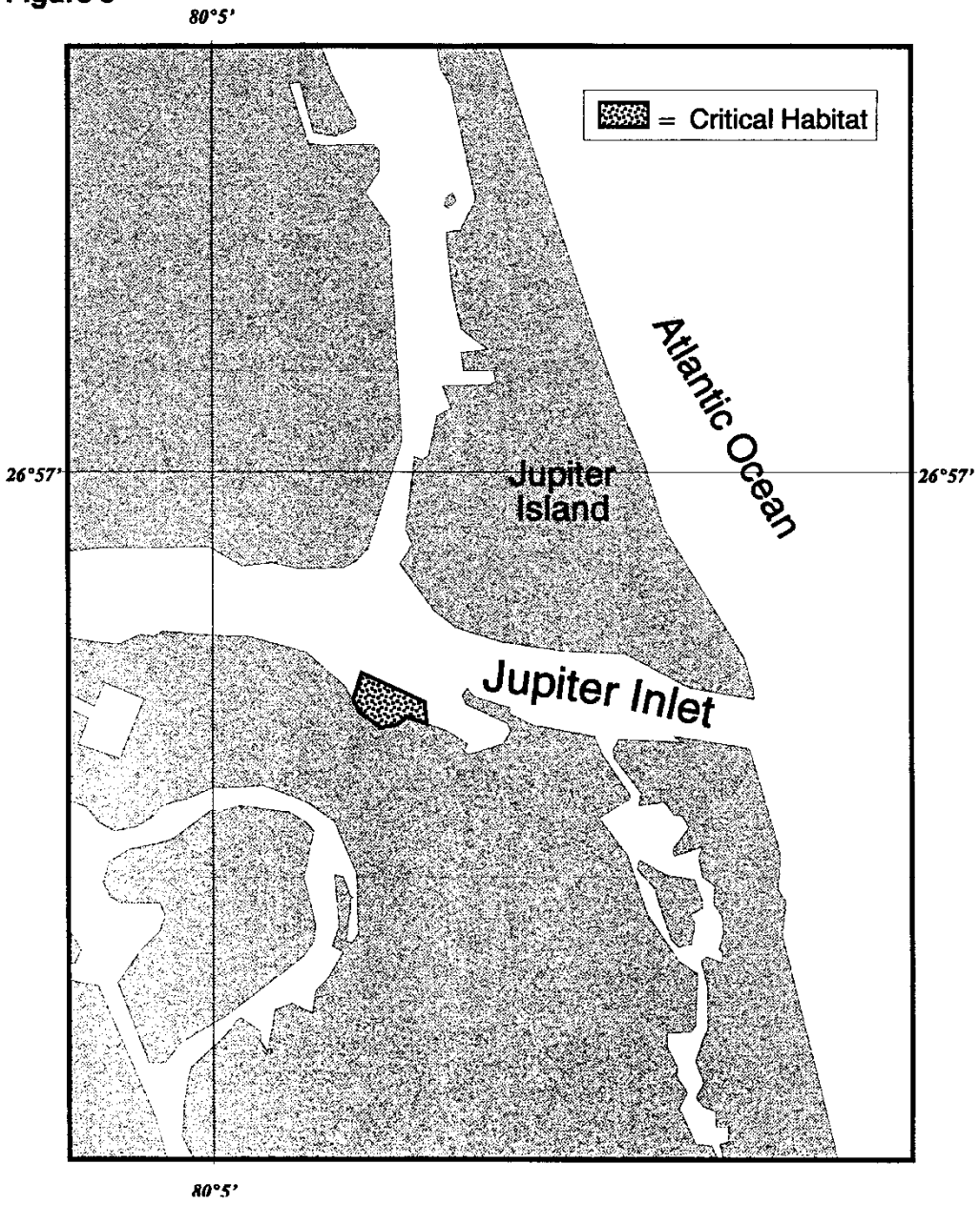

80°5'
= Critical Habitat
Atlantic Ocean
26°57'
Jupiter Island
26°57'
Jupiter Inlet
80°5'

Figure 6

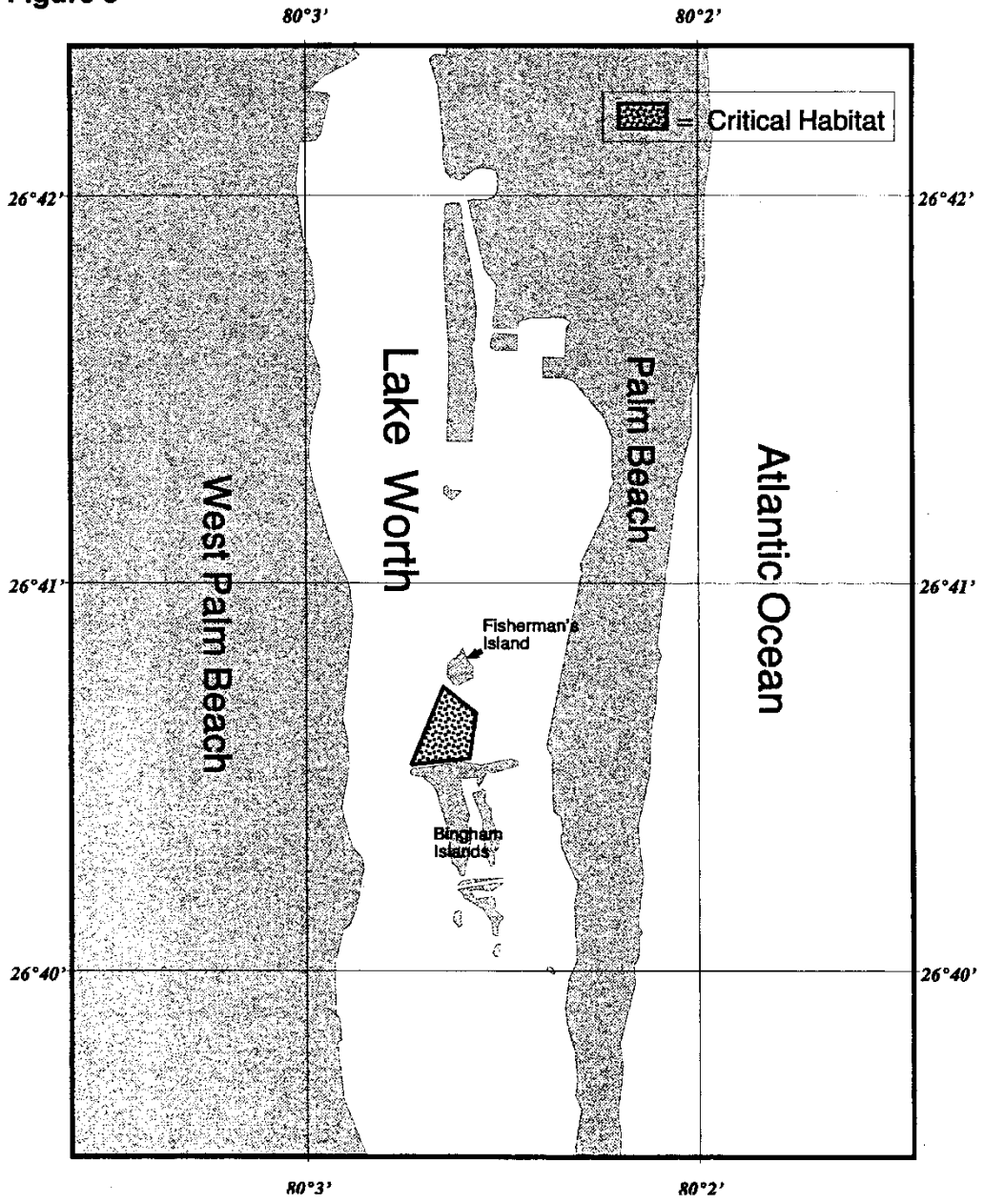

80°3'
80°2'
= Critical Habitat
26°42'
26°41'
26°40'
West Palm Beach
Lake Worth
Palm Beach
Atlantic Ocean
Fisherman's Island
Bingham Islands

Figure 7

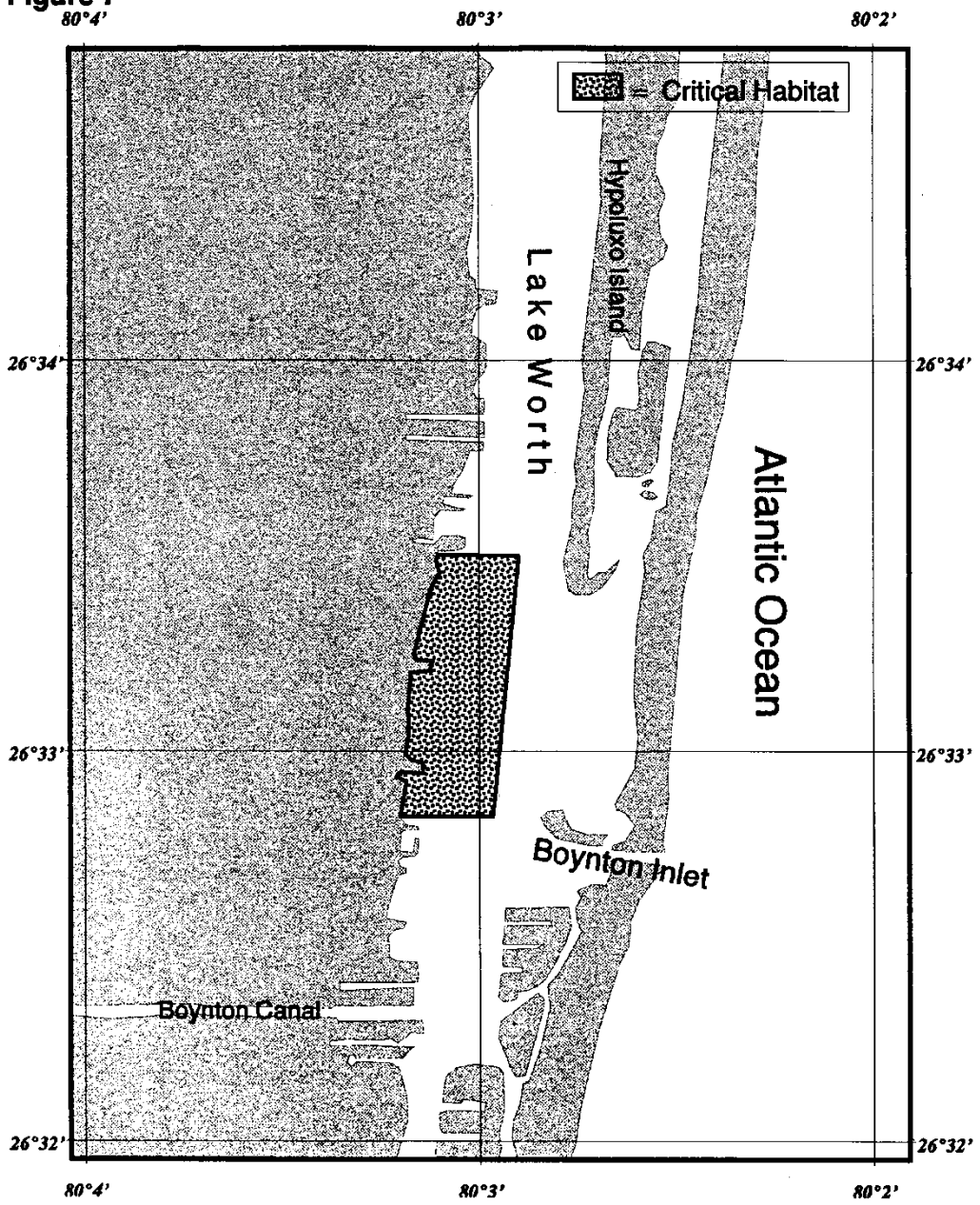

80°4'
80°3'
80°2'
= Critical Habitat
Hypoluxo Island
Lake Worth
Atlantic Ocean
26°34'
26°33'
26°32'
Boynton Inlet
Boynton Canal

Figure 8

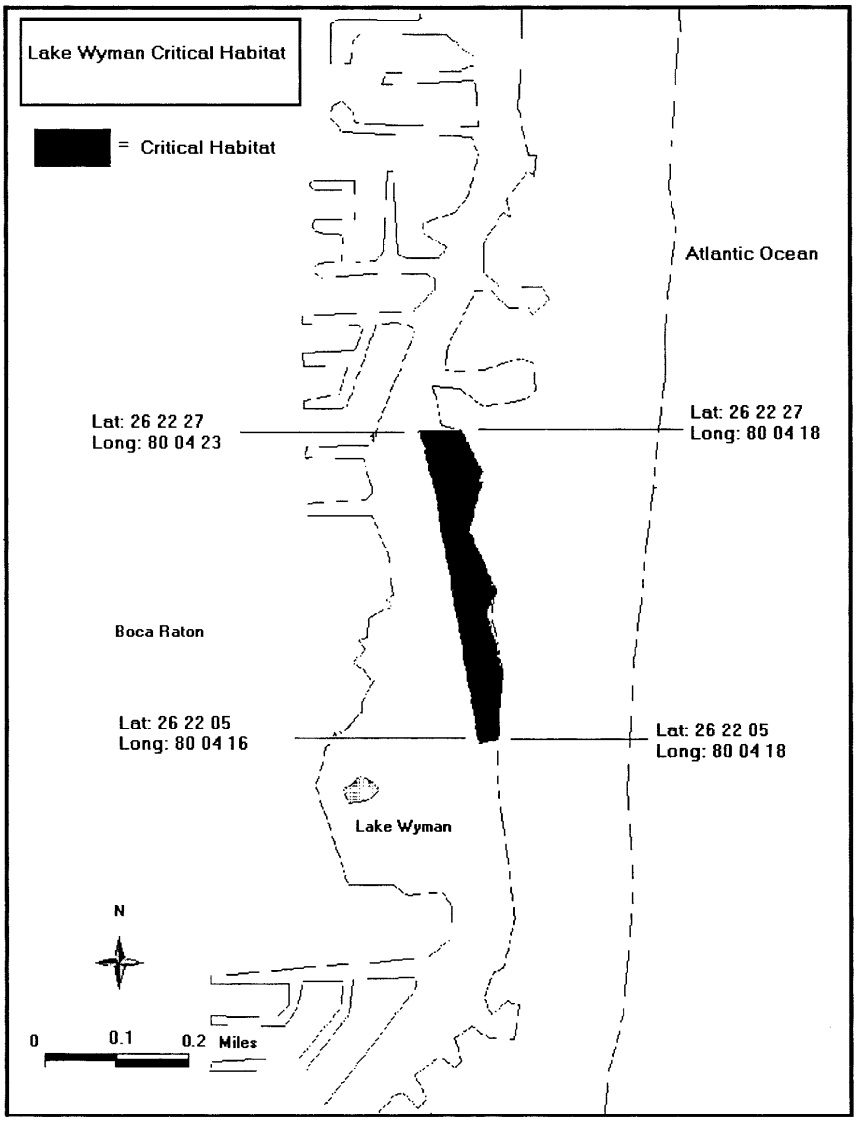
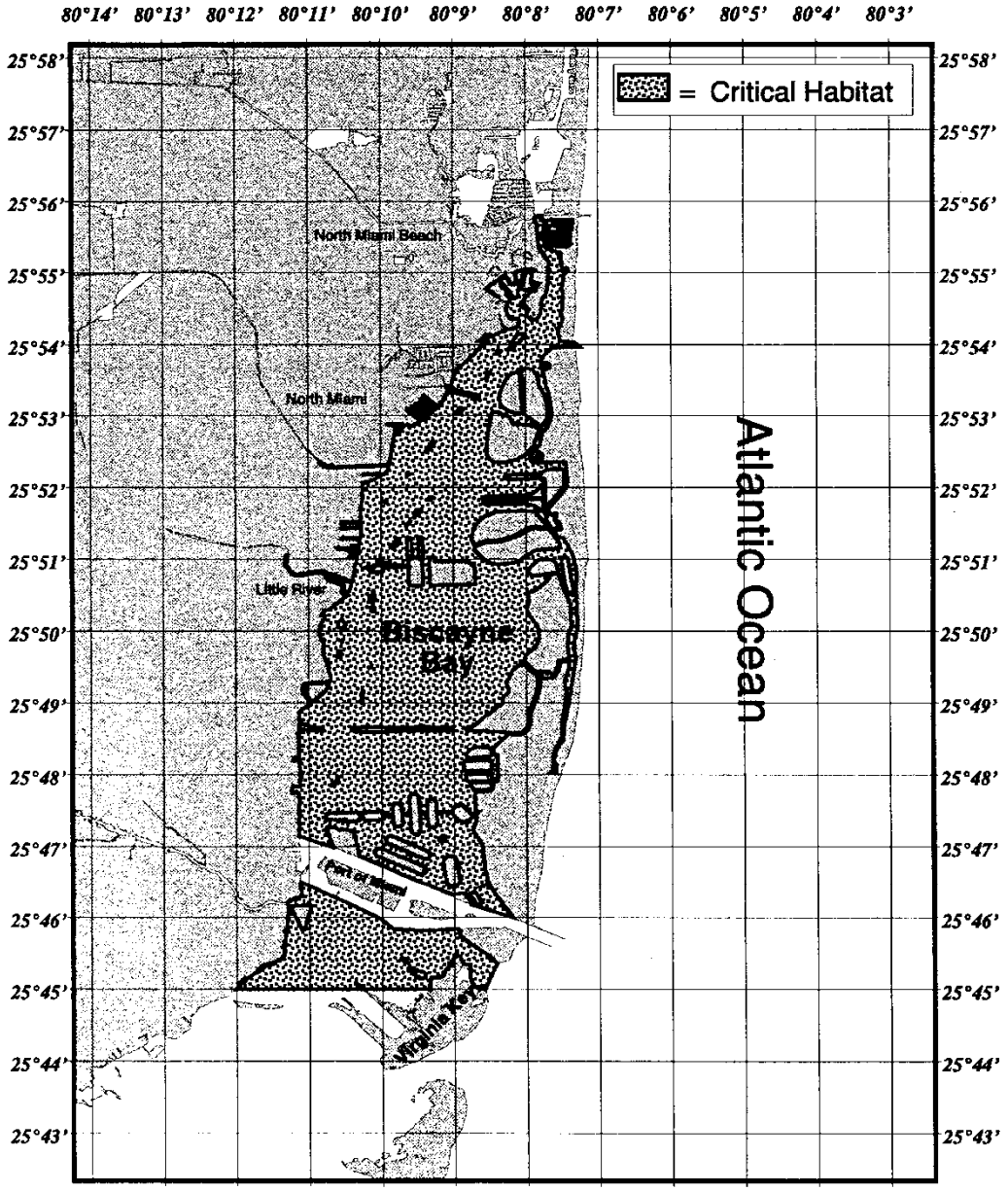
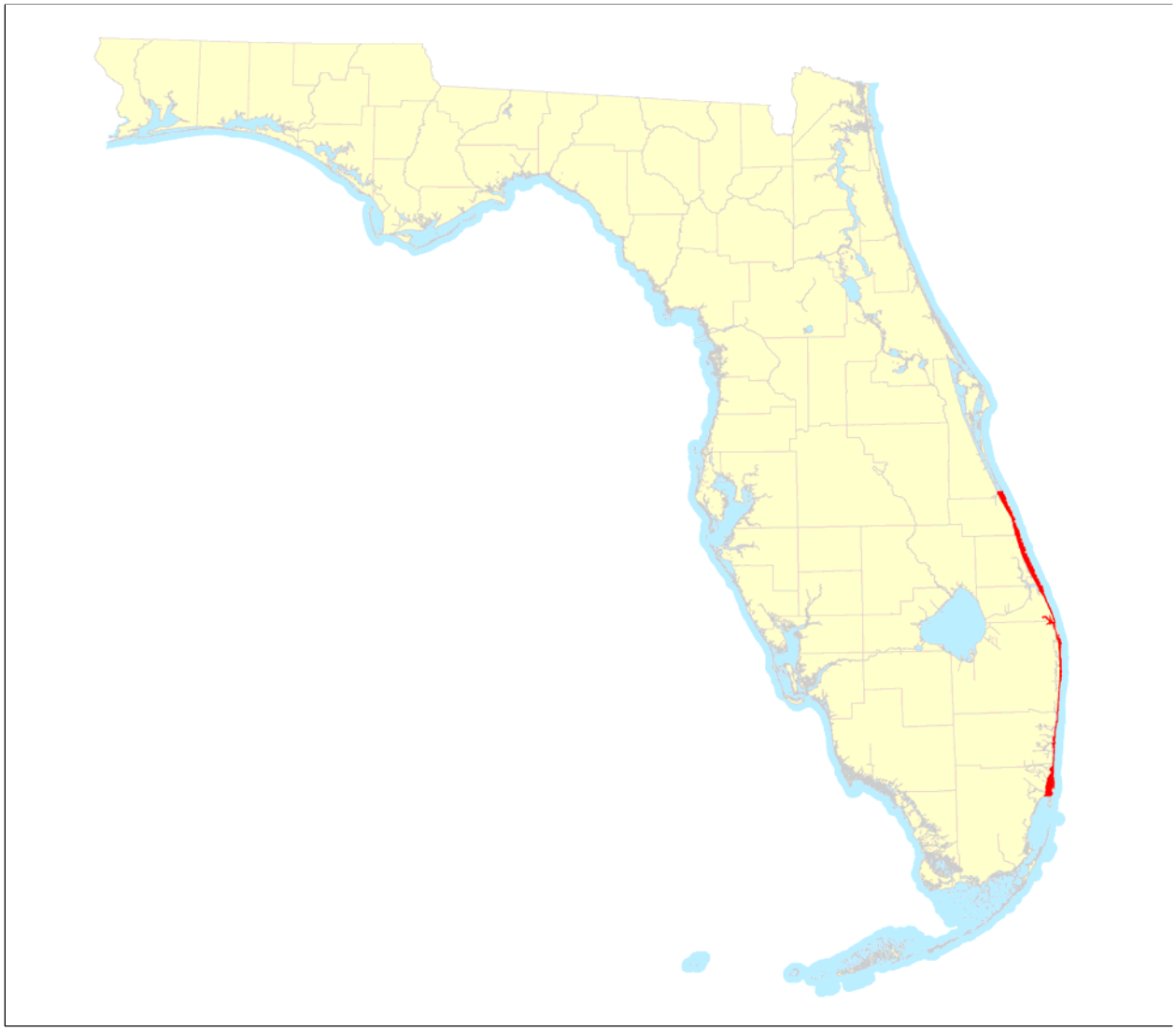

Lake Wyman Critical Habitat
= Critical Habitat
Atlantic Ocean
Lat: 26 22 27
Long: 80 04 23
Lat: 26 22 27
Long: 80 04 18
Boca Raton
Lat: 26 22 05
Long: 80 04 16
Lat: 26 22 05
Long: 80 04 18
Lake Wyman
N
0
0.1
0.2
Miles

Figure 9



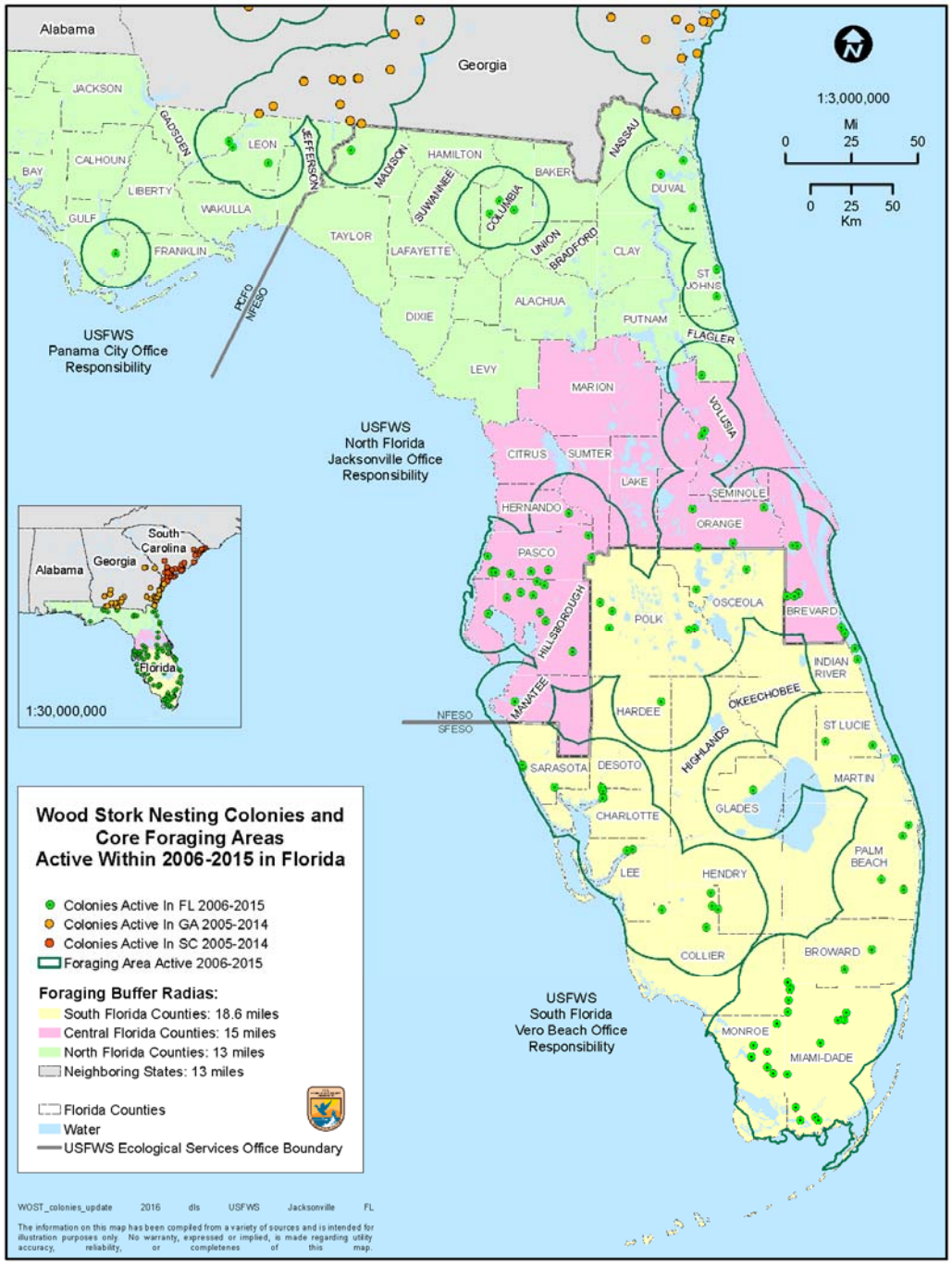
[FR Doc. 00–8394 Filed 4–4–00; 8:45 am]
BILLING CODE 3510–22–C

Johnson's Seagrass Range



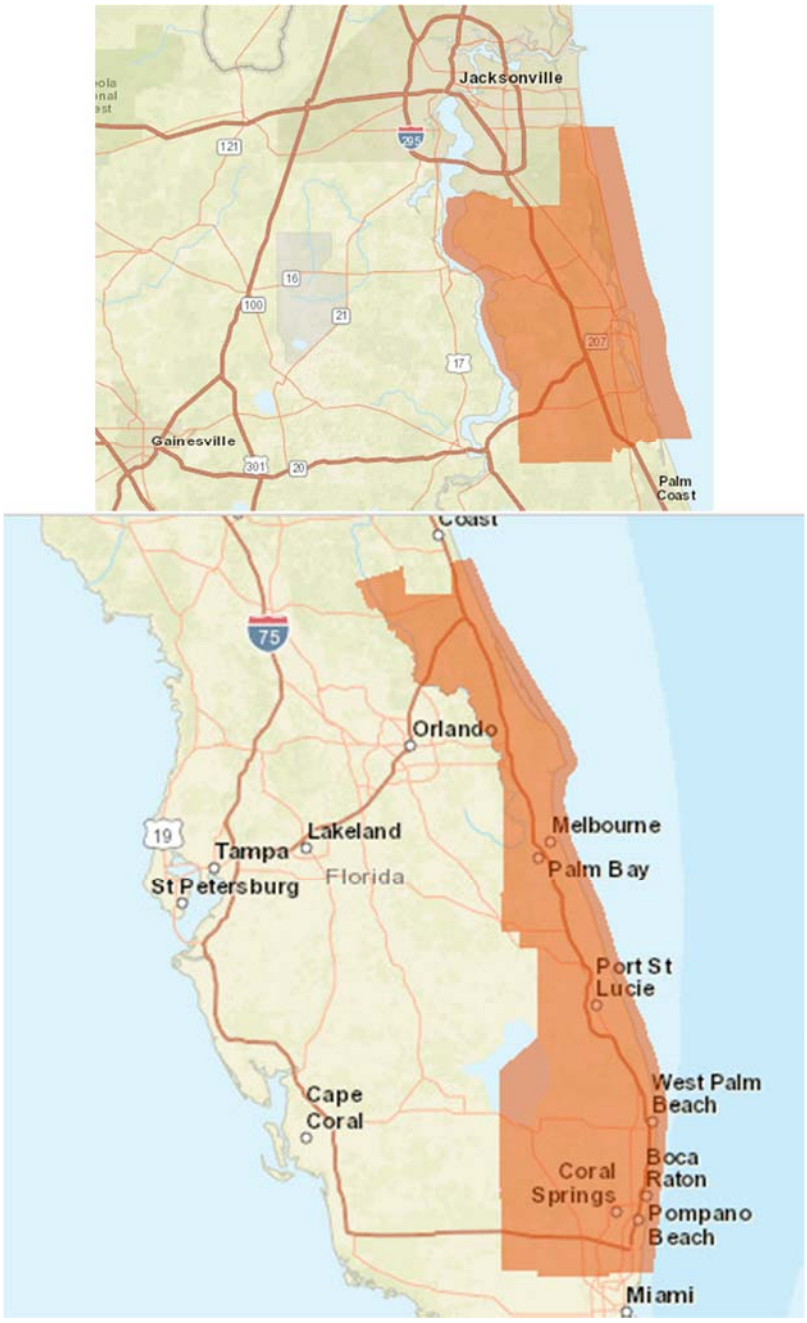
Based on Kenworthy, W.J. 1997. An updated biological status review and summary of the proceedings of a workshop to review the biological status of the seagrass, Halophila johnsonii Eiseman. Report to the Office of Protected Resources, National Marine Fisheries Service, Silver Spring, MD. 23 pp.

This map is periodically updated by the U.S. Fish and Wildlife Service.
The most current map will be used.



Anastasia Beach Mouse & Southeastern Beach Mouse

Map shows County boundaries from http://ecos.fws.gov



Anastasia Beach Mouse & Southeastern Beach Mouse

Habitat Description (within Counties)

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Endangered Status for the Anastasia Island Beach Mouse and Threatened Status for the Southeastern Beach Mouse

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Fish and Wildlife Service hereby determines the Anastasia Island beach mouse (*Peromyscus polionotus phasma*) to be an endangered species and the southeastern beach mouse (*Peromyscus polionotus niveiventris*) to be a threatened species pursuant to the Endangered Species Act of 1973, as amended (Act). These mice occur only on the Atlantic coast of Florida and have declined primarily due to the alteration and destruction of their habitat. In some areas competition from house mice and predation by house cats may also be affecting survival. This rule implements the protection and recovery provisions afforded by the Act for these two beach mice.

EFFECTIVE DATE: June 12, 1989.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Jacksonville Field Office, U.S. Fish and Wildlife Service, 3100 University Boulevard South, Suite 120, Jacksonville, Florida 32216.

FOR FURTHER INFORMATION CONTACT: Mr. David J. Wesley, Field Supervisor, at the above address (904/791-2580 or FTS 946-2580).

SUPPLEMENTARY INFORMATION

Background

Beach mice are pale-colored coastal subspecies of the oldfield mouse (*Peromyscus polionotus*), a wide-ranging species in the southeastern United States. Beach mice occur only along the Atlantic and Gulf coasts of Florida and the Gulf coast of Alabama. Three subspecies of Gulf coast beach mice, the Alabama beach mouse (*Peromyscus polionotus ammobates*), Perdido Key beach mouse (*P. p. trissyllepsis*), and the Choctawhatchee beach mouse (*P. p. allophrys*), have already been listed as endangered species pursuant to the Act (June 6, 1985; 50 FR 23872). The present rule lists two of the Atlantic coast subspecies. One of these, the Anastasia Island beach mouse (*P. p. phasma*), is listed as an endangered species; the other, the southeastern beach mouse (*P. p. niveiventris*), is listed as threatened. Both occur only in Florida. The Anastasia Island beach mouse was known historically from the mouth of the St. Johns River, Duval County, south to Matanzas Inlet, St. Johns County. The southeastern beach mouse formerly occurred from Ponce (Mosquito) Inlet, Volusia County, south to Hollywood Beach, Broward County (Humphrey 1987).

The Anastasia Island beach mouse (*Peromyscus polionotus phasma*) was named by Bangs in 1898 as a full species, *Peromyscus phasma*. Osgood (1909) relegated it to subspecific rank under the species *Peromyscus polionotus*. It is one of the largest of the beach mice, with ten adults from the type locality averaging 138.5 mm. in total length with an average tail length of 53 mm. (Osgood 1909). Like all beach mice, it is considerably paler than inland races of *P. polionotus*. The coloration is light ochraceous buff on the back, with pure white underparts, a unicolor tail, and rather indistinct white markings on the nose and face (Howell, unpubl. ms., *circa* 1940). The type locality is Point Romo, Anastasia Island, St. Johns County, Florida (Hall 1981).

The southeastern beach mouse (*Peromyscus polionotus niveiventris*) was named by Chapman as *Hesperomys niveiventris* in 1889. Bangs placed it in the genus *Peromyscus* in 1898, and Osgood (1909) relegated it to subspecies rank under *Peromyscus polionotus*. This is the largest of the beach mice, with 10 adults averaging 139 mm. in total length and 52 mm. in tail length (Osgood 1909). It is slightly darker and more buffy than *Peromyscus polionotus phasma*, but still considerably paler than most inland subspecies (it is similar in coloration to inland *P. p. rhoadsi*, but is much larger in size) (Howell, unpubl. ms., *circa* 1940). The type locality is Oak Lodge, east peninsula opposite Micco, Brevard County, Florida (Hall 1981).

Both *Peromyscus polionotus phasma* and *P. p. niveiventris* are restricted to sand dunes mainly vegetated by sea oats (*Uniola paniculata*) and dune panic grass (*Paspalum amarulum*), and to the adjoining scrub, characterized by oaks (*Quercus* sp.) and sand pine (*Pinus clausa*) or palmetto (*Serenoa repens*) (Humphrey and Barbour 1981, Humphrey 1987). Extine and Stout (1987) studied dispersion and movements of *Peromyscus polionotus niveiventris* on Merritt Island. The habitat of the mice consisted of three contiguous zones of vegetation running parallel with the beach and dune lines. Zone 1 was seaward and supported sea oats; Zone 2 was characterized by clumps of palmetto and sea grape (*Coccoloba uvifera*), and expanses of open sand; Zone 3 was interior and consisted of dense scrub dominated by palmetto, sea grape, and wax myrtle (*Myrica cerifera*). Zones 2 and 3 were found to be the preferred habitats of the beach mice, whereas Zone 1 was marginal.

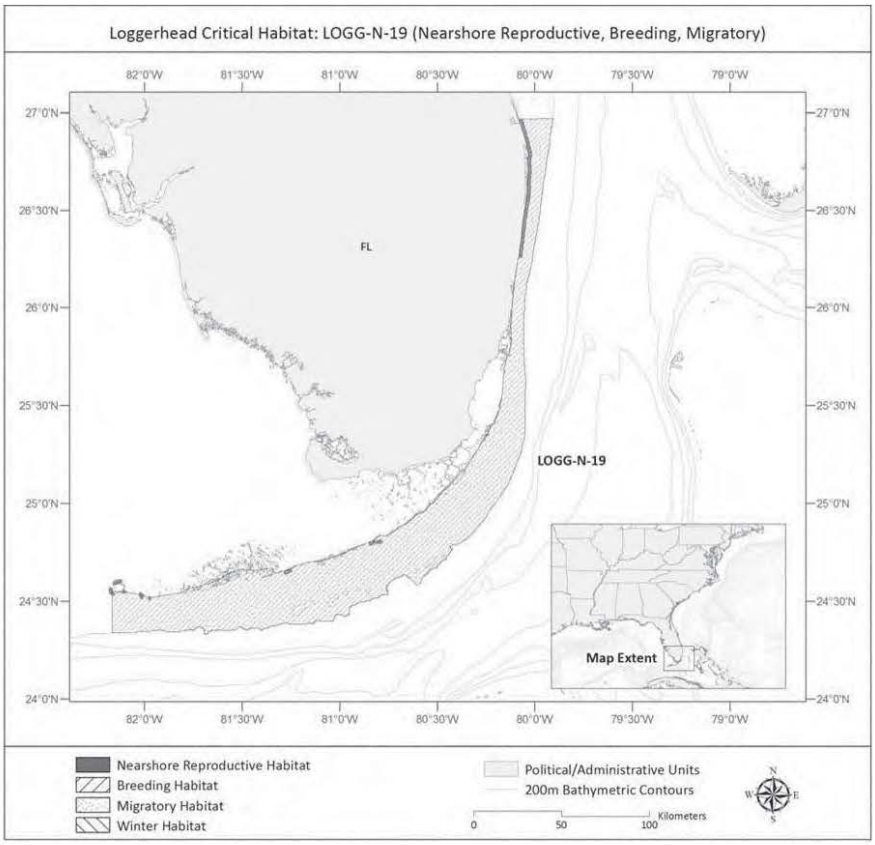
The following information pertains mostly to Gulf coast beach mice, but probably applies to subspecies along the Atlantic coast, since all beach mice are morphologically similar and live in similar habitats.

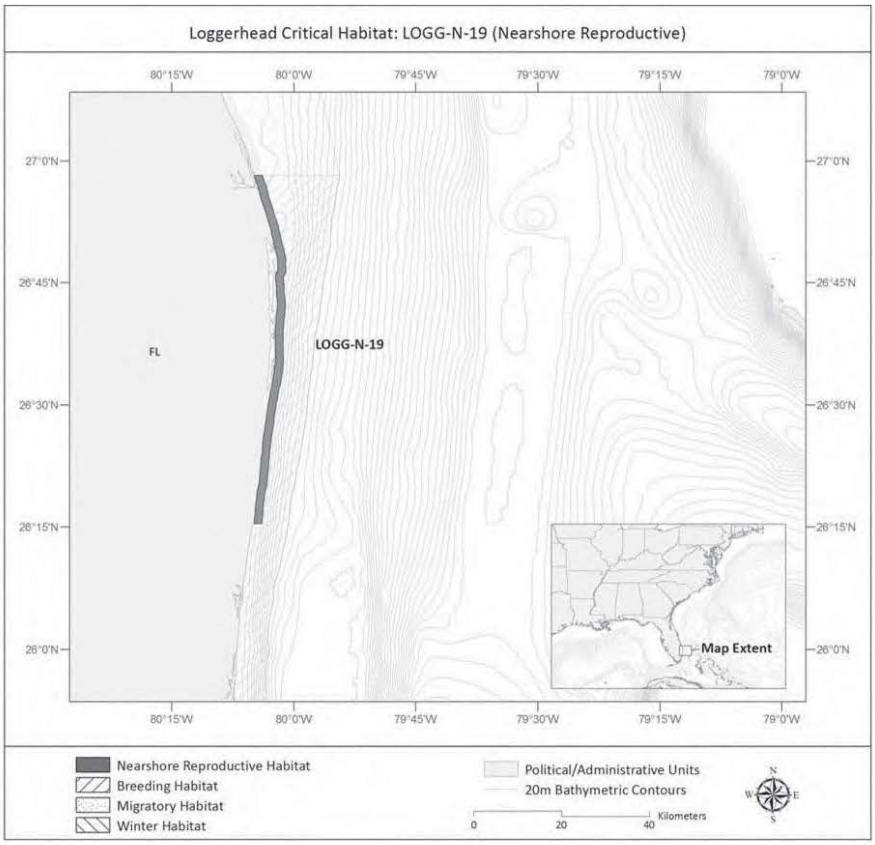
Blair (1951) found that food plants most utilized by beach mice are various beach grasses and sea oats. The fruits of beach grass are readily available to the mice, but those of sea oats are usually obtainable only after they have been blown down by heavy winds. These foods are often found stored in mouse burrows. Beach mice also probably eat invertebrates from time to time, especially in late spring and early summer when seeds are scarce (Ehrhart *in* Layne, 1978).

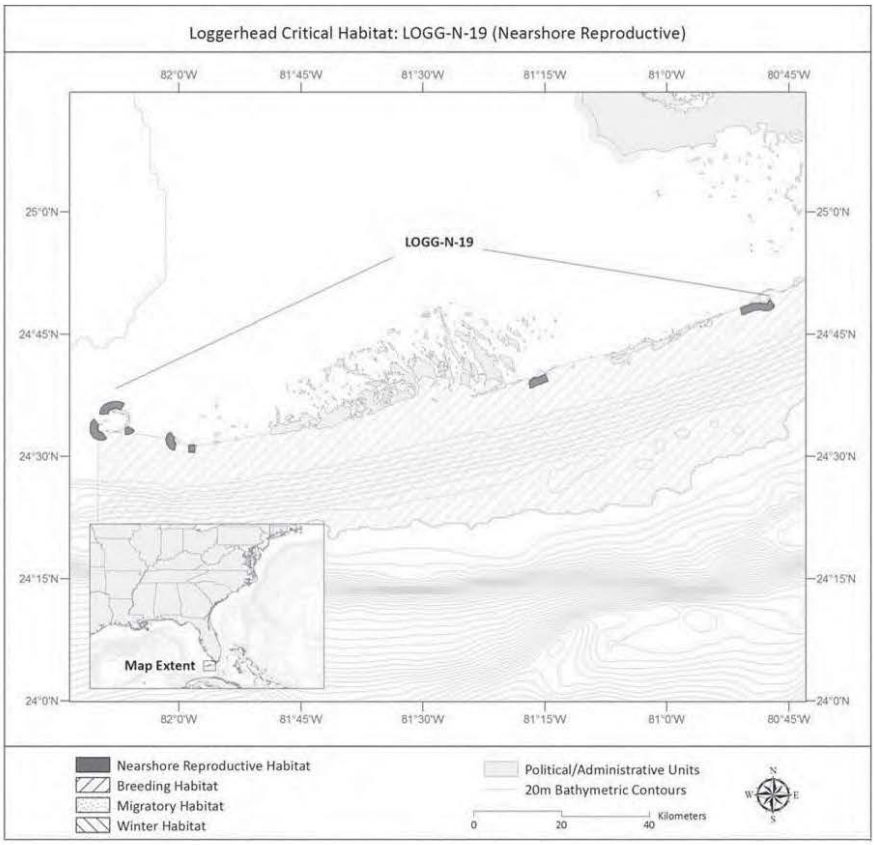
Beach mice are burrow-inhabiting animals. Ehrhart (*in* Layne 1978), writing

Perdido Key, Choctawatchee & St Andrew Beach Mice

Map shows County boundaries from http://ecos.fws.gov


Loggerhead Critical Habitat: LOGG-N-19 (Nearshore Reproductive, Breeding, Migratory)
82°0'W
81°30'W
81°0'W
80°30'W
80°0'W
79°30'W
79°0'W
27°0'N
26°30'N
26°0'N
25°30'N
25°0'N
24°30'N
24°0'N
FL
LOGG-N-19
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
200m Bathymetric Contours
0
50
100
Kilometers
N
W
E
S


Loggerhead Critical Habitat: LOGG-N-19 (Nearshore Reproductive)
80°15'W
80°0'W
79°45'W
79°30'W
79°15'W
79°0'W
27°0'N
26°45'N
26°30'N
26°15'N
26°0'N
FL
LOGG-N-19
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S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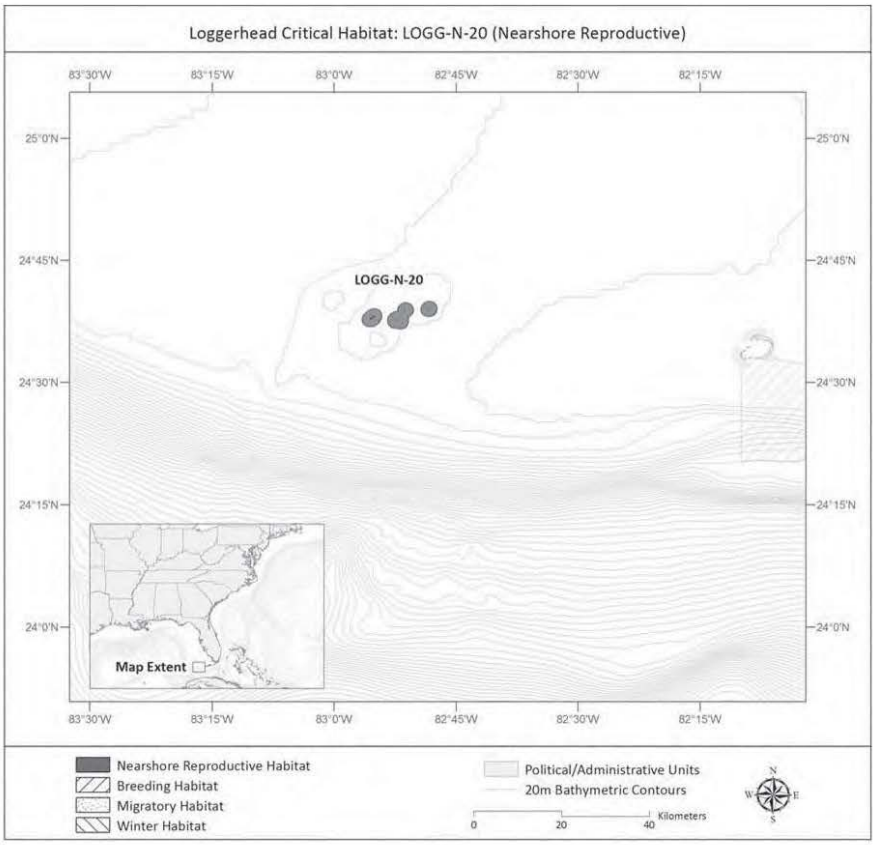
82°0'W
81°45'W
81°30'W
81°15'W
81°0'W
80°45'W
25°0'N
24°45'N
24°30'N
24°15'N
24°0'N
LOGG-N-19
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S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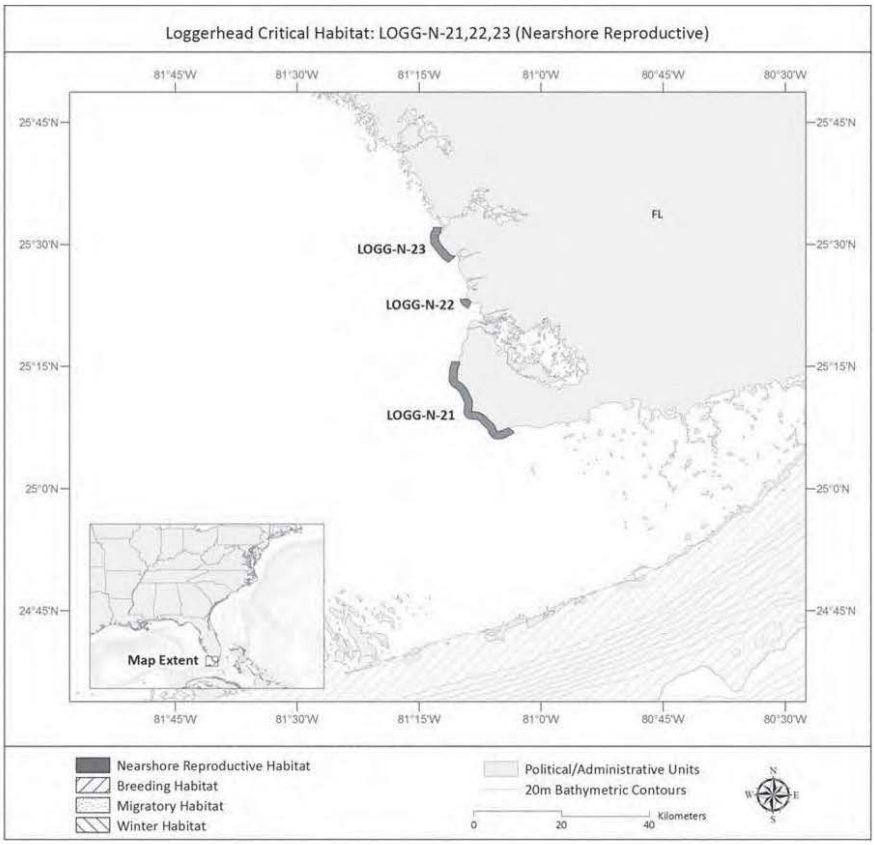
83°30'W
83°15'W
83°0'W
82°45'W
82°30'W
82°15'W
25°0'N
24°45'N
24°30'N
24°15'N
24°0'N
LOGG-N-20
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S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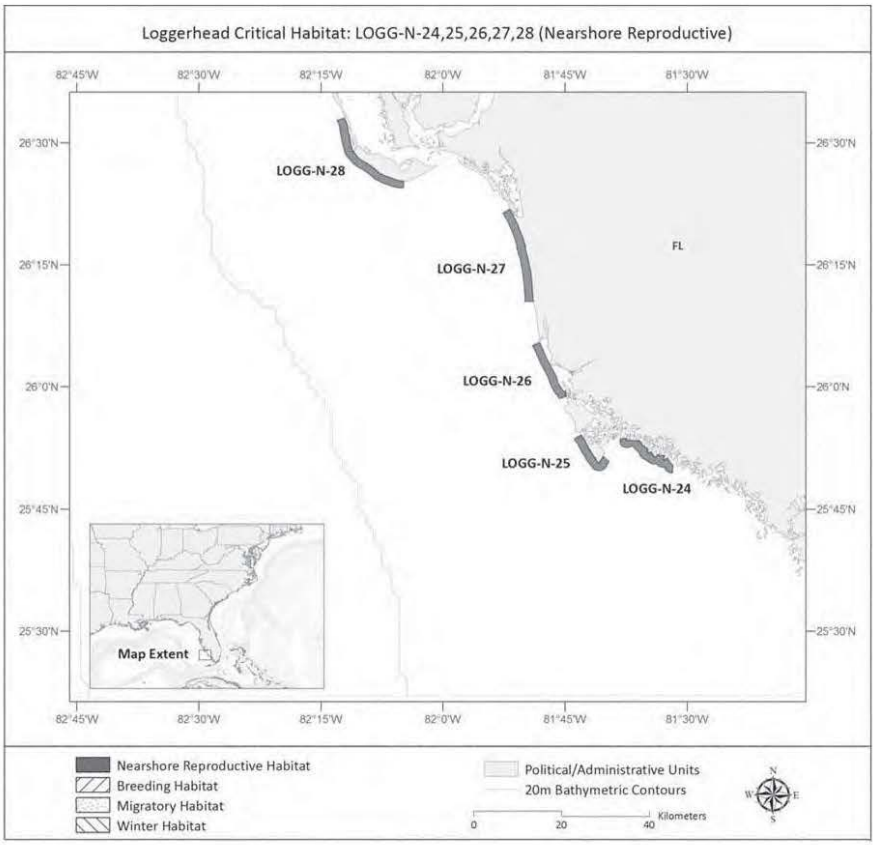
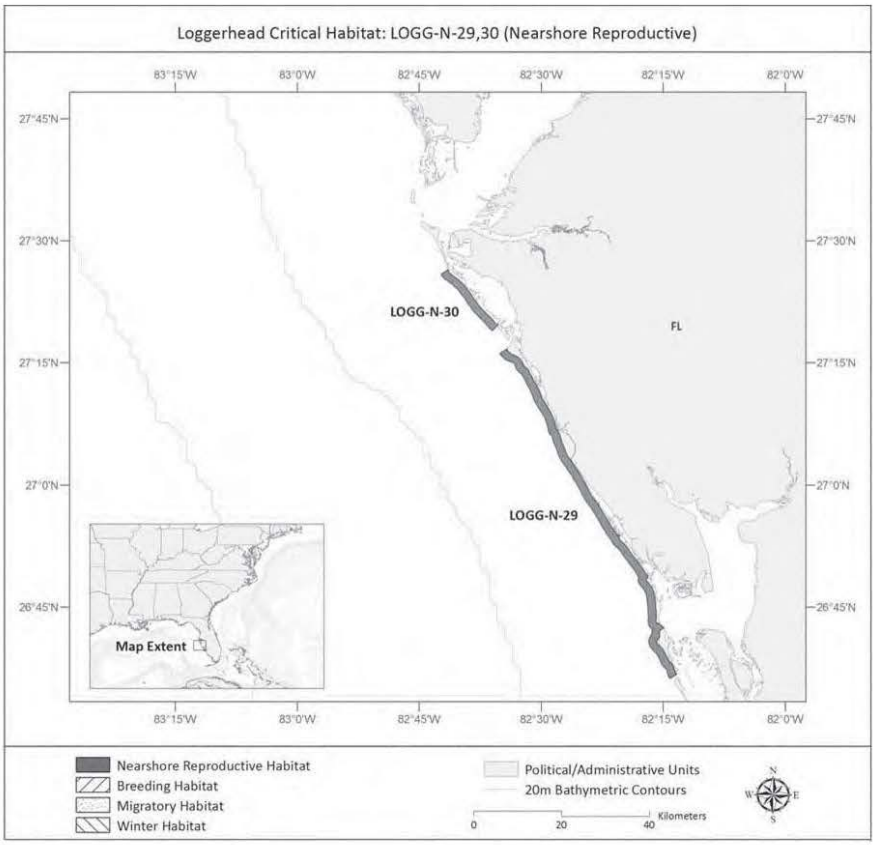
81°45'W
81°30'W
81°15'W
81°0'W
80°45'W
80°30'W
25°45'N
25°30'N
25°15'N
25°0'N
24°45'N
FL
LOGG-N-23
LOGG-N-22
LOGG-N-21
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S


Loggerhead Critical Habitat: LOGG-N-24,25,26,27,28 (Nearshore Reproductive)
82°45'W
82°30'W
82°15'W
82°0'W
81°45'W
81°30'W
26°30'N
26°15'N
26°0'N
25°45'N
25°30'N
LOGG-N-28
LOGG-N-27
LOGG-N-26
LOGG-N-25
LOGG-N-24
FL
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S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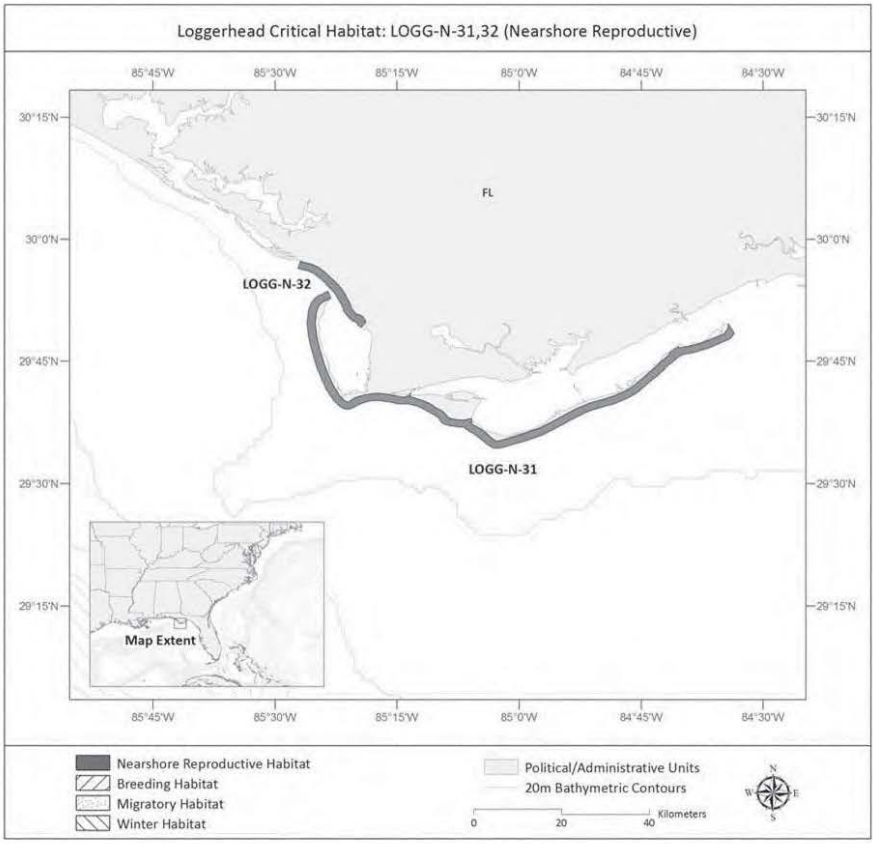
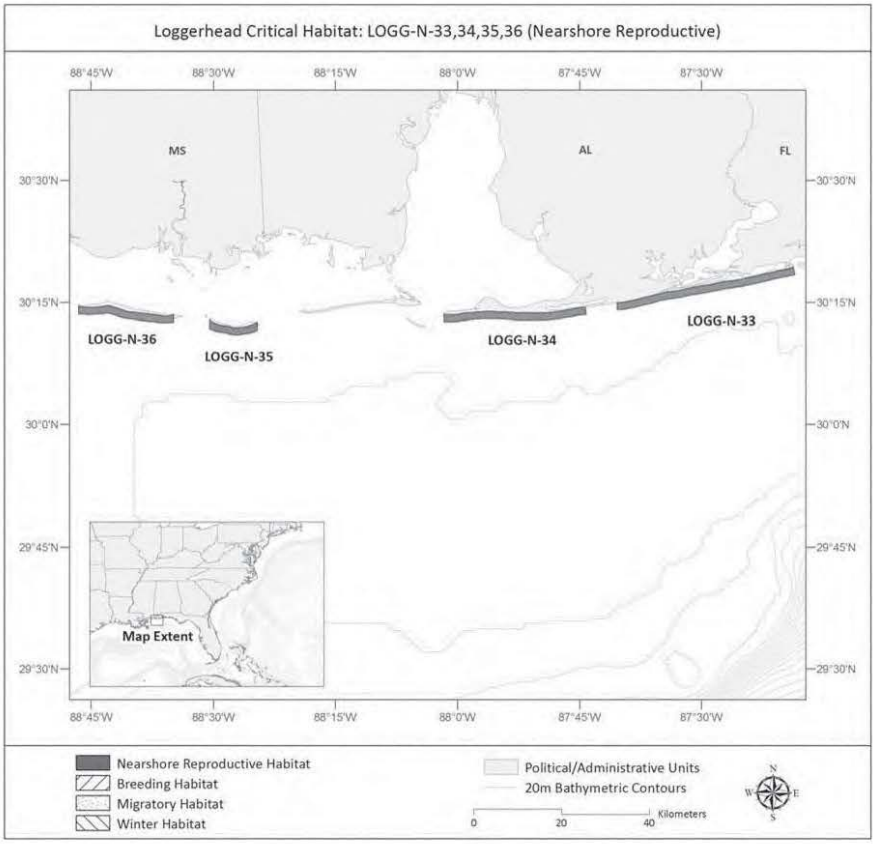
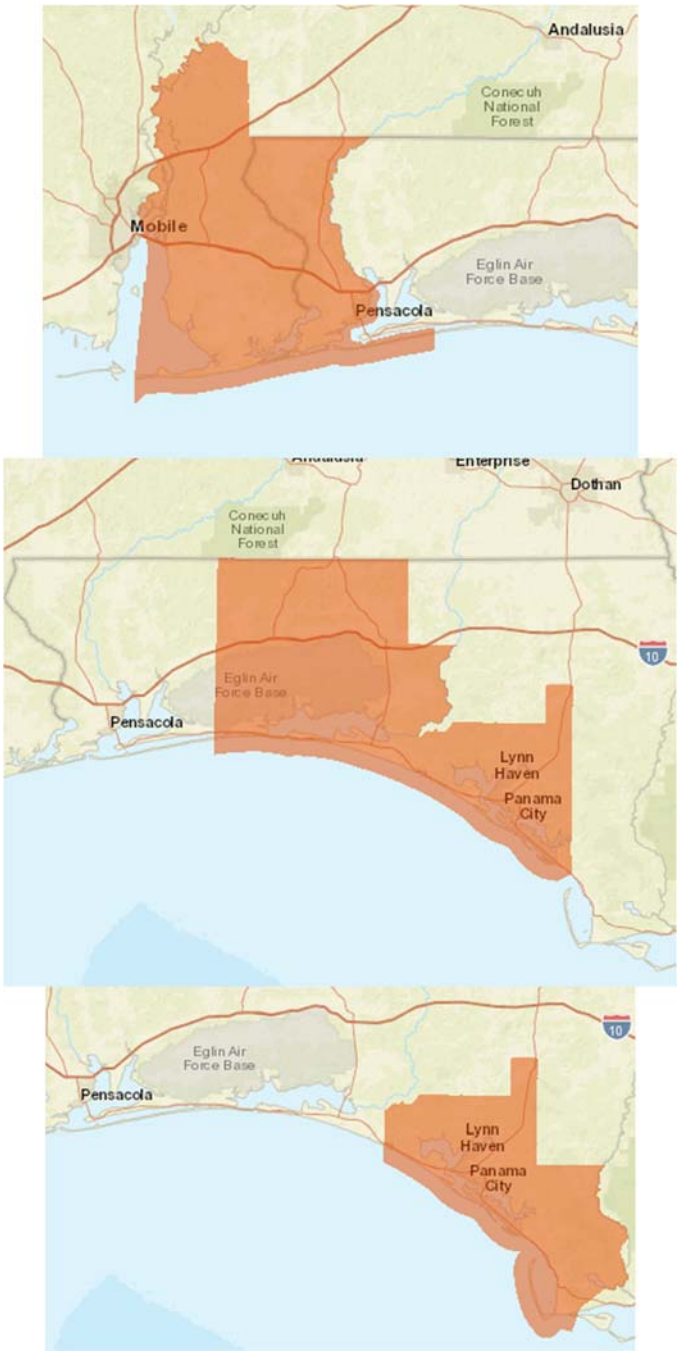
83°15'W
83°0'W
82°45'W
82°30'W
82°15'W
82°0'W
27°45'N
27°30'N
27°15'N
27°0'N
26°45'N
LOGG-N-30
FL
LOGG-N-29
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S


Loggerhead Critical Habitat: LOGG-N-31,32 (Nearshore Reproductive)
85°45'W
85°30'W
85°15'W
85°0'W
84°45'W
84°30'W
30°15'N
30°0'N
29°45'N
29°30'N
29°15'N
FL
LOGG-N-32
LOGG-N-31
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S


Loggerhead Critical Habitat: LOGG-N-33,34,35,36 (Nearshore Reproductive)
88°45'W
88°30'W
88°15'W
88°0'W
87°45'W
87°30'W
MS
AL
FL
30°30'N
30°15'N
30°0'N
29°45'N
29°30'N
LOGG-N-36
LOGG-N-35
LOGG-N-34
LOGG-N-33
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S


Andalusia
Conecuh National Forest
Mobile
Eglin Air Force Base
Pensacola
Enterprise
Dothan
Conecuh National Forest
10
Eglin Air Force Base
Pensacola
Lynn Haven
Panama City
10
Eglin Air Force Base
Pensacola
Lynn Haven
Panama City

Perdido Key, Choctawatchee & St Andrew Beach Mice

Habitat Description (within Counties)

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status and Critical Habitat for Three Beach Mice

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines endangered status and critical habitat for the Alabama beach mouse, Choctawhatchee beach mouse, and Perdido Key beach mouse. The three beach mice are endemic to the Gulf Coast of southern Alabama and northwestern Florida. They are restricted to sand dune habitat, which is being destroyed by residential and commercial development, recreational activity, and tropical storms. This rule will provide the three beach mice with the protection of the Endangered Species Act of 1973, as amended. The Service will initiate recovery actions for the three beach mice.

EFFECTIVE DATE: June 6, 1985.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours (7:00 AM–4:30 PM) at the Service's Endangered Species Field Station, U.S. Fish and Wildlife Service, 2747 Art Museum Drive, Jacksonville, Florida 32207.

FOR FURTHER INFORMATION CONTACT: Mr. David J. Wesley, Endangered Species Field Supervisor, at the above address (904/791–2580 or FTS 946–2580).

SUPPLEMENTARY INFORMATION:

Background

The species *Peromyscus polionotus*, often known as the old field mouse, occurs in northeastern Mississippi, Alabama, Georgia, South Carolina, and Florida; 16 subspecies are currently recognized (Hall, 1981). Certain of the subspecies are endemic to the beaches and sandy fields of southern Alabama and northwestern Florida. Prior to a detailed study by Bowen (1968), involving genetics, morphology, historical geology, and habitat, only 3 subspecies were recognized in the latter region. Bowen determined that variation was much more extensive than previously thought, and he described 5 new subspecies, including the 3 that are the subjects of this final rule: the Alabama beach mouse (*P. p. ammobates*), originally found on coastal dunes from Fort Morgan to Alabama Point, and on Ono Island, Baldwin County, Alabama; the Peridido Key beach mouse (*P. p. trissyllepsis*), originally found on much of Perdido Key, which extends along the Gulf Coast of Baldwin Conty, Alabama, and Escambia County, Florida; and the Choctawhatchee beach mouse (*P. p. allophrys*), originally found on the Gulf Coast of Florida from the East Pass of Choctawhatchee Bay, Okaloosa County, eastward to Shell Island, Bay County.

Beach mice have small bodies, haired tails, relatively large ears, protuberant eyes, and coloration that blends well with the sandy soils and dune vegetation of their habitat. In the Alabama beach mouse, also called the Alabama Gulf Coast beach mouse or white-fronted mouse, head and body length is 68 to 88 millimeters (mm) (2.7 to 3.4 inches (in.)), tail length is 42 to 60 mm (1.6 to 2.3 in.), the upper parts are pale gray with an indistinct middorsal stripe, the sides and underparts are white, and the tail is white with an incomplete dorsal stripe. In the Perdido Key beach mouse, also called the Perdido Bay beach mouse or Florala beach mouse, head and body length is 70 to 85 mm (2.7 to 3.3 in.), tail length is 45 to 54 mm (1.8 to 2.1 in.), the upper parts are grayish fawn to wood brown with a very pale yellow hue and an indistinct middorsal stripe, the white of the underparts reaches to the lower border of the eyes and ears, and the tail is white to pale grayish brown with no dorsal stripe. In the Choctawhatchee beach mouse, head and body length is 70 to 89 mm (2.7 to 3.5 in.), tail length is 43 to 64 mm (1.7 to 2.5 in.), the upper parts are orange-brown to yellow-brown, the underparts are white, and the tail has a variable dorsal stripe (Bowen, 1968; Ehrhart, 1978; Howell, 1920; Linzey, 1978).

The sand dune habitat of the beach mouse is not uniform. The depth of the habitat, from the beach inland, may vary depending upon the configuration of the sand dune system and the vegetation. There are commonly several rows of dunes, paralleling the shoreline and occasionally ranging up to 14 meters (46 feet) in height. The frontal dunes are sparsely vegetated with widely scattered grasses including sea oats (*Uniola paniculata*), bunch-grass (*Andropogon maritimus*), and beach grass (*Panicum amarum* and *P. repens*), and with seaside rosemary (*Ceratiola ericoides*), beach morning glory (*Ipomoea stolonifera*), and railroad vine (*I. pes-caprae*). The interdunal areas contain cordgrass (*Spartina patens*), sedges (*Cyperus* sp.), rushes (*Juncus scirpoides*), pennywort (*Hydrocotyle bonariensis*), and salt-grass (*Distichlis spicata*). The dunes farther inland from the Gulf support growths of saw palmetto (*Serenoa repens*), slash pine (*Pinus elliotti*), sand pine (*P. clausa*), and scrubby shrubs and oaks including yaupon (*Ilex vomitoria*), marsh-elder (*Iva* sp.), scrub oak (*Quercus myrtifolia*), and sand-live oak (*Q. virginiana* var. *maritima*). Seaside goldenrod (*Solidago pauciflosculosa*), aster (*Heterotheca subaxillaris*), and *Paronychia* sp. may also be present.

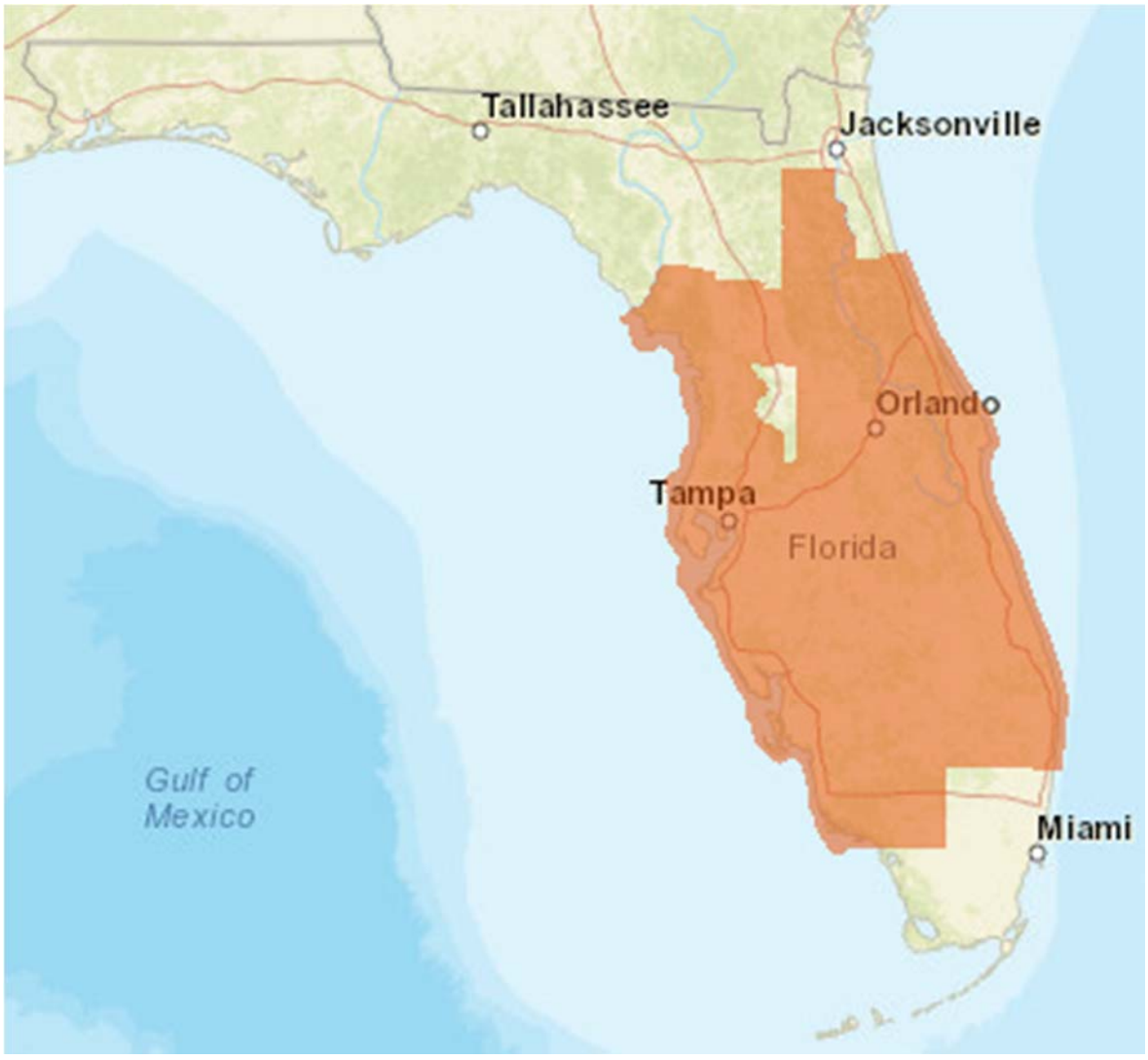
Human and natural alteration of coastal ecosystems has resulted in severe declines of beach mice. Most suitable habitat has been lost because of residential and commercial development, recreational activity, beach erosion, and vegetational succession. Competition from introduced house mice (*Mus musculus*) and predation by domestic cats (*Felis catus*) also seem to be problems. Tropical storms are a constant threat to the remnant, fragmented populations of beach mice. Hurricane Eloise in 1975 and Hurricane Frederick in 1979 were especially bad, destroying large areas of habitat for all three subspecies. Bowen (1968) observed that more than two-thirds of the habitat of *P. p. allophrys* had been lost since 1950, as a result of the coastal real estate boom.

Several recent status surveys and habitat analyses have indicated that the situation continues to worsen. Holliman (1983) found *P. p. ammobates* to still survive on disjunct tracts of the sand dune system from Fort Morgan State Park to the Romar Beach area, but to have apparently disappeared from most of its original range, including all of Ono Island. Working in various parts of the habitat of the subspecies, with a total length of 20.6 kilometers (km) (12.8 miles (mi.)), he live-trapped (and released after marking) an average of 10.7 mice per 100 trap-nights of effort. He estimated *P. p. ammobates* to contain a total of 875 individuals on 134.6 hectares (ha) (332.6 acres (A)), a relatively low population size for a small mammal. A few months later, Meyers (1983), working in the same areas, live-trapped an average of only 3.6 *P. p. ammobates* per 100-trap-nights. Additional record of *P. p. ammobates* have been obtained recently by Dawson (1983) and Meyers (pers. comm.).

Humphrey and Barbour (1981) made a study of *P. p. trissyllepsis* in 1979, prior to Hurricane Frederick. They estimated that only 78 individuals of the subspecies survived, there being 52 at the Gulf Islands National Seashore on the eastern part of Perdido Key and 26 at the Gulf State Park on the western

Florida Scrub Jay

Map shows County boundaries from http://ecos.fws.gov



Florida Scrub jay

Habitat Description (within Counties)

problems in some areas. This rule implements the protection and recovery provisions of the Endangered Species Act of 1973, as amended, for the Florida scrub jay.

DATES: The effective date of this rule is July 6, 1987.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Endangered Species Field Station, U.S. Fish and Wildlife Service, 2747 Art Museum Drive, Jacksonville, Florida 32207.

FOR FURTHER INFORMATION CONTACT: Mr. David J. Wesley, Field Supervisor, at the above address (telephone 904/791-2580 or FTS 946-2580).

SUPPLEMENTARY INFORMATION:

Background

The Florida scrub jay (*Aphelocoma coerulescens coerulescens*) was originally named by Bosc, 1795, as *Corvus coerulescens*. The species *Aphelocoma coerulescens* is widely distributed in the western United States, but the Florida subspecies, *Aphelocoma coerulescens coerulescens*, an isolated form of the species, is restricted to scrub habitat areas of peninsular Florida. The Florida scrub jay is a 30 centimeter (12 inch), bluish-colored, crestless jay totally lacking the white-tipped wings and tail feathers of the more common and widespread blue jay (*Cyanocitta cristata*). A necklace of blue feathers separates the white throat from the grayer underparts, and a white line over the eye often blends into a whitish forehead. The tail is long and loose in appearance (Woolfenden *in* Kale 1978). The subspecies has been recorded only once from outside of peninsular Florida, on Jekyll Island, Georgia (Moore 1975).

The following information on the biology of the Florida scrub jay is abstracted from Cox (1984) and Woolfenden and Fitzpatrick (1984). Scrub jays are long-lived (10 years or more), sedentary, permanently monogamous inhabitants of oak scrub. They typically nest at the edge of an oak thicket, near an open area. Scrub jays rarely breed at one year of age, even though they are then physiologically mature; instead they may remain on their natal territories for a number of years and assist their parents in raising further broods. Scrub jay breeding pairs with helpers have significantly greater reproductive success than pairs without helpers. Males may remain with their parents as helpers for longer periods (up to six years) than females. As the group's size increases, the territory grows. Eventually, a male helper may be able to claim part of the enlarged territory for his own breeding territory. Females rarely help for more than two years, and disperse within the local population as breeding vacancies arise. Scrub jays are omnivorous, eating almost anything they can catch, but they concentrate on lizards and arthropods in spring and summer, and acorns in fall and winter. Surplus acorns are frequently cached in the ground.

The Florida scrub jay lives only in the Florida scrub habitat, which occurs on fine, white, well drained sands. This type of sand occurs along the present coastline of Florida, and on inland dunes deposited during the past when sea levels were much higher than at present. The most important of these dune systems include the Atlantic coastal ridge along the Atlantic coast of Florida, the Lake Wales Ridge in Polk and Highlands Counties, and the extensive sand dunes of Ocala National Forest. Cox (1984) stated that the most commonly occupied jay habitat is "oak scrub." Oak scrub consists of a single layer of evergreen shrubs, usually dominated by three species of oaks—myrtle oak (*Quercus myrtifolia*), sand live oak (*Quercus geminata*), and Chapman oak (*Quercus chapmanii*). Scrub jays are rarely found as residents in habitat with more than 50% canopy cover that is over 3 meters (10 feet tall). In summary, scrub jay habitat consists of dense thickets of scrub oaks less than 3 meters in height, interspersed with bare sand for foraging and storing acorns.

Scrub jays have been reported in the past from scrub habitat in each of the following Florida Counties: Alachua, Brevard, Broward, Charlotte, Citrus, Clay, Collier, Dade, De Soto, Dixie, Duval, Flagler, Gilchrist, Glades, Hardee, Hendry, Hernando, Highlands, Hillsborough, Indian River, Lake, Lee, Levy, Manatee, Marion, Martin, Okeechobee, Orange, Osceola, Palm Beach, Pasco, Pinellas, Polk, Putnam, St. Johns, St. Lucie, Sarasota, Seminole, Sumter, and Volusia. Today, scrub jays have been completely eliminated from Broward, Dade, Duval, Pinellas, and St. Johns Counties, and their numbers have decreased drastically in Brevard, Highlands, Orange, Palm Beach, and Seminole Counties. In virtually every county where the species occurs, it is known to have declined in numbers. It has disappeared from fully 40% of the locations from which it was known historically, and the total population has probably dropped by half in the past century (Cox 1984). The major cause of the jay's population decline and its disappearance from specific sites is habitat destruction. The total number of Florida scrub jays estimated by Cox to survive in Florida today is between 15,000 and 22,000 birds, of which about 13,000 to 20,000 are on public lands, and about 2,000 on private property.

On March 16, 1984, Jeffrey A. Cox, Florida State Museum, University of Florida, Gainesville, Florida, petitioned the Service to list the Florida scrub jay as a threatened species. Dr. Cox provided a comprehensive report on the status of this species in support of the petition. The Service found on May 4, 1984, that the petitioned action may be warranted and published the finding on July 13, 1984 (49 FR 28584). A 12-month finding was made on March 18, 1985, and published on July 18, 1985 (50 FR 24238), that the action requested was warranted but precluded by work on other pending proposals. Publication of the proposed rule to list the Florida scrub jay as threatened, published in the **Federal Register** (51 FR 18627) on May 21, 1986, constituted the next and final 12-month finding for the Florida scrub jay, as required under section 4(b)(3)(c)(i) of the Act, that the petitioned action is warranted.

Summary of Comments and Recommendations

In the May 1986, proposed rule, and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final rule. Appropriate State agencies, county governments, Federal agencies, *scientific organizations, and other* interested parties were contacted and requested to comment. Newspaper notices were published in the *Orlando Sentinel* on June 15, 1986, and the *Palm Beach Post* on June 14, 1986, which invited general public comment. Twenty-one comments were received, none of which opposed the action. A summary of substantive comments is presented below.

Tom Webber, Biologist, the Florida State Museum, Gainesville, wrote that he resurveyed some of the scrub jay populations that Jeffey A. Cox censused in 1981. He found that the picture of overall decline remains; of the five northernmost populations (in Clay and Putnam Counties), four have disappeared since 1981, and the fifth has been reduced to one bird. Other populations that have held out since 1981 are often in places where their habitat will probably be destroyed soon and irreversibly.

Theodore O. Hendrickson urged the Service to perhaps consider a category "more urgent" than "threatened" for this bird. Because the scrub jay is still fairly widespread in distribution in Florida,

Indigo Snake

Map shows County boundaries from http://ecos.fws.gov

Indigo Snake

Habitat Description (within Counties) from Recovery Plan

peninsula, and, in some localities, the snakes are common or abundant. In parts of southern Florida, from about Sarasota south, the snake is said to be locally abundant and common in many places. North of Sarasota, in the peninsula, the snake is thought to be common in several localities and abundant in a few. The panhandle has only a few known small populations and the indigo should probably be considered rare in that region.

Because of a rather precipitous decline in eastern indigo snake numbers in the 1960's and 1970's, the species has been considered threatened in the southeastern region (Mount and Speake in press) and endangered in Alabama (Mount 1976). The eastern indigo snake was granted full protection in Florida in 1971, was placed under protection in Georgia in 1977, and was listed as threatened by the Federal government (Federal Register Vol. 43 No. 52:11082 - 11093) in 1978.

Habitat

The habitat of the eastern subspecies varies somewhat latitudinally. Carr (1940) reported utilization of high pineland in central and north Florida, while flatwoods, dry glades, tropical hammocks, and muckland fields constituted the habitat in south Florida. Lawler (1977) stated that the species was often common along canal banks in south Florida, where crab holes were utilized in lieu of gopher tortoise burrows. Kochman (1978) listed the Florida indigo as occupying seven out of eight designated terrestrial habitat types (mixed hardwood-pine was omitted) and five of eleven wetland habitats. The species seems to be less restricted in habitat requirements in the southern portion of its range than in the north — probably a function of climate and the species' winter behavior.

In Georgia, the indigo snake is strongly associated with the xeric sandridge habitat (Speake et al. 1978). Described by Harper (1906) in his discussion of the "Altamaha Grit" region of Georgia, these ridges occur primarily on the east or northeast side of the major coastal plain streams. Geologically, they are found on Miocene and Plio-Pleistocene deposits. The vegetational community supported by the deep droughty soils has been described as "sandhill" or "dry pine barren" (Harper 1906), oak-pine-heath (Bozeman 1971) and dwarf-oak forest (Wharton 1978). It is probably most commonly referred to as a longleaf pine-scrub oak association, with longleaf pine (Pinus palustris), turkey oak (Quercus laevis) and wiregrass (Aristida stricta) being the principal components. Regarded as fire subclimaxes, these plant communities have an average burn frequency of 5 to 10 years (Wharton 1978) and succeed to a laurel oak (Quercus laurifolia) association in the absence of fire (Bozeman 1971). Intimately associated with this xeric habitat, in the southeastern coastal plain, is the gopher tortoise (Gopherus polyphemus) (Auffenberg and Franz 1975). The indigo snake utilizes the tortoise burrow as both a refuge and overwintering site. A recent Georgia study (Landers and Speake in press) shows that all radio-instrumented indigo snakes studied during winter (N=24) selected the sandhills as winter habitat and 94% of the winter dens were tortoise burrows. Indigo snakes also nested, foraged and denned in tortoise burrows during other seasons. The den of this one species plays an integral role in the sandhill ecosystem, providing a refuge for a host of vertebrate commensals (Pope 1946, Carr 1952, Speake and Mount 1973, Lawler 1977, Landers and Speake in press) as well as some 32 species of arthropods (Young and Goff

1939). Speake et al. (1978) showed that many Georgia indigo snakes move from sandhill habitat to the vicinity of agricultural fields and stream-bottom thickets in summer and that they make extensive movements during the late summer and fall.

Limiting Factors

In addition to the total loss of indigo snake habitat when land is converted to house sites or row crops, much of the forested sandhill habitat in south Georgia and parts of Florida is being degraded so that its value to the indigo snake is greatly reduced. "Natural" longleaf pine-turkey oak stands are frequently protected from fire too long and the oak component is allowed to become too dominant. Many areas that have been converted to pine plantations are not being control burned properly or have a pine overstory that is too dense. Habitat loss or degredation is probably the single most important indigo snake limiting factor.

Because the indigo snake is large, conspicuous, and relatively slow, it is an easy mark for persons who kill snakes on sight. Moreover, the docile nature and handsome appearance of this nonpoisonous snake give it a high value in the pet trade. Collection of the indigo snake combined with habitat destruction, highway fatalities, and deliberate persecution led to a noticeable decline of the indigo snake in Florida by 1971. According to Blaney and Blaney (1974), the decline in the numbers of indigo snakes in southern Florida can be directly attributed to overcollecting for the pet trade. The same authors point out that prices for indigo snakes among mail order dealers of reptiles and amphibians of the Southeast increased from $17.00 in 1965 for an average sized adult to $90.00 in 1973. Since that time prices have continued

Federal Navigation Channels

Not all Federal channels shown.
This map is being updated to include the missing ones.
Updates will be posted in the “Source Book” webpage of the
Regulatory Division, Jacksonville District, U.S. Army Corps of Engineers
http://www.saj.usace.army.mil/Missions/Regulatory/SourceBook.aspx

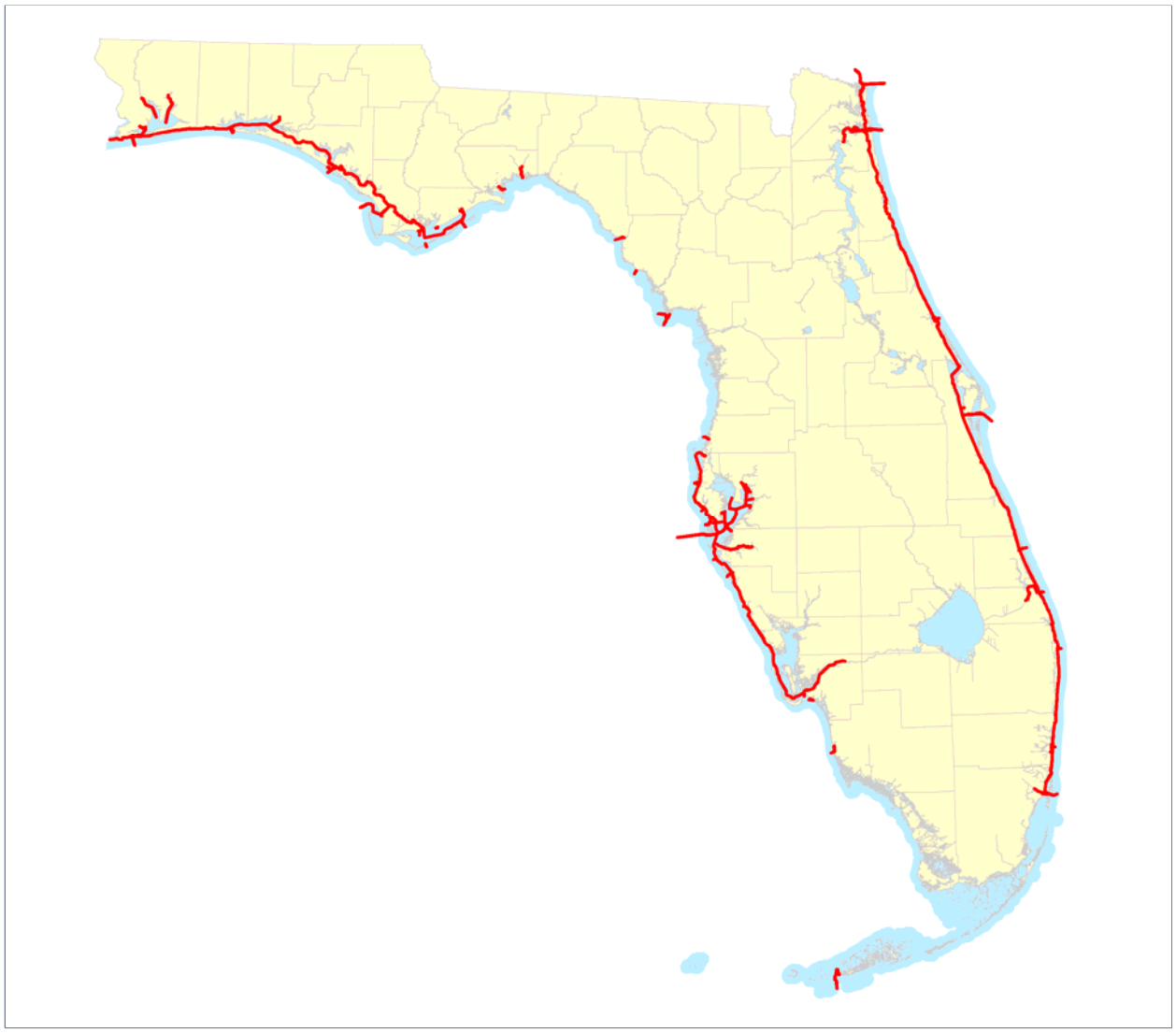


Table 8. SWPBO Exclusion Zones in Smalltooth Sawfish Critical Habitat

Name	Latitude	Longitude
U.S. 41 Bridges		
U.S. 41 NW	26.660413°	-81.885243°
U.S. 41 NE	26.666827°	-81.872966°
U.S. 41 SW	26.642991°	-81.873880°
U.S. 41 SE	26.649405°	-81.861605°
Iona Cove		
IC NW	26.521437°	-81.991586°
IC NE	26.521212°	-81.976191°
IC SW	26.511762°	-81.991762°
IC SE	26.511537°	-81.976368°
Glover Bight		
GB NW	26.542971°	-81.997791°
GB NE	26.542678°	-81.977745°
GB SW	26.529478°	-81.998035°
GB SE	26.529185°	-81.977992°
Cape Coral		
CC 1	26.551662°	-81.947412°
CC 2	26.551561°	-81.940683°
CC 3	26.539075°	-81.940916°
CC 4	26.539205°	-81.951049°
CC 5	26.542181°	-81.951047°
CC 6	26.542133°	-81.947776°

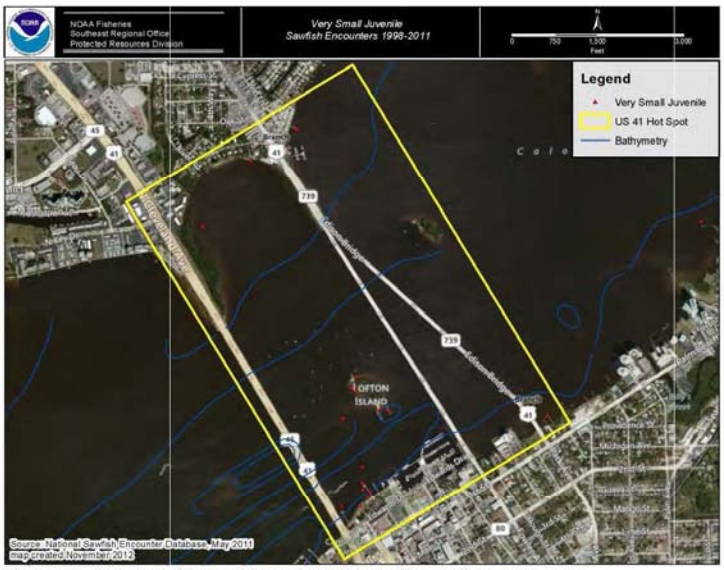


Figure 19. U.S. 41 bridges with very small juvenile sawfish encounters

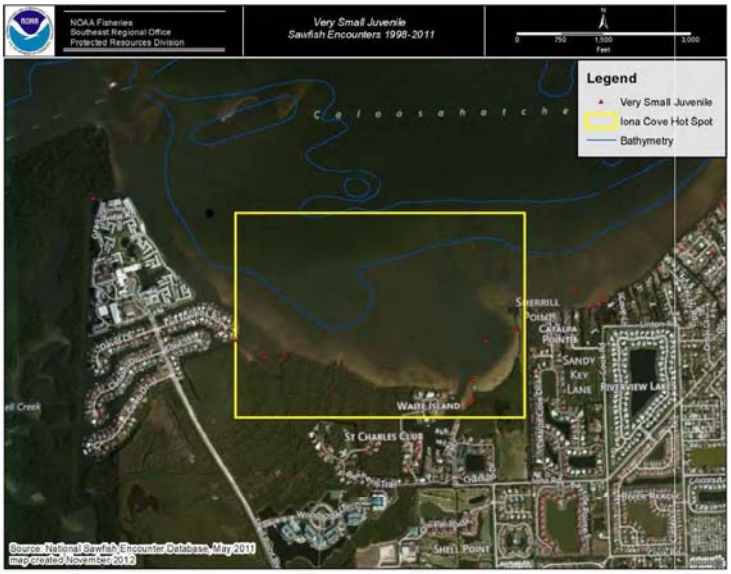


Figure 20. Iona Cove with very small juvenile sawfish encounters

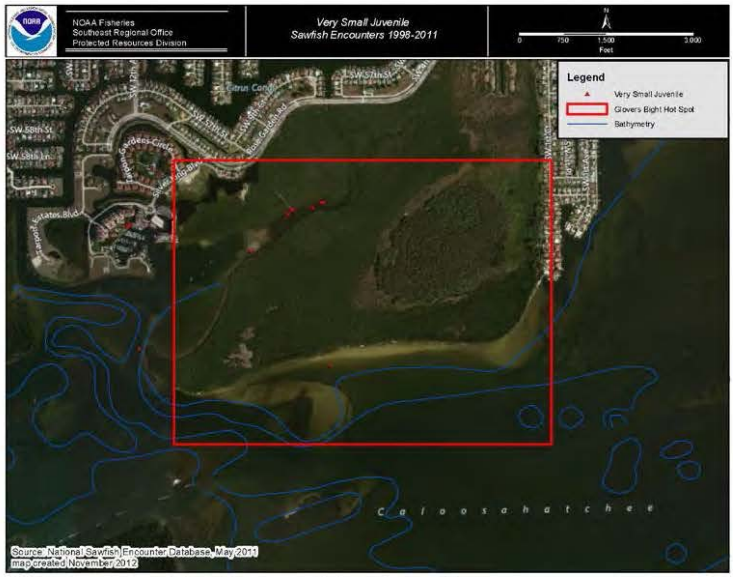


Figure 21. Glover Bight with very small juvenile sawfish encounters

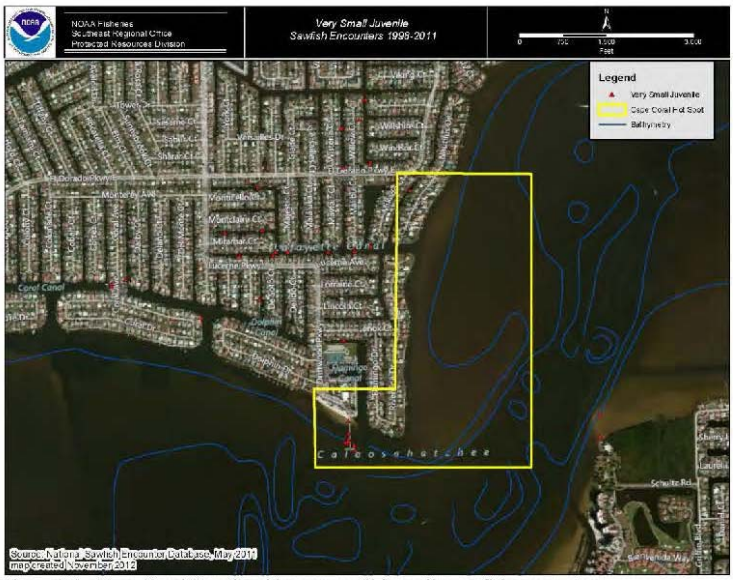
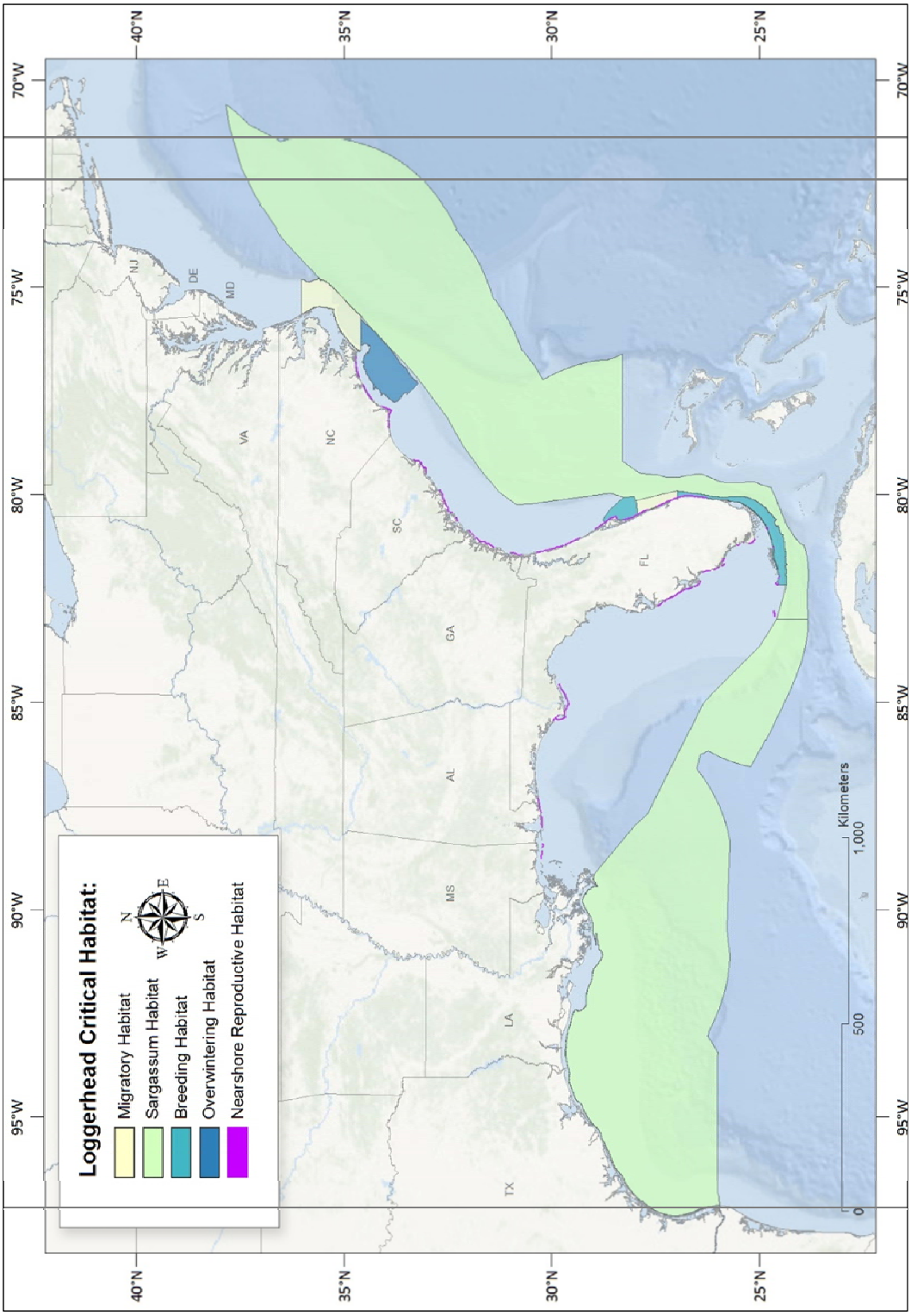
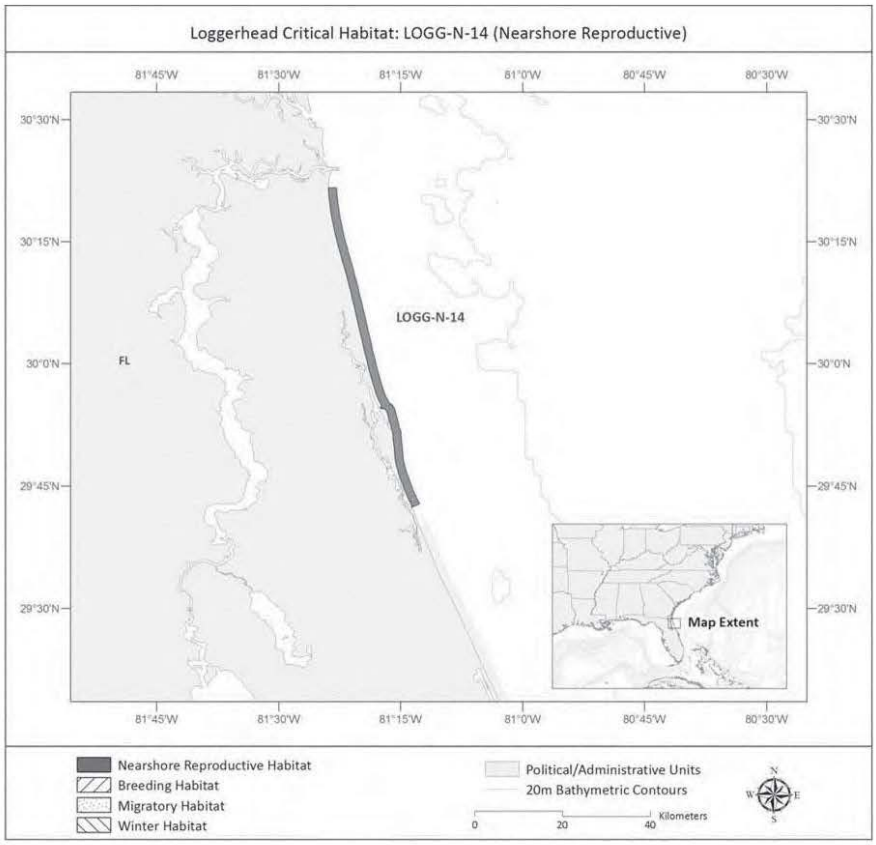
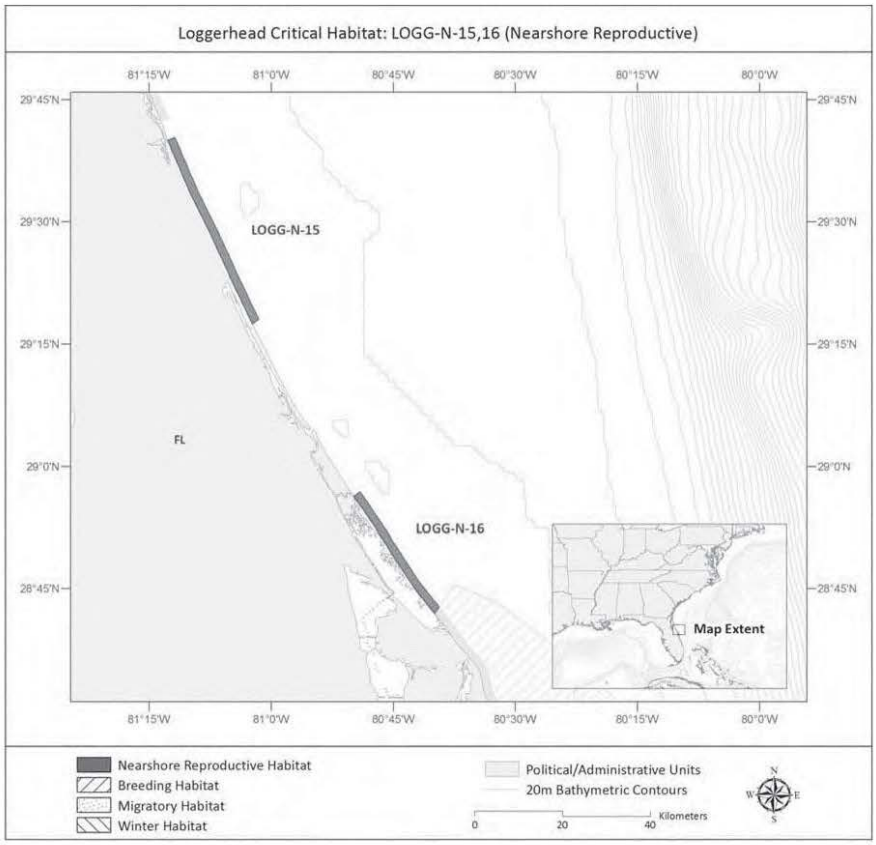
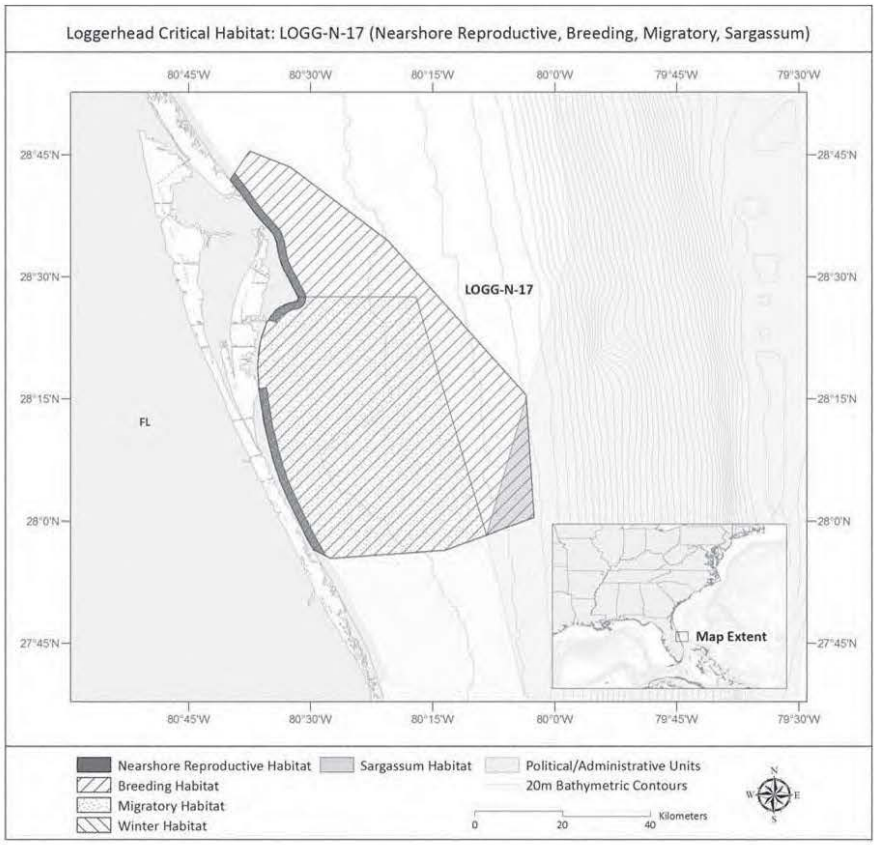


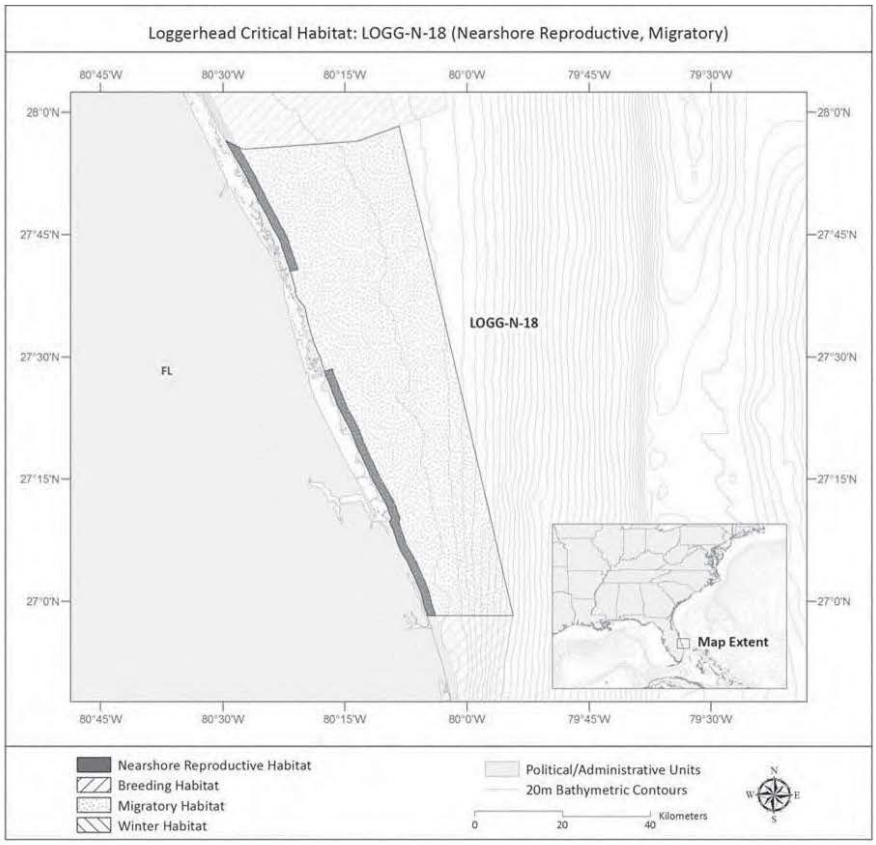
Figure 22. Cape Coral Canals with very small juvenile sawfish encounters

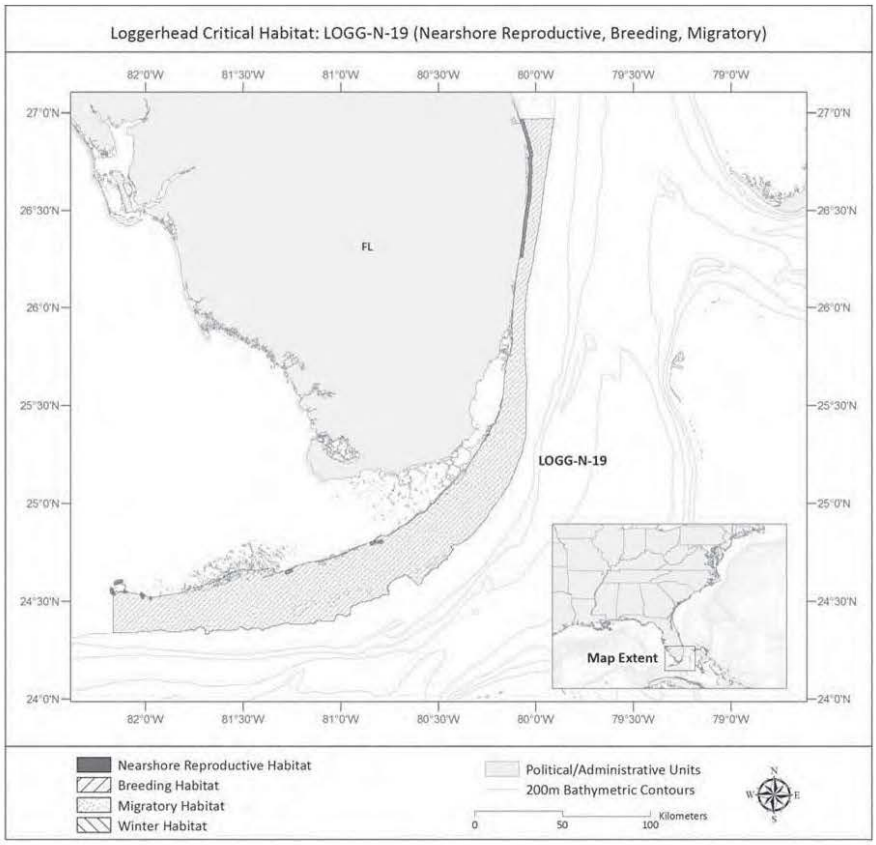

Loggerhead Critical Habitat:
Migratory Habitat
Sargassum Habitat
Breeding Habitat
Overwintering Habitat
Nearshore Reproductive Habitat
N
E
S
W
Kilometers
0
500
1,000
40°N
35°N
30°N
25°N
70°W
75°W
80°W
85°W
90°W
95°W
NJ
DE
MD
VA
NC
SC
GA
FL
AL
MS
LA
TX

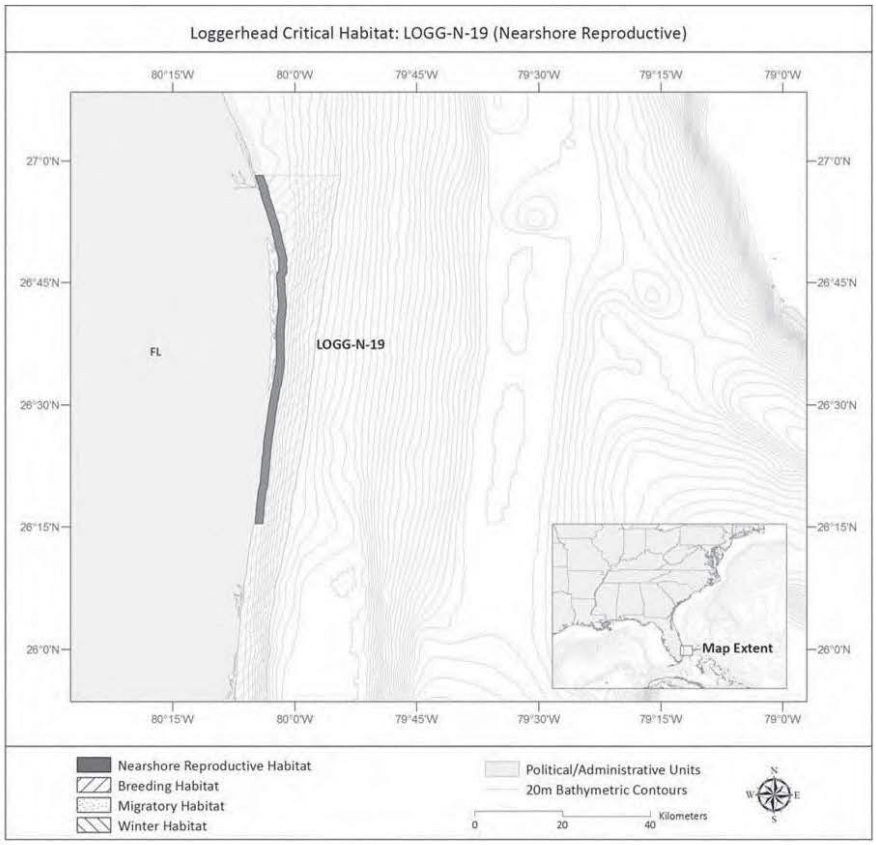

Loggerhead Critical Habitat: LOGG-N-14 (Nearshore Reproductive)
81°45'W
81°30'W
81°15'W
81°0'W
80°45'W
80°30'W
30°30'N
30°15'N
30°0'N
29°45'N
29°30'N
LOGG-N-14
FL
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

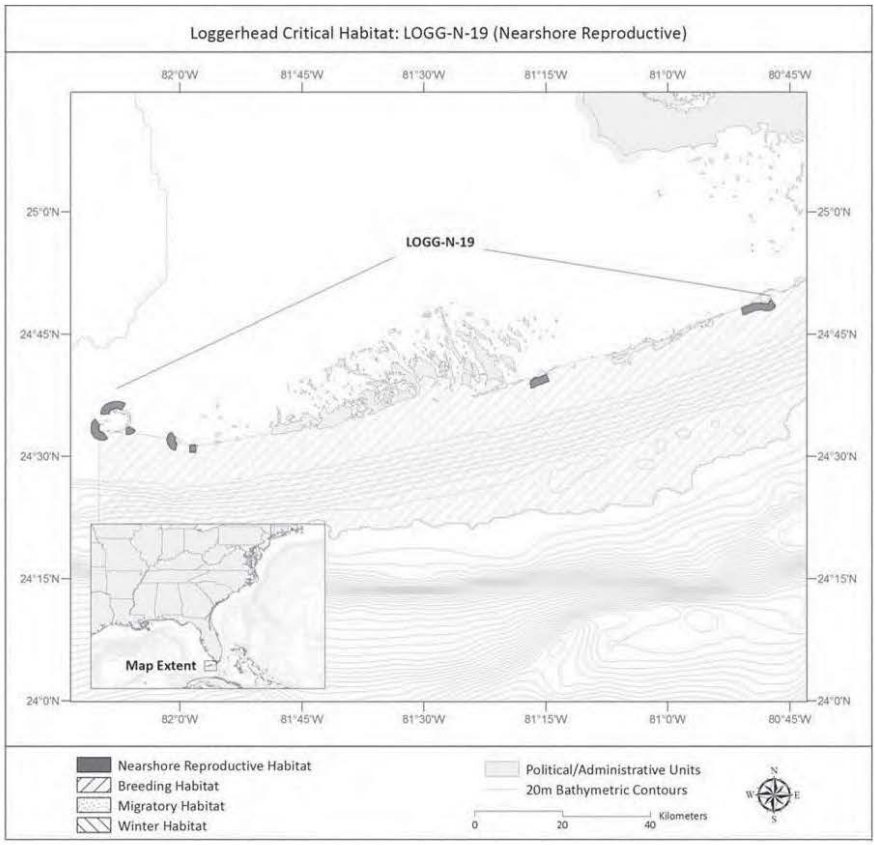

Loggerhead Critical Habitat: LOGG-N-15,16 (Nearshore Reproductive)
81°15'W
81°0'W
80°45'W
80°30'W
80°15'W
80°0'W
29°45'N
29°30'N
29°15'N
29°0'N
28°45'N
LOGG-N-15
LOGG-N-16
FL
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

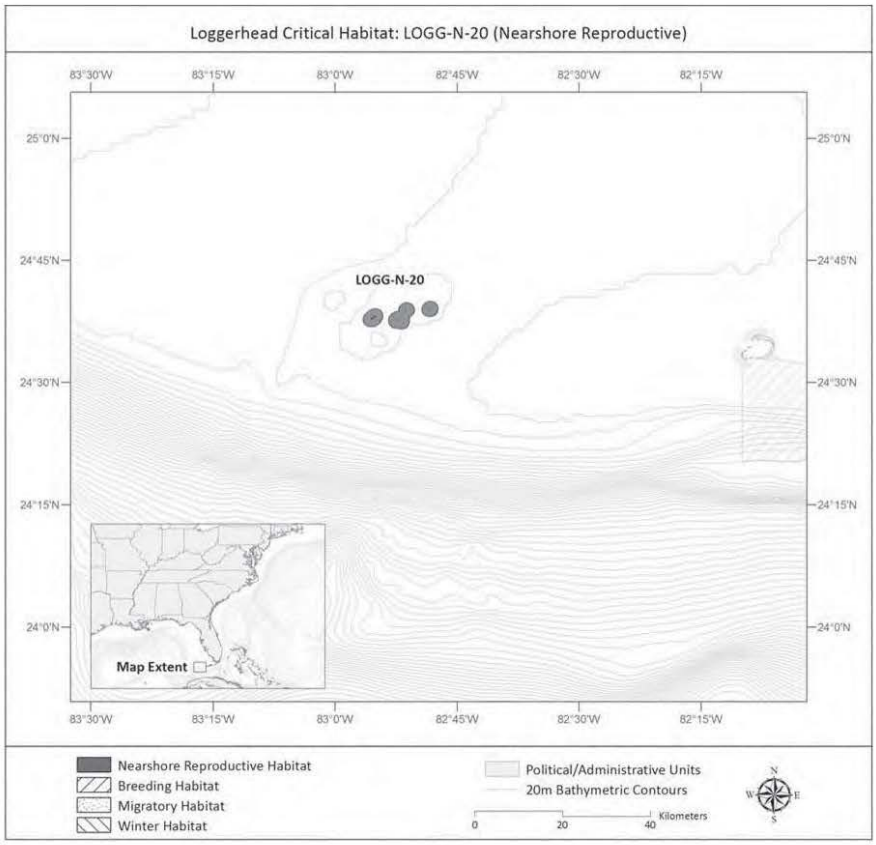

Loggerhead Critical Habitat: LOGG-N-17 (Nearshore Reproductive, Breeding, Migratory, Sargassum)
80°45'W
80°30'W
80°15'W
80°0'W
79°45'W
79°30'W
28°45'N
28°30'N
28°15'N
28°0'N
27°45'N
LOGG-N-17
FL
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Sargassum Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

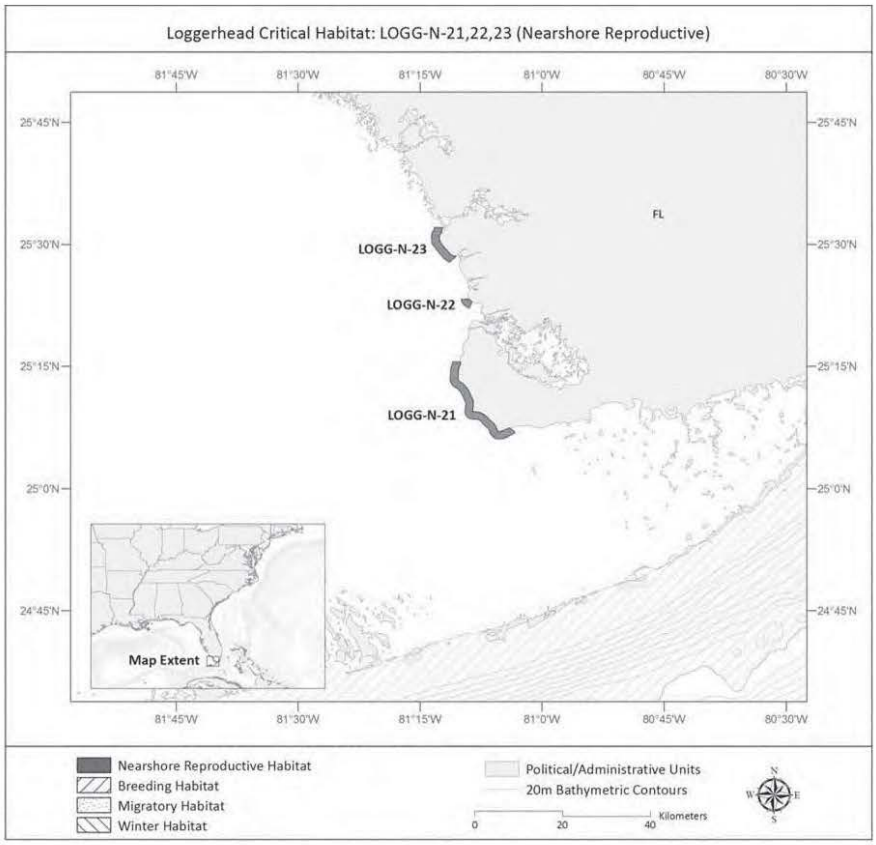

Loggerhead Critical Habitat: LOGG-N-18 (Nearshore Reproductive, Migratory)
80°45'W
80°30'W
80°15'W
80°0'W
79°45'W
79°30'W
28°0'N
27°45'N
27°30'N
27°15'N
27°0'N
LOGG-N-18
FL
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

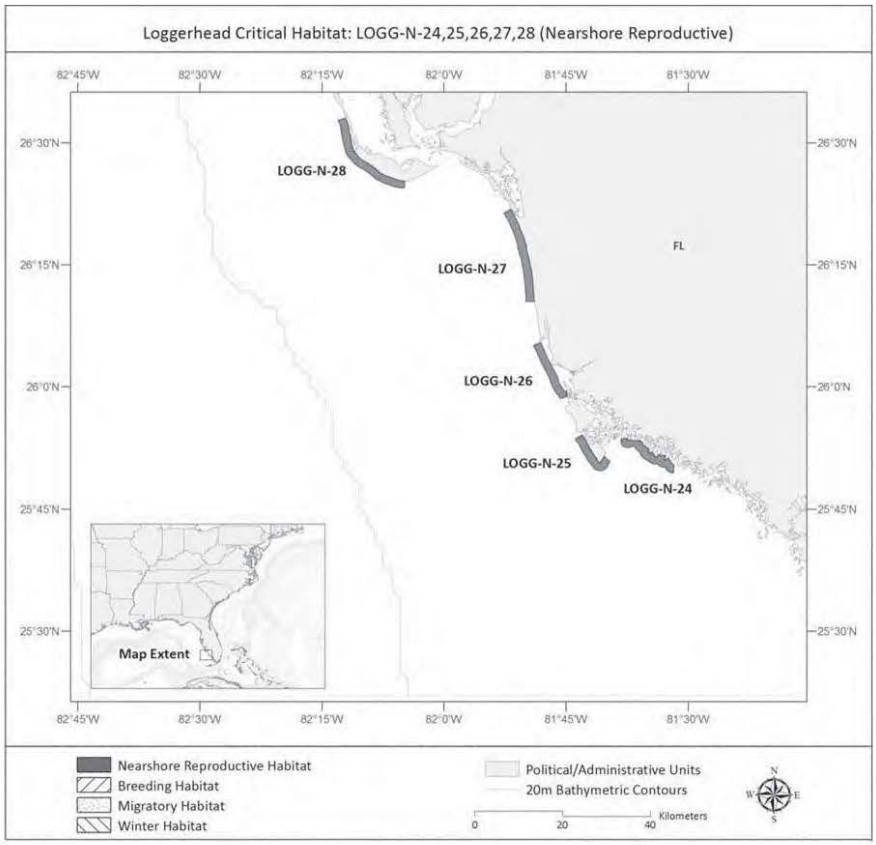

Loggerhead Critical Habitat: LOGG-N-19 (Nearshore Reproductive, Breeding, Migratory)
82°0'W
81°30'W
81°0'W
80°30'W
80°0'W
79°30'W
79°0'W
27°0'N
26°30'N
26°0'N
25°30'N
25°0'N
24°30'N
24°0'N
FL
LOGG-N-19
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
200m Bathymetric Contours
0
50
100
Kilometers
N
W
E
S

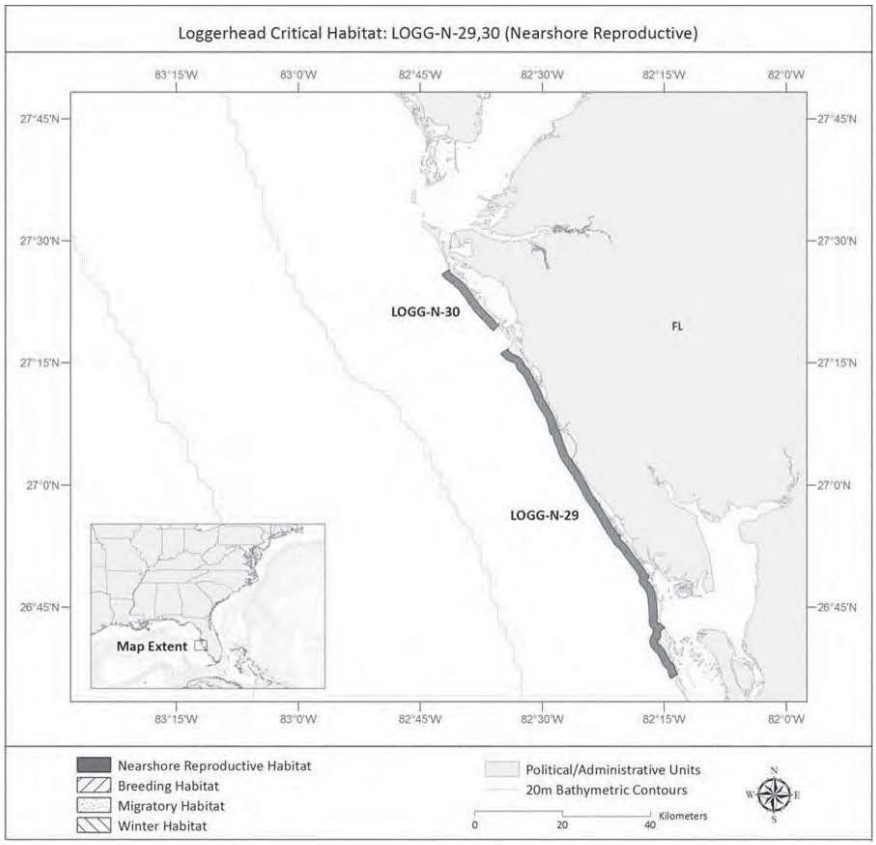

Loggerhead Critical Habitat: LOGG-N-19 (Nearshore Reproductive)
80°15'W
80°0'W
79°45'W
79°30'W
79°15'W
79°0'W
27°0'N
26°45'N
26°30'N
26°15'N
26°0'N
FL
LOGG-N-19
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

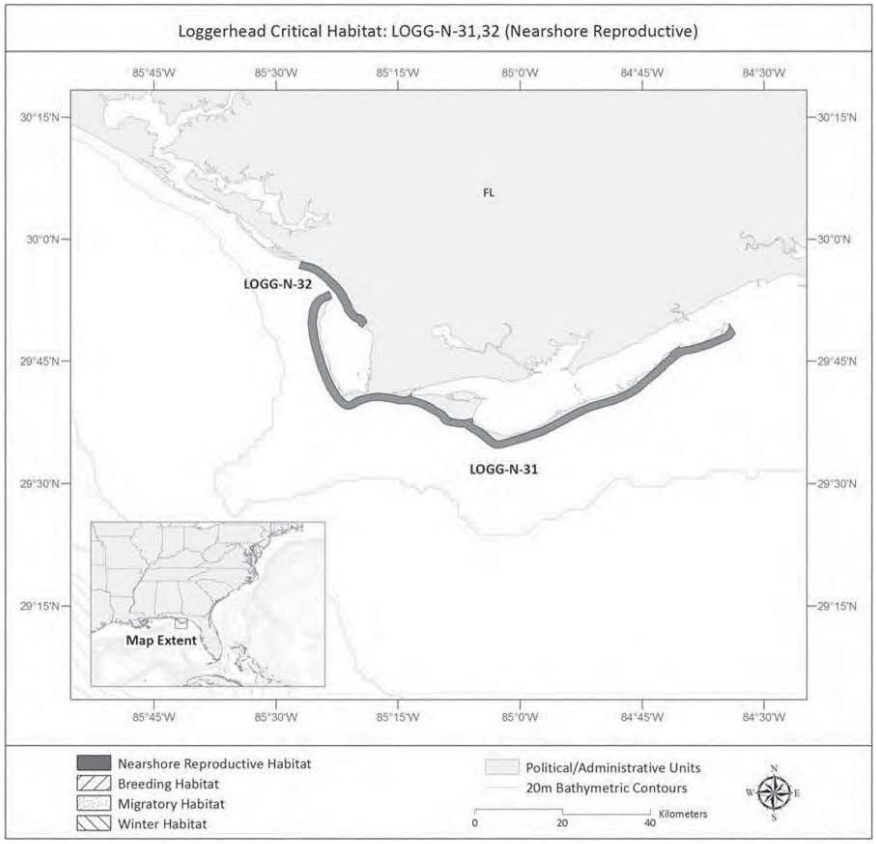

Loggerhead Critical Habitat: LOGG-N-19 (Nearshore Reproductive)
82°0'W
81°45'W
81°30'W
81°15'W
81°0'W
80°45'W
25°0'N
24°45'N
24°30'N
24°15'N
24°0'N
LOGG-N-19
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

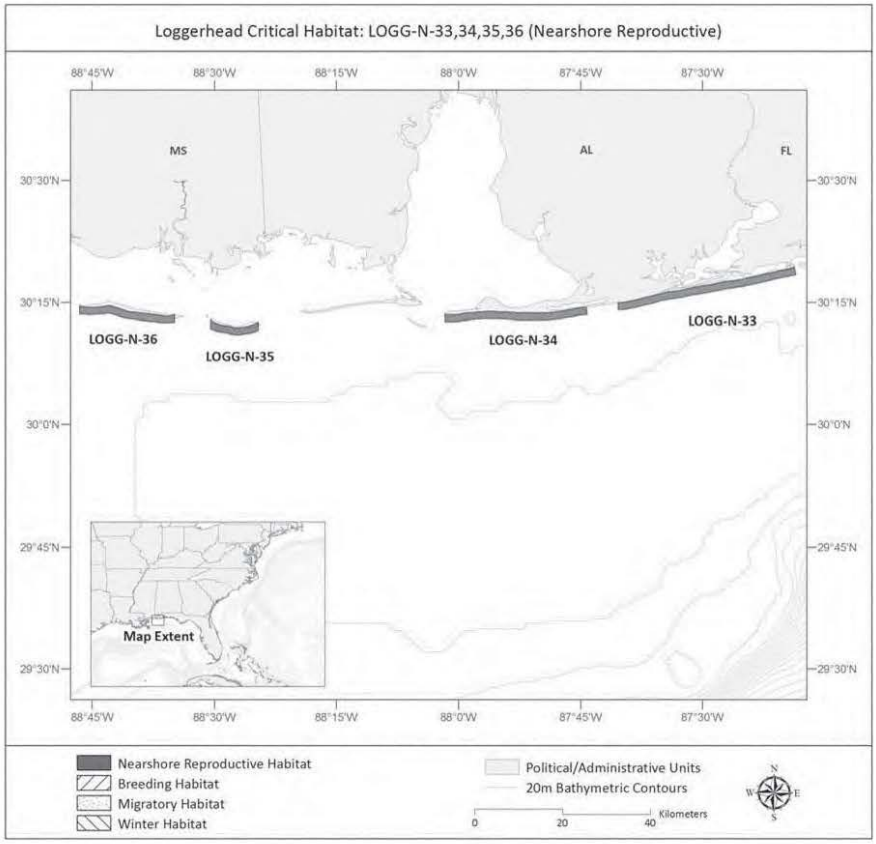

Loggerhead Critical Habitat: LOGG-N-20 (Nearshore Reproductive)
83°30'W
83°15'W
83°0'W
82°45'W
82°30'W
82°15'W
25°0'N
24°45'N
24°30'N
24°15'N
24°0'N
LOGG-N-20
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S

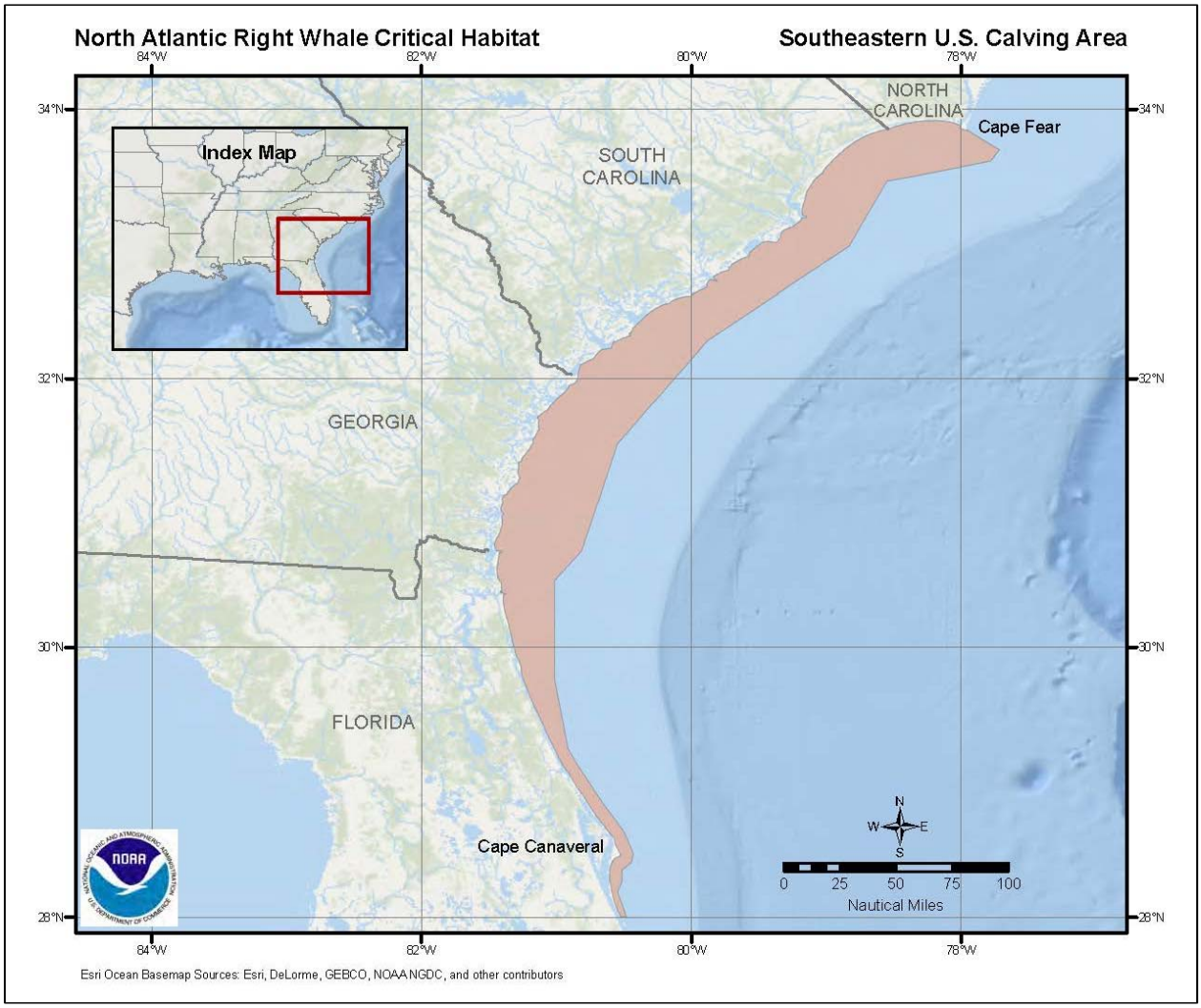

Loggerhead Critical Habitat: LOGG-N-21,22,23 (Nearshore Reproductive)
81°45'W
81°30'W
81°15'W
81°0'W
80°45'W
80°30'W
25°45'N
25°30'N
25°15'N
25°0'N
24°45'N
FL
LOGG-N-23
LOGG-N-22
LOGG-N-21
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S


Loggerhead Critical Habitat: LOGG-N-24,25,26,27,28 (Nearshore Reproductive)
82°45'W
82°30'W
82°15'W
82°0'W
81°45'W
81°30'W
26°30'N
26°15'N
26°0'N
25°45'N
25°30'N
LOGG-N-28
LOGG-N-27
LOGG-N-26
LOGG-N-25
LOGG-N-24
FL
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S


Loggerhead Critical Habitat: LOGG-N-29,30 (Nearshore Reproductive)
83°15'W
83°0'W
82°45'W
82°30'W
82°15'W
82°0'W
27°45'N
27°30'N
27°15'N
27°0'N
26°45'N
LOGG-N-30
LOGG-N-29
FL
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S


Loggerhead Critical Habitat: LOGG-N-31,32 (Nearshore Reproductive)
85°45'W
85°30'W
85°15'W
85°0'W
84°45'W
84°30'W
30°15'N
30°0'N
29°45'N
29°30'N
29°15'N
FL
LOGG-N-32
LOGG-N-31
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S


Loggerhead Critical Habitat: LOGG-N-33,34,35,36 (Nearshore Reproductive)
88°45'W
88°30'W
88°15'W
88°0'W
87°45'W
87°30'W
MS
AL
FL
30°30'N
30°15'N
30°0'N
29°45'N
29°30'N
LOGG-N-36
LOGG-N-35
LOGG-N-34
LOGG-N-33
Map Extent
Nearshore Reproductive Habitat
Breeding Habitat
Migratory Habitat
Winter Habitat
Political/Administrative Units
20m Bathymetric Contours
0
20
40
Kilometers
N
W
E
S


North Atlantic Right Whale Critical Habitat
Southeastern U.S. Calving Area
84°W
82°W
80°W
78°W
34°N
32°N
30°N
28°N
NORTH CAROLINA
Cape Fear
SOUTH CAROLINA
Index Map
GEORGIA
FLORIDA
Cape Canaveral
N
W
E
S
0 25 50 75 100
Nautical Miles
NOAA
Esri Ocean Basemap Sources: Esri, DeLorme, GEBCO, NOAA,NGDC, and other contributors

15 Appendix B: Frac-Out Plan Example

Proposed Methods for Protection of Water Quality for Directional Bored Water Crossings (BMPs and Frac-out Plan)

BMPs

[The APPLICANT] and [the Contractor] will implement the following Best Management Practices (BMPs) to minimize the potential for adverse environmental impacts during horizontal directional drilling activities:

☐ BMPs for erosion control within the staging area shall be implemented and maintained at all times during the drilling and back-reaming operations to prevent siltation and turbid discharges in excess of State Water Quality Standards pursuant to Rule 62-302, F.A.C. Methods shall include, but are not limited to the immediate placement of turbidity containment devices such as turbidity screen, silt containment fence, hay bales, and earthen berms, etc. to contain the drilling mud. Earthen berms shall not be utilized as to impact wetlands or other surface waters.

Frac-out Plan

To provide an additional level of resource protection, the following measures shall be taken to monitor any potential releases of drilling fluid:

☐ Measures used to prevent frac-out during the drilling operation include maintaining the proper depth for the soil conditions along the drilling route as well as proper management of drilling fluids circulation pressure. Under the waterway, the minimum distance between the pipe and the bottom of the waterway will be __[#]__ feet as shown on the cross section. This is suspected to be sufficient to prevent frac-out when drilling under the waterway.

☐ Non-toxic fluorescent dyes will be added to the drilling lubricant as a method for monitoring bentonite releases in the underwater portions of this drilling. Details of the fluorometry monitoring method shall be submitted to the USACE prior to the pre-construction meeting.

☐ The volume of bentonite in the drill string will be monitored at all times during the directional drilling operation. Should a drop in volume of bentonite occur, immediately conduct a visual inspection of both terrestrial and subaqueous portions of the horizontal directional drilling corridor.

☐ Should the detection of dye or a drop in volume of bentonite occur, the Contractor will follow the Release Procedures outlined below.

☐ The Contractor will identify prior to commencement of construction an environmental scientist/biologist with experience in-water quality monitoring and habitat protection to be used in the event of a frac-out. The biologist will supervise the implementation of the Frac-Out Plan, Release Procedure, and Containment Plan outlined below. Divers shall be present during drilling operations in order to respond to a potential frac-out release.

☐ All drilling fluids associated with the horizontal directional drilling operation will be contained on site. The volume of the drilling fluids recirculation/solids settlement pit will be determined by the Contractor at the Pre-Construction meeting. Periodically during the drilling process settled solids will be removed from the pit by a backhoe and disposed of at a site of the Contractor's choice in accordance with applicable regulations. At the conclusion of drilling operations, drilling fluid remaining in the pit will be settled and hauled to a disposal site of the Contractor's choice in accordance with applicable regulations. After back-reaming, drilling materials will be removed from the inside of the pipeline by pigging it from the exit point towards the rig area.

☐ At all times, adequate protection will be taken to avoid impacts to the Aquatic Preserve/Outstanding Florida Waters and contiguous wetlands. This shall include, but is not limited to halting of construction/drilling and/or placement of turbidity containment devices.

☐ A Vactor Truck shall be onsite and available at all times.

☐ A Spill Kit (i.e., absorbent pads/brooms, goggles, gloves) shall be on-site and available at all times.

Release Procedure:

☐ If a frac-out is confirmed, all construction activity contributing to the frac-out shall cease immediately.

☐ If the return drilling mud/fluid is less than the projected amount to be recovered, divers shall begin their search for the missing material within one hour of potential release. Once the drilling mud and frac-out is located, then the drilling mud containment plan shall be immediately implemented.

☐ If a frac-out has occurred during construction activities, the permittee shall notify the USACE of Engineers, Palm Beach Gardens Regulatory office, within 24 hours of the occurrence. The notification shall include the time of the frac-out, the response time of the underwater diver, and the environmental conditions of the affected area.

Drilling Mud Containment Plan:

☐ Should the release of drilling materials occur on land, a sediment fence shall be constructed around the site and the material shall be removed by vacuum truck.

☐ Should the release of drilling materials occur in-water, clean-up with a vacuum system shall commence within 24 hours.

☐ The scientist/biologist underwater divers will guide the suction hose of the pump to minimize both the removal of natural bottom material and the disturbance of any existing vegetation.

☐ Any escaped drilling lubricant must be pumped into filter bags or directly into a vactor truck.

☐ A barge company will be contacted to transport a vactor truck should it be needed to respond "in-water."

☐ Once the spill is contained, the escaped drilling lubricant shall be properly disposed of in an approved upland disposal site.

☐ Clean-up with a vacuum system shall commence within 24 hours.

☐ After containment/recovery of the drilling material/resources, a detailed written report shall be submitted to the USACE, within 10 business days, indicating the location of the frac-out, amount of drilling material discharged and the amount of drilling mud recovered, the process in which the drilling mud was recovered, and the area that was affected by the drilling discharge.