US Army Corps of Engineers®

Tybee Island Shoreline Protection Project (TISPP) Periodic and Emergency Nourishments Draft Environmental Assessment and Finding of No Significant Impact Tybee Island, Chatham County, GA

Appendix C

Endangered Species Act Section 7 Consultation U.S. Fish and Wildlife Service (USFWS)

January 2026

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Appendix C.1

Placeholder for Correspondence

January 2026

US Army Corps of Engineers®

Tybee Island Shoreline Protection Project (TISPP) Periodic and Emergency Nourishments Draft Environmental Assessment and Finding of No Significant Impact Tybee Island, Chatham County, GA

Appendix C.2

Draft Biological Assessment (BA)

January 2026

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SAVANNAH DISTRICT
100 W. OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3604

January 8, 2026

Mr. Pete Maholland
Field Supervisor
U.S. Fish and Wildlife Service
RG Stephens Jr. Federal Building
355 East Hancock Avenue, Room 320, Box 7
Athens, Georgia 30601

Dear Mr. Maholland:

The U.S. Army Corps of Engineers, Savannah District (USACE) has conducted an environmental assessment of the Tybee Island Shoreline Protection Project (TISPP) at Tybee Island, Georgia. The TISPP is a Federally designed and constructed hurricane and storm damage risk reduction project to reduce risk from waves, erosion, and inundation. The proposed Federal action includes periodic and emergency beach renourishments for the remaining duration of Federal authorization (through 2036). The project code is: 2025-0126820.

In accordance with Section 7 of the Endangered Species Act, USACE has determined that the proposed action will have no effect for the following Federally listed species or their designated critical habitat: Eastern black rail (*Laterallus jamaicensis ssp. Jamaicensis*), wood stork (*Mycteria americana*), eastern indigo snake (*Drymarchon couperi*), Hawksbill sea turtle (*Eretmochylys imbricata*), Kemp's Ridley sea turtle (*Lepodochelys imbricata*), Monarch butterfly (*Danaus plexippus*), and pondberry (*Lindera melissifolia*). USACE has made a may affect, not likely to adversely affect (MANLAA) determination for the West Indian manatee (*Trichechus manatus*), piping plover (*Charadrius melodus*) and its critical habitat, rufa red knot (*Calidris canutus rufa*) and its proposed critical habitat, and leatherback sea turtle (*Dermochelys coriacea*). USACE has made a may affect and is not likely to adversely affect (MALAA) determination for green sea turtle (*Chelonia mydas*) and loggerhead sea turtle (*Caretta caretta*). USACE will include the following in contract specifications: manatee conditions provided by the USFWS, Project Design Criteria in the 2020 National Marine Fisheries South Atlantic Regional Biological Opinion for Dredging and Material Placement Activities, and any additional Best Management Practices as described in Section 4.6 in the attached Biological Assessment (BA).

We request your concurrence on our effects determination for West Indian manatee (*Trichechus manatus*), piping plover (*Charadrius melodus*) and its critical habitat, rufa red knot (*Calidris canutus rufa*) and its proposed critical habitat, green sea turtle (*Chelonia mydas*), leatherback sea turtle (*Dermochelys coriacea*), and loggerhead sea turtle (*Caretta caretta*). We are also requesting review of this action under the Fish and Wildlife Coordination Act. We also respectfully request, as appropriate, a copy of the draft biological opinion. Questions regarding our consultation request can be directed to Dr. Kaitlyn Murphy-Wefel, Biologist, at Kaitlyn.M.Murphy-Wefel@usace.army.mil or (912) 710 – 8885.

Sincerely,

Suzanne Hill

Suzanne Hill
Environmental Section Chief, Planning Branch

Enclosure

Tybee Island Shoreline Protection Project (TISPP)
Periodic and Emergency Nourishments
USFWS Section 7 ESA Consultation
Draft Biological Assessment

1.0 Background

The U.S. Army Corps of Engineers, Savannah District (USACE) is seeking to perform periodic and emergency beach renourishments on Tybee Island, GA in support of the Tybee Island Shoreline Protection Project (TISPP). The TISPP is a Federally designed and constructed hurricane and storm damage risk reduction project to shield the project area from waves, erosion, and inundation (Figure 1). The Tybee Island Storm Risk Management Act, part of Water Resources Development Act (WRDA) 2022, extends Federal participation in the TISPP to 2036. Periodic beach renourishments are anticipated every 7 years, with the first planned for 2026-2027. Emergency beach renourishments may occur based on authorizations and funding provided as needed (i.e., in the event of damages incurred by a storm or other event).

The original Federal TISPP was authorized by Senate and House Resolutions dated June 22 and June 23, 1971. The beach was last periodically renourished in 2015 and repaired in 2018. After hurricanes Matthew in 2016 and Irma in 2017, an emergency renourishment was conducted in 2020 to add material that was lost due to storm damage (USACE 2019). Table 1 provides a history of beach renourishments and shoreline protection activities along Tybee Island.

Table 1. History of Tybee Island, GA erosion and erosion control efforts.

Year	Action
1975	800-ft North End Terminal Groin constructed using 10.5 tons of armor and 2,700 lbs. of stone.
1975-1976	Initial nourishment. 2,262,100 yd^3 of sand placed on the beach between North End Terminal Groin and 18th Street (13,200 feet long). Borrow site #3 used.
1986-1987	600-ft South End Terminal Groin constructed between 18th and 19th St. Rehabilitation of North End Terminal Groin. 1,200,000 yd^3 of sand placed from between the groins. 157,000 yd^3 of sand placed on 1,400' of shoreline south of South End Groin. Borrow site #3 used.
1993	An estimated 918,000 yd^3 of sand placed on Front beach by USACE and Georgia Ports Authority from Savannah Harbor deepening. Navigation channel was the sand source.
1994	South Tip Groin Field constructed by Georgia Ports Authority with State funds.
1995	285,000 yd^3 of sand placed between South End Groin and 13th Street, and 50,000 yd^3 of sand placed within South Tip Groin Field by Georgia Ports Authority. Borrow site #4 used.
2000	Back River Groin Field constructed, initial nourishment of Back River with sand and beach renourishment of South Tip and Front Beach with sand. Quantities are Armor Stone- 4,631 tons, Underlay Stone- 619 tons, Bedding Material- 1,847 tons, Back River/Tybee Creek Beach- 86,319 yd^3, Second Street Beach- 1,267,738 yd^3, South Beach- 118,654 yd^3, Back River/Tybee Creek/North of Seawall- 7,859 yd^3. Borrow site #4 was used.
2001-2004	Average annual 142,084 yd^3 erosion for Front, South Tip, and Back River beaches.
2008	Front Beach renourishment with sand from Borrow Area Extension 2008. Quantities are: Back River/Tybee Creek- 39,679 yd^3, Front Beach- 1,187,469 yd^3 (between Gulick Street and the South End Terminal Groin- 13,200 feet long).

2015	Front Beach renourishment with sand from Borrow Area Extension 2008. Quantities are: Back River/Tybee Creek- 40,000 yd^3, Front Beach- 1,390,000 yd^3 (between North Terminal Groin and the South Terminal Groin- 13,500 feet long).
2016	270,000 yd^3 lost to erosion from Hurricane Matthew. 462,000 yd^3 lost from Construction Template and 47,000 yd^3 lost from Design Template.
2017	144,000 yd^3 lost natural erosion and 156,000 yd^3 lost Hurricane Irma over Nov 2016-May 2017. 840,000 yd^3 lost from Construction Template and 68,000 yd^3 lost from Design Template over May 2017-Sep 2017.
2018	Front Beach renourishment (250,000 yd^3 between North Terminal Groin and the South Terminal Groin- 4,200 feet long) with sand from Borrow Area Extension 2008.
2020	Hurricane Irma and Matthew Supplemental Beach renourishment completed with an expanded borrow area. Front Beach (between the North Terminal Groin to Back River, approximately 1.500 feet South of the South Terminal Groin), approximately 14,860 linear feet and 1.2 MCY.
2020-2024	Average annual 155,000 yd^3 erosion for Front, South Tip, and Back River beaches.

The proposed sand source for these renourishments is the Tybee Island Borrow Area (Figure 2). The Borrow Area Extension (BAE) of 2008 was used for the 2008 and 2015 renourishments, and an additional extension occurred for the 2020 emergency renourishment (USACE 2019). Sediment in the borrow area was characterized using hydrographic survey, vibracore borings, and materials testing. At the time of each beach renourishment, borrow area locations may be assessed for use. There is enough material to support additional beach renourishments, but if another borrow site is needed, a separate expansion may occur separate from the proposed action.

Figure 1. TISPP approximate Federal template for beach renourishment.

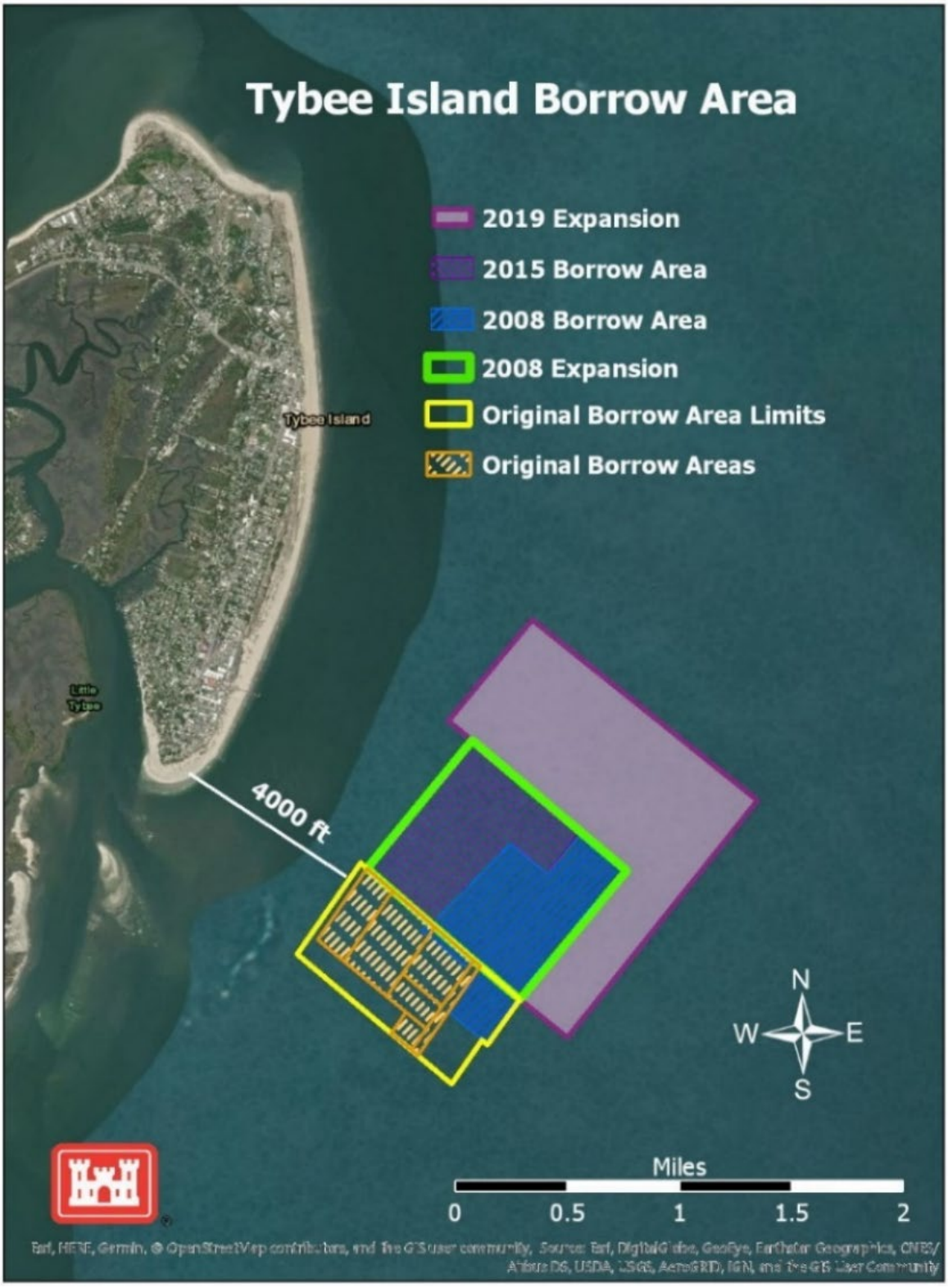

Figure 2. Tybee Island Borrow Area and associated history.

2.0 Description of the Action Being Considered

The proposed action is to directly place 1.5 MCY of primarily sandy material from the Tybee Island Borrow Area onto 16,100 total linear feet along the Front, South Tip, and Back River Beaches of Tybee Island, GA. The purpose of the TISPP is to replenish the volume of sand lost due to erosion and storm events, increase the storm protection function of the beaches, and to maintain or improve resiliency of the beaches within the project limits and over the project's lifetime. Without renourishment, beaches would continue to erode, with a concomitant loss in storm damage protection, recreational benefits, and habitat for threatened and endangered sea turtles and birds.

Beach renourishments within the Federal template may occur periodically every 7 years, with the first planned for 2026-2027. Emergency beach renourishments may occur based on authorizations and funding provided as needed (i.e., in the event of damages incurred by a storm or other event). The project would be constructed using a hydraulic cutterhead pipeline dredge and support equipment. A submerged pipeline would extend from the borrow site to the southerly tip of Tybee Island.

The authorized design for Front Beach and South Tip Beach is shown in Figure 4. The design includes a berm at elevation 11.2 ft MLLW with a tolerance of +0.5 ft and a slope of 1:25 (vertical: horizontal) (Figure 3). The authorized design for Back River is shown in Figure 5. The design includes a berm at elevation 11.2 ft MLLW with a tolerance of +0.5 ft and a slope of 1:15 (vertical: horizontal) (Figure 4). The tolerance allows the contractor to place material up to +0.5 ft above the lines and grades shown on the plans. The tolerance is included due to the large equipment required for this project and the dynamic shoreline conditions. Beach fill tolerance is shown in Figure 5.

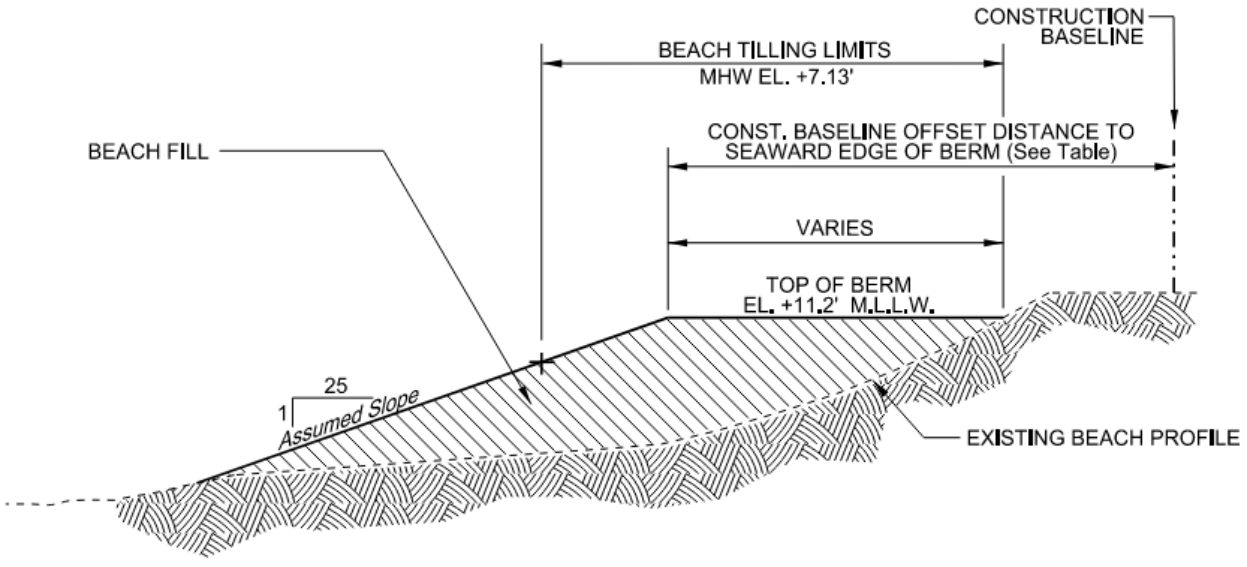

Figure 3. Beach nourishment cross-profile on Front Beach and South Tip Beach.

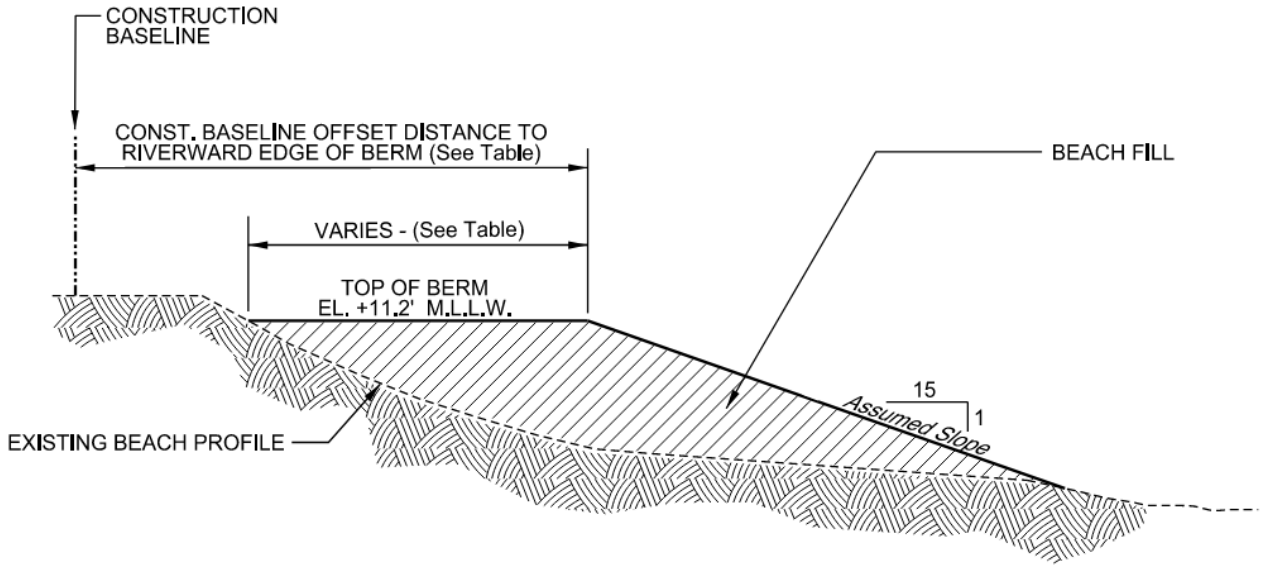

Figure 4. Beach nourishment cross-profile on Back River Beach.

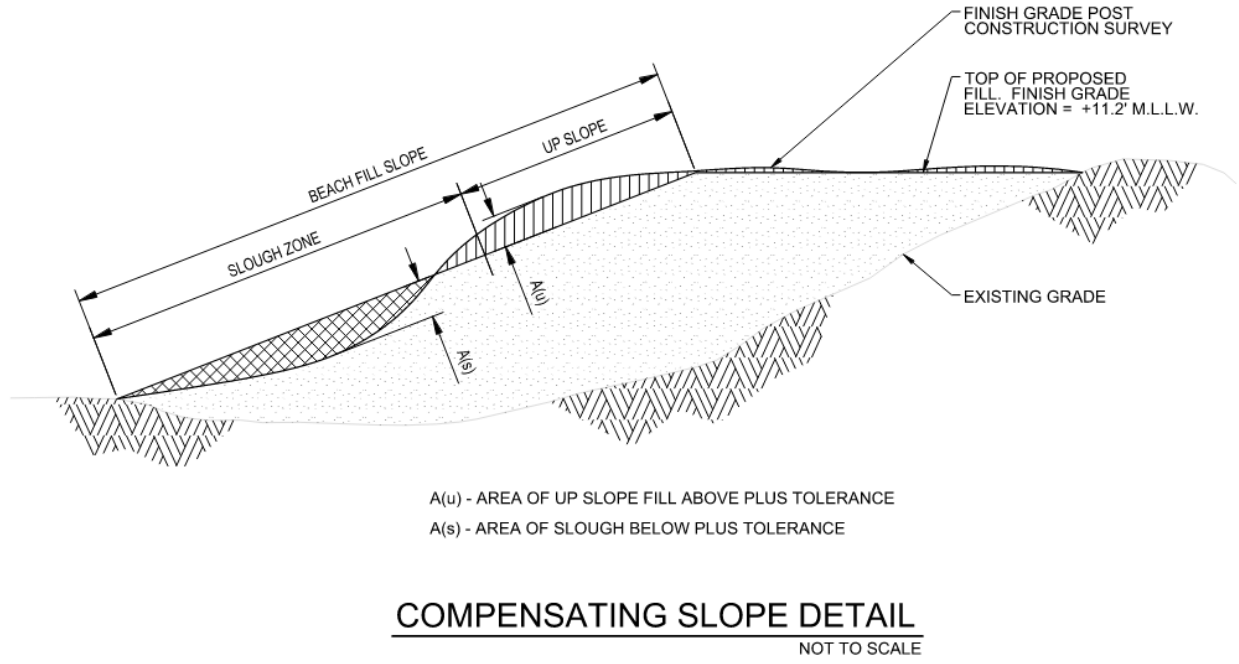

Figure 5. Beach fill tolerance cross-profile for the Federal template.

After fill placement is complete, the upper 18 inches of the beach fill (from the elevation of 7.13 ft MHW and above) must be tilled and sand compaction testing is required after filling due to potentially influencing sea turtle nesting success, per the 2016 Georgia Department of Natural Resources (GADNR) Guidelines for Beach Nourishment Projects (GADNR 2016).

In addition to renourishing the Federal template, USACE may place additional compatible beach fill within the Federal template to provide material for future dune enhancement by the non-Federal sponsor. The non-Federal sponsor (City of Tybee Island) will have the sole responsibility for the subsequent relocation of this material to construct and enhance the dune system. USACE may place the additional material on the beach up to elevation 13.2 ft MLLW and the non-Federal sponsor will be responsible for moving the material into the dune system prior to sea turtle nesting season. The non-Federal sponsor will assume full responsibility for all aspects of dune construction, including obtaining all necessary permits and complying with all applicable Federal, State, and local laws and regulations. The specific locations for dune enhancement will be determined by the non-Federal sponsor for each beach renourishment cycle, based on assessments of need and vulnerability.

All construction will take place outside sea turtle nesting and hatching season (occurring from 1 November to 30 April). This construction window will avoid impacts to nesting sea turtles, migratory West Indian manatees, and benefit juvenile life stages of fishery species that are likely present in warmer months. USACE will abide by Section 7 of the ESA [16 U.S.C. 1531 et seq.] which outlines the procedures for Federal interagency cooperation to conserve Federally listed species and designated critical habitats. Best Management Practices (BMPs; see Section 4.6) will be added to any contract issued for the work to avoid potential adverse impacts to threatened and endangered species that might occur in the general project area.

3.0 Description of the Specific Area that May be Affected by the Action

The proposed action involves beach renourishment on Tybee Island, Georgia. The placement area is 13,200 linear feet of beach along Front Beach, 1,100 linear feet along the South Tip, and the 1,800 linear feet of the eastern bank of Tybee Creek to the city fishing pier (referred to as Back River and South Tip Beaches), totaling 16,100 linear feet of placement. Another area impacted by the proposed action is the Tybee Island Borrow Area. These areas may be impacted during both periodic and emergency renourishments over the project authorization period (ending in 2036).

4.0 Description of any listed species or critical habitat that may be affected by the Action

The following species have been listed by the U.S. Fish and Wildlife Service (USFWS) as occurring or possibly occurring within the project area as identified using the Information for Planning and Consultation (IPaC) tool on December 30, 2025

(https://ipac.ecosphere.fws.gov) (Project Code: 2025-0126820). USACE has assessed the listed species and critical habitats that may be present in the action area and made a determination of the effects, which are summarized in Table 2.

Table 2. ESA-listed threatened and endangered species, critical habitat found within the project area, and USACE's effects summary.

Group	Common Name	Scientific Name	Status	Critical Habitat	Effects Summary
Mammals	West Indian Manatee	*Trichechus manatus*	Threatened	No	MANLAA[1]; Manatee Conditions included in specifications.
Birds	Eastern Black Rail	*Laterallus jamaicensis ssp. jamaicensis*	Threatened	No	NE[2]; preferred habitat is not located within proposed action area.
	Piping Plover	*Charadrius melodus*	Threatened	**Yes**	MANLAA; BMPs[3] included in specifications.
	Rufa Red Knot	*Calidris canutus rufa*	Threatened	**Yes (Proposed)**	MANLAA; BMPs[3] included in specifications.
	Wood Stork	*Mycteria americana*	Threatened	No	NE; preferred habitat is not located within proposed action area.
Reptiles	Eastern Indigo Snake	*Drymarchon couperi*	Threatened	No	NE; preferred habitat is not located within proposed action area.
	Green Sea Turtle*	*Chelonia mydas*	Threatened	No	MALAA; BMPs[3] included in specifications.
	Hawksbill Sea Turtle*	*Eretmochelys imbricata*	Endangered	No	NE; no reported nesting by this species on Tybee Island.
	Kemp's Ridley Sea Turtle*	*Lepidochelys kempii*	Endangered	No	NE; no reported nesting by this species on Tybee Island.
	Leatherback Sea Turtle*	*Dermochelys coriacea*	Endangered	No	MANLAA; BMPs[3] included in specifications.
	Loggerhead Sea Turtle*	*Caretta caretta*	Threatened	No	MALAA; BMPs[3] included in specifications.
Insects	Monarch Butterfly	*Danaus plexippus*	Proposed Threatened	No	NE; preferred habitat is not located within proposed placement sites.
Flowering Plants	Pondberry	*Lindera melissifolia*	Endangered	No	NE; preferred habitat is not located within proposed placement sites.

1. MANLAA = may affect, not likely to adversely affect.
2. NE = no effect.
3. BMPs = Best Management Practices (see Section 4.6).
4. MALAA = may affect, likely to adversely affect.

* = NOAA jurisdiction for in-water species and USFWS on land.

4.1 Listed Species with No Effect Determination

Since all aspects of the proposed action will occur on the beaches of Tybee Island, USACE has made a determination of no effect for the following species: Eastern black rail, wood stork, Eastern indigo snake, Hawksbill sea turtle, Kemp's Ridley sea turtle, monarch butterfly, and pondberry. USACE has made this no effect determination as these species' habitat is not present in the project area and/or it is extremely unlikely that these species would be present in the project area. Therefore, there is no route of effect. Please see below for an explanation of this no effect determination by species:

No effect determination has been made for the Eastern black rail, as no suitable habitat for this species would be affected by beach renourishment activities. Eastern black rails tend to occupy higher areas of emergent wetland with or near very shallow water, and overhead cover that permits little to no view of bare ground. The project area has no emergent wetlands or overhead coverage.

No effect determination has been made for the wood stork because no suitable habitat for this species would be impacted by beach renourishment activities. Wood stork rookeries and nesting areas are located on hammocks and along the edges of the marsh behind the barrier islands. Both habitats are not found in the project area.

The proposed beach renourishment and dredging operations will have no effect on eastern indigo snakes because no suitable habitat for this species would be impacted by beach renourishment activities. Eastern indigo snakes are found in longleaf pine sandhills and coastal flatwoods. There are no forests located in or around the project area.

Hawksbill sea turtles and Kemp's Ridley sea turtles have no recorded history of nesting on the beaches at Tybee Island (seaturtle.org). Therefore, USACE has made a no effect determination. This determination is reflective of the substantial rarity of current nesting patterns in the project area by these species.

No effect determination has been made for the Monarch Butterfly as there is no suitable habitat in the project area. There is also no milkweed, a plant required by this species for survival, in or around the project area.

The proposed beach renourishment and dredging operations will have no effect on pondberry because habitat does not exist nor is historically present in or around the project area. Pondberry grow in wetlands and prefer shaded habitats. The project area is in full sunlight and no wetlands are found in or around the project area.

4.2 West Indian Manatee

West Indian manatees are massive fusiform-shaped animals with skin that is uniformly dark, grey, wrinkled, sparsely haired, and rubber-like; paddle-like forelimbs; no hind limbs; and a spatulate, horizontally flattened tail (USFWS 2016). Manatees occur in the

southeastern U.S., east coast of Mexico and Central America, northeastern South America, the Greater Antilles, and parts of the Lesser Antilles. Their southeastern U.S. range is predominately in Florida year-round, and sometimes Georgia and South Carolina during warmer months. The West Indian manatee inhabit rivers and coastal waters where they feed on sea grass, algae, marsh grass, and other aquatic plants. In Georgia, this species can be found from March to October in any tidally influenced waters (coastal, tidal creeks, estuaries, and lower portions of rivers). During the winter months manatees move to warm water refuges including warm springs, warm water discharges from power plants, and subtropical waters of south Florida.

In the southeastern United States, threats to manatee habitat include loss of seagrass due to marine construction activities, propeller scarring and anchoring, and oil spills; loss of freshwater due to damming and competing uses; and increasing coastal commercial and recreational activities (USFWS 2007). Most critical, however, is loss of warm-water natural spring areas in Florida, from loss of flow, diminished water quality, or human activities (Taylor 2006).

Direct losses of manatees in the southeastern U.S. primarily involve those in Florida and watercraft collisions, fishing gear entanglement, water control structures, exposure to contaminants, algal blooms, and cold weather among other factors (USFWS 2016). However, implementation of regulatory actions throughout the southeastern portions of the manatee range has significantly reduced manatee deaths from these factors and contributed to projected population growth and recovery. Habitat fragmentation and loss are believed to be the most significant threat to manatee outside the U.S. Nevertheless, based on range-wide recovery projections, in 2016, USFWS proposed the species be down listed to threatened (USFWS 2016).

The proposed beach renourishment on Tybee Island may affect but is not likely to adversely affect manatees because the species does occur in the general vicinity of the action area but are not likely to adversely affect manatees because any construction contract issued would include the following Savannah District In-Water Construction Manatee Conditions as agreed upon between USACE Savannah District and the USFWS:

- Personnel associated with dredging activities shall be advised of the civil and criminal penalties for harming, harassing, or killing manatees, or other species protected under the Endangered Species Act of 1973 and the Marine Mammal Protection Act of 1972. The Contractor may be held responsible for manatees, whales, sea turtle, or sturgeon harmed, harassed, or killed as a result of project activities.
- A minimum of 2 temporary manatee awareness construction signs that are 3 feet by 4 feet will be provided and maintained at prominent locations within the construction area prior to initiation of construction/dredging and removed upon completion of the project. Signs shall be posted prior to and during construction and dredging activities to remind personnel to be observant for manatees during active construction/dredging operations and within vessel movement zones (i.e.,

the work area), and at least one sign shall be placed where it is visible to the vessel operator. One additional temporary sign will be installed in a location prominently visible to water-related construction crews.

- Siltation or turbidity barriers below the high tide line are not allowed in association with this project.
- To prevent a crushing hazard to manatees or other protected species, pipelines used to transport dredged material shall be secured to the river bottom or to a fixed object along their length to prevent movement with tides or wave action.
- Clamshells buckets, and other dredging equipment (pipelines, anchors, etc.) shall be raised and lowered in the water column at the slowest possible speed. Upon retrieval, clamshell buckets shall be held just above the water's surface so excess water can drain before being raised higher. This reduces the splashing noise associated with the draining water as it contacts the water's surface, a possible manatee attractant.
- Night dredging with a clamshell should be avoided if possible. However, if it is necessary, bright lights adequate to provide illumination to aid in spotting manatees must be used.
- Vessels associated with dredging projects shall operate at “no wake/idle” speed while in the immediate project area and while in water where the draft of the vessel provides less than four feet of clearance from the bottom. Vessels shall follow routes of deep water when possible.
- If a manatee is sighted within 100 yards of the active work zone, special operating conditions shall be implemented, including: In-water operations, including vessels and moving equipment, shall be shut down if one or more manatees comes within 50 feet of the operation; vessels shall operate at no wake/idle speeds within 100 yards of the work area. In-water operations shall not resume until the manatees have moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatees have not reappeared within 50 feet of the operation. Animals shall not be herded away or harassed into leaving. Once the manatee has left the 100-yard buffer zone around the work area of its own accord, special operating conditions are no longer necessary, but careful monitoring shall resume.
- Collisions with manatees or other Federally listed species shall be immediately reported to USACE (912-710-8885) and the USFWS Coastal Suboffice (762-250-0613). The above offices shall be notified upon locating a dead, injured, or sick endangered or threatened species specimen. Care shall be taken in handling dead specimens to preserve biological materials for later analysis of cause of death. Dead manatees found in the project area shall be secured to a stable object to prevent the carcass from being moved by the current. The finder shall ensure that evidence intrinsic to the specimen is not unnecessarily disturbed. In the event of injury or mortality of any protected species, aquatic activity in the project area shall cease, pending Section 7 consultation under the Endangered Species Act between the USFWS and USACE.
- A log shall be kept detailing sightings, collisions, and injury to manatees, sea turtles, sturgeons, and whales which have occurred during the Contract period. Within 15 days following project completion, a report shall be submitted to the

Contracting Officer or Contracting Officer Representative summarizing sightings and incidents. Reports shall be signed by the Contractor or its representative and shall include the name of the person making each sighting.
- USACE will comply with the most current version of the SARBO and any relevant PDC for the proposed action.

Species Effects Determination

The primary route of effect to West Indian Manatees from placement operations would be increased noise in the area, which may deter and displace manatees. This effect would be minor and short-term as there is abundant adjacent habitat, and it would only occur during placement operations. By requiring the contractor to follow the standard in-water work conditions as outlined above, it is anticipated that the proposed in-water placement of sediment associated with nearshore placement along Tybee Island "**may affect, not likely to adversely affect"** this species.

4.3 Piping Plovers

Piping plovers are small shorebirds approximately six inches long with sand-colored plumage on their backs and crown and white under parts. The piping plover breeds on the northern Great Plains, in the Great Lakes region, and along the Atlantic coast (Newfoundland to North Carolina); and winters on the Atlantic and Gulf of Mexico coasts from North Carolina to Mexico, and in the Bahamas West Indies. The species spends up to 10 months on their migration and winter grounds, generally from July 15 to May 15 (Noel et al. 2007, Elliott-Smith and Haig 2020). The piping plover is a common winter resident with high site fidelity along the Atlantic Coast of Georgia, South Carolina, and North Carolina (Gibson et al. 2018). When not foraging, plovers can be found roosting, preening, bathing, in aggressive encounters, and moving among available habitat locations (Zonick and Ryan, 1996).

The piping plover winters at coastal intertidal flats including sand and/or mud flats with no or very sparse emergent vegetation or occasionally those partially covered by a mat of blue-green algae. Important components of the sand/dune ecosystem include surf cast algae, sparsely vegetated back beach and salt pans, spits, and wash-over areas. Important components of intertidal flats include sand and/or mudflats with no or very sparse emergent vegetation. Adjacent non-vegetated or sparsely vegetated sand, mud, or algal flats above high tide are also important, especially for roosting piping plovers.

The primary threats to the piping plover are habitat modification and destruction, and human disturbance to nesting adults and flightless chicks. Habitats may be adversely impacted by development and construction, dredging and sand mining, inlet stabilization and relocation, groins, seawalls and revetments, loss of foraging from shoreline stabilization, invasive vegetation, and wrack removal/beach cleaning (USFWS 2015). According to Gibson et al., piping plovers along the southeastern Atlantic coast have high site fidelity and may be influenced by habitat disturbance, including beach renourishment activities (Gibson et al. 2018). Other threats include those associated with energy development (e.g., oil spills, oil and gas exploration, wind turbines), as well

as natural threats like storms, cold weather events, predation, and disease.

On July 10, 2001, the USFWS designated 137 areas along the coasts of North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas as critical habitat for the wintering population of the Piping plover where they spend up to 10 months of each year on the wintering grounds. Designated critical habitat does not include existing developed sites consisting of buildings, marinas, paved areas, boat ramps, exposed oil and gas pipelines, and similar structures (Federal Register/Vol. 66, No 132, July 10, 2001). The USFWS designated the north end of Tybee Island, Georgia (Georgia Unit GA -1; Figure 7) as critical habitat for the wintering piping plover, which constitutes 9.4% of the Federal template on Tybee Island, GA (Figure 8). Piping plover critical habitat within the Federal template is 0.18% of the critical habitat in Georgia.

The U.S. Geological Survey (USGS) and Environment Canada, with participation from USACE and USFWS, prepared a joint Piping Plover census report; Tybee Island had no recorded piping plovers during the winter census which occurred from January 24 to February 6, 2011 (Elliot-Smith 2011). This period also coincides with the winter construction timeframe for the proposed action. As research by Comber et al. (2021) and Mengak et al. (2019) has established, ongoing recreational disturbance is a primary factor driving shorebird displacement from key habitats. These studies also report no recorded piping plover presence within the federal template during the construction timeframe (proposed from November 1 – April 30) (Comber et al. 2021; Mengak et al. 2019).

During the last emergency beach nourishment in 2019 (USACE 2019) shorebird monitoring was conducted by USACE biologists prior to and during construction activities in the vicinity of critical habitat GA-1 for piping plover (see Figure 7). These surveys were conducted every few weeks from February 5, 2018, to March 1, 2019 for a total of eighteen surveys (USACE unpublished trip reports). Surveyors recorded avian species observed and any disturbances to species over an average time of two hours per survey. No piping plovers were reported during any of these surveys prior to and during construction of the beach renourishment. This lack of habitat use within the Federal template may be due to the high level of human activity, namely from recreation, already occurring within this area.

Species Effects Determination

Tybee Island is considered an important foraging and roosting habitat for piping plover. The primary routes of effect to piping plovers would be disturbance during placement operations and temporary impacts to the intertidal foraging habitat on Tybee Island. The noise of construction could temporarily displace any individuals present in the proposed action area. While piping plover are shown to have high site fidelity, bird monitoring data available for the Tybee Island indicates that piping plovers are unlikely to be present during placement activities. Additionally, the high level of human activity that occurs within the Federal template already results in diminished use by piping plovers.

The major threat piping plover is the continued degradation of habitat, including

potential areas for overwintering like Tybee Island. Placement of sediment on the foreshore can provide protection to the shoreline and long-term beneficial effects to the piping plover by stabilizing their intertidal foraging habitat and protecting the beach profile onshore. For these reasons, USACE has made a "**may affect, not likely to adversely affect**" determination for piping plover.

Critical Habitat Effects Determination

Due to placement occurring on the foreshore environment of Tybee Island, there will be short-term temporary impacts to piping plover critical habitat. However, effects may be beneficial in the long-term as beach renourishment will provide protection and stabilization of this critical habitat throughout the project authorization. Therefore, USACE has made a "**may affect, not likely to adversely affect**" determination for piping plover critical habitat.

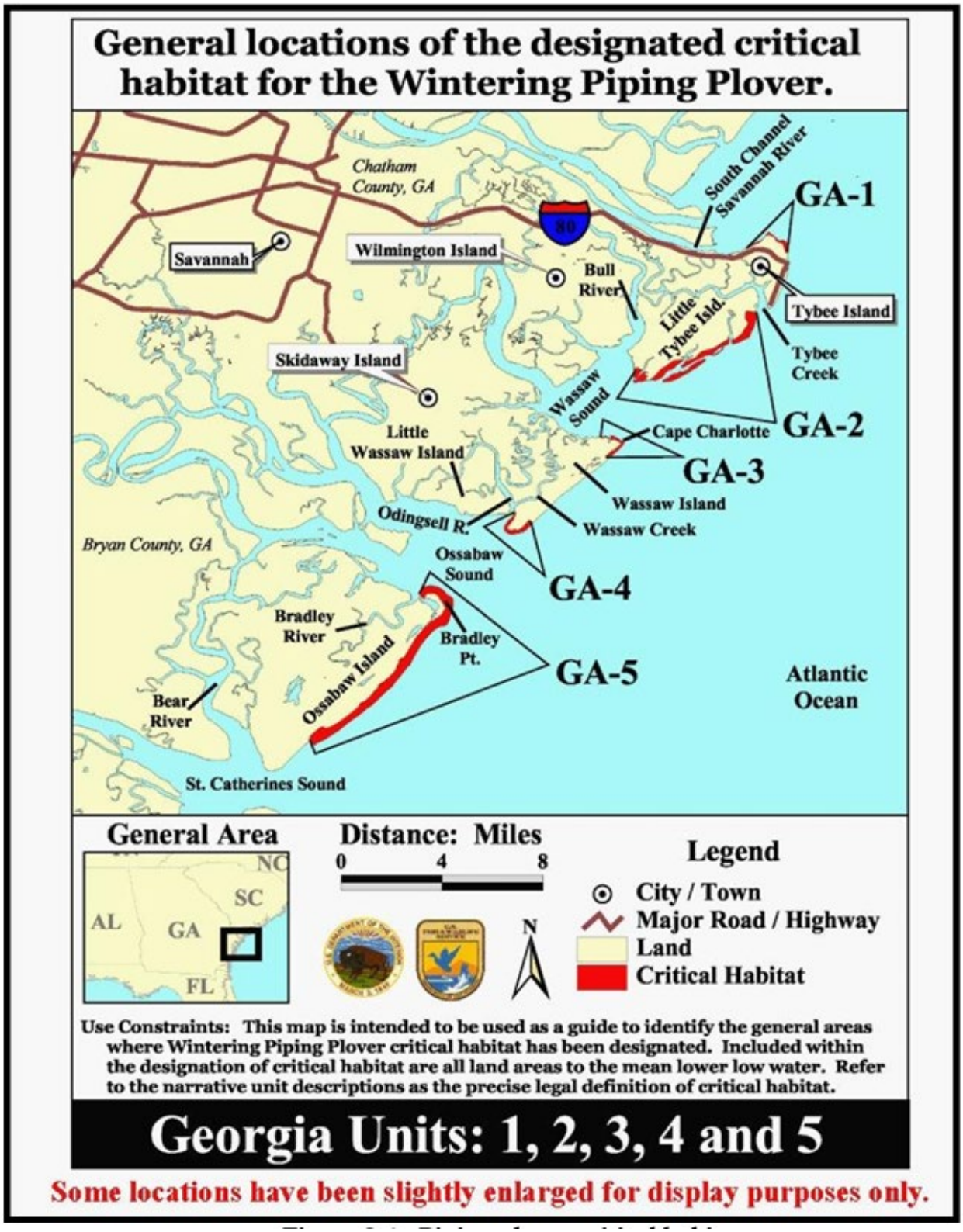

Figure 7. Piping plover critical habitat in Georgia.

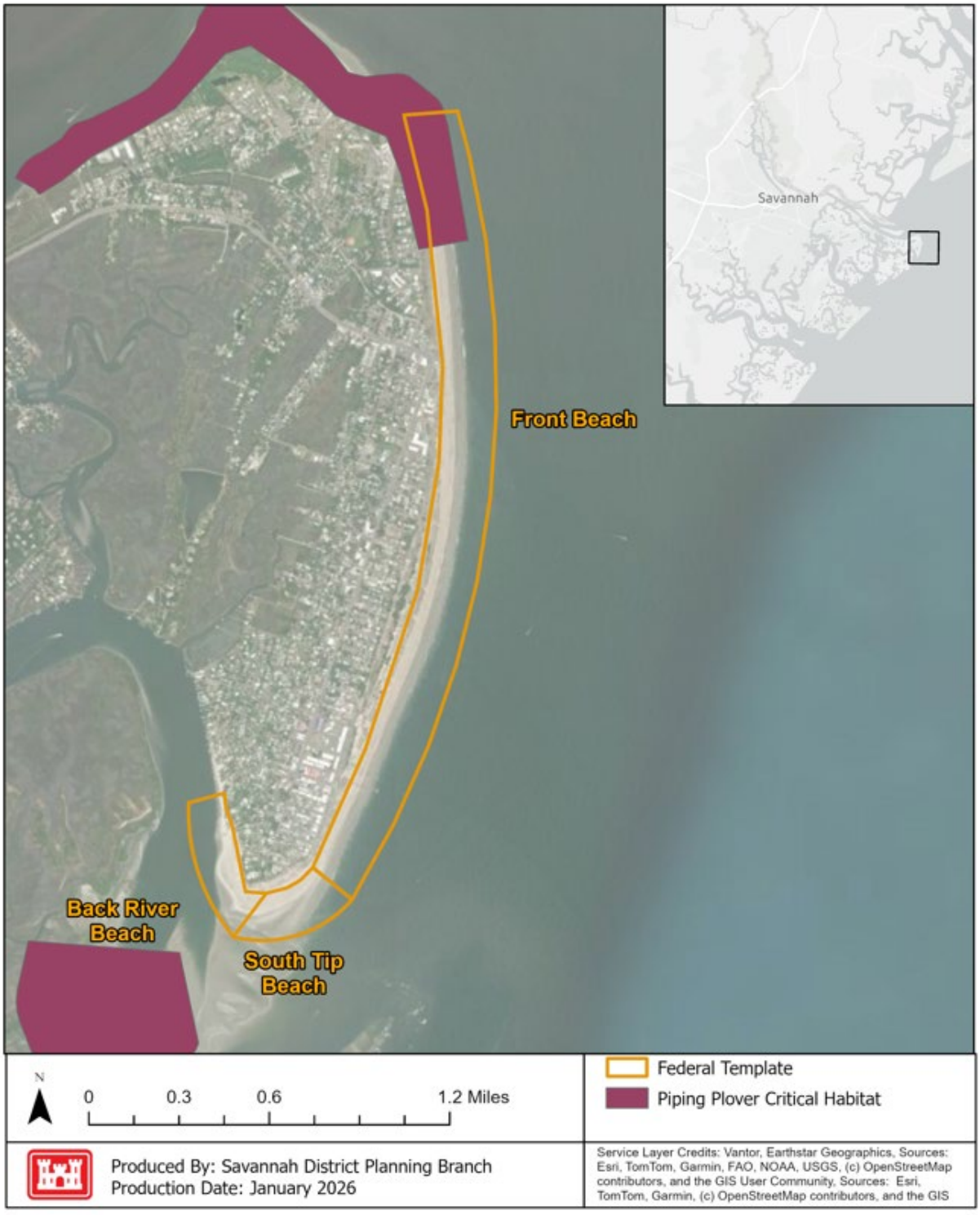

Figure 8. Piping plover critical habitat located within the TISPP Federal template.

4.4 Rufa Red Knot

The rufa red knot is a medium-sized migratory shorebird that breeds in the Canadian Arctic, winters in parts of the Southeastern U.S., the Caribbean, and South America, and primarily uses well-known spring and fall stopover areas on the Atlantic coast of the U.S. Rufa red knot are dependent on these overwintering and stopover locations to achieve adequate weight gain for successful migration (Niles et al. 2008, van Gils et al. 2005a, 2005b, Piersma et al. 1999). In addition to energetic needs for migration, food stores are utilized for body transformation to breeding conditions (Morrison 2006).

Rufa red knots, generally, overwinter and stopover at coastal marine and estuarine habitats with large areas of exposed intertidal sediments. Preferred microhabitats are muddy or sandy coastal areas, particularly at the mouths of bays and estuaries, tidal flats, and tidal inlets (Lott et al. 2009, Niles et al. 2008, Harrington 2001). Rufa red knots generally require areas where erosion, accretion, over washes, island migration, and inlet migration provide dynamic conditions for optimal habitat. Intertidal flats are also preferred spawning habitat for horseshoe crabs, a preferred food resource for rufa red knot, because the sediment is porous and well oxygenated (Kingsley-Smith et al. 2019).

Threats to the rufa red knot include habitat loss, reduced food availability, asynchronies in the annual cycle, competition with gulls, and human disturbance. Habitat destruction and modification are occurring throughout the entire range of the subspecies often affected by climate change, shoreline stabilization, and coastal development, in addition to smaller scale impacts like beach cleaning, invasive vegetation, agriculture, and aquaculture. Habitat changes may be compounded by disturbances from recreation and other human activities.

On December 11, 2014, the USFWS published the final rule to list the rufa red knot as threatened subspecies under the ESA. Rufa red knot critical habitat has been proposed for the beach profiles within the project area consisting of unit GA-2 on Tybee Island (Figure 9; USFWS 2023). The proposed critical habitat for rufa red knot consists of approximately 2,046 acres (828 hectare) of occupied habitat on Tybee Island. The northern boundary of the unit begins at the Savannah River shoreline of Tybee Island and extends south to Tybee Beach Inlet, which separates Tybee Island from Little Tybee Island. This includes all emergent land from the MLLW line to the toe of the dunes where densely vegetated habitat (not used by the rufa red knot) begins (i.e., the highly dynamic shoreline and sandy intertidal zone that is covered at high tide and uncovered at low tide). The dynamic habitat also includes the ephemeral emergent shoals within the flood-tidal and ebb-tidal deltas associated with the eastern side of Tybee Inlet's navigable channel. The physical and biological features of the critical habitat are as follows:

1) Beaches and tidal flats used for foraging;
2) Upper beach areas used for roosting, preening, resting, or sheltering;
3) Ephemeral and/or dynamic coastal features used for foraging or roosting;
4) Ocean vegetation deposits or surf-cast wrack used for foraging or roosting;
5) Intertidal peat banks used for foraging and roosting;

6) Features landward of the beach that support foraging and roosting; and,
7) Artificial habitat mimicking natural conditions or maintaining the physical or biological features 1 to 6 (above).

Similar to the lack of piping plover presence as described in Section 3.4, no rufa red knot were reported during surveys prior to and during construction of the 2019 beach renourishment on Tybee Island (USACE unpublished trip reports; USACE 2019). This lack of habitat use within the Federal template may be due to the high level of human activity, namely from recreation, already occurring within this area. However, data reported by the GADNR (GADNR unpublished data 2013-2015) and eBird, an online database of bird distribution and abundance provided by the Cornell Lab of Ornithology (eBird 2025 and 2026), show rufa red knot prefer the north and south tips of Tybee Island. Both areas are more likely to have less human activity (and thus, may be better habitat for foraging) than areas on Front Beach, which is primarily used for recreation.

Species Effects Determination

While Tybee Island is recognized as an important foraging, roosting, and stopover habitat for the rufa red knot, their presence is concentrated on the north and south tips, where human activity is minimal and foraging habitat is more suitable. Conversely, the project area along Front Beach is characterized by high levels of human recreation, which has already diminished its value as a habitat and resulted in the species' general absence; this was confirmed by surveys prior to and during the 2019 beach renourishment which reported no sightings. The primary routes of to rufa red knots effect from the proposed action would be disturbance during placement operations and temporary impacts to the intertidal foraging habitat on Tybee Island. The noise of construction could temporarily displace individuals. Rufa red knot have been reported on North and South Tip beaches; however, North beach is outside the Federal template and beaches on Tybee Island already have a high level of human activity which result in diminished use by rufa red knot.

Placement of sediment on the foreshore can provide protection to the shoreline and long-term beneficial effects to the rufa red knot by stabilizing their intertidal foraging habitat and protecting the beach profile onshore. The addition of sediment in the area would increase the available spawning habitat for horseshoe crabs, and thus available rufa red knot food resources (Kingsley-Smith et al. 2019). Moreover, these effects to food resources located within the beach and nearshore environment would recover in 4-6 months following renourishment (SCDNR 2016). For these reasons, USACE has made a “**may affect, not likely to adversely affect**” determination for the rufa red knot.

Proposed Critical Habitat Effects Determination

Due to placement occurring on the foreshore environment of Tybee Island, there will be short-term temporary impacts to the proposed rufa red knot critical habitat. However, effects may be beneficial in the long-term as beach renourishment will provide protection and stabilization of this critical habitat, as well as spawning habitat for preferred food sources of the rufa red knot, throughout the project authorization.

Furthermore, while there will be temporary impacts to the intertidal foraging habitat, recovery of the benthic food resources is expected within four to six months. Therefore, USACE has made a "**may affect, not likely to adversely affect**" determination for the proposed rufa red knot critical habitat.

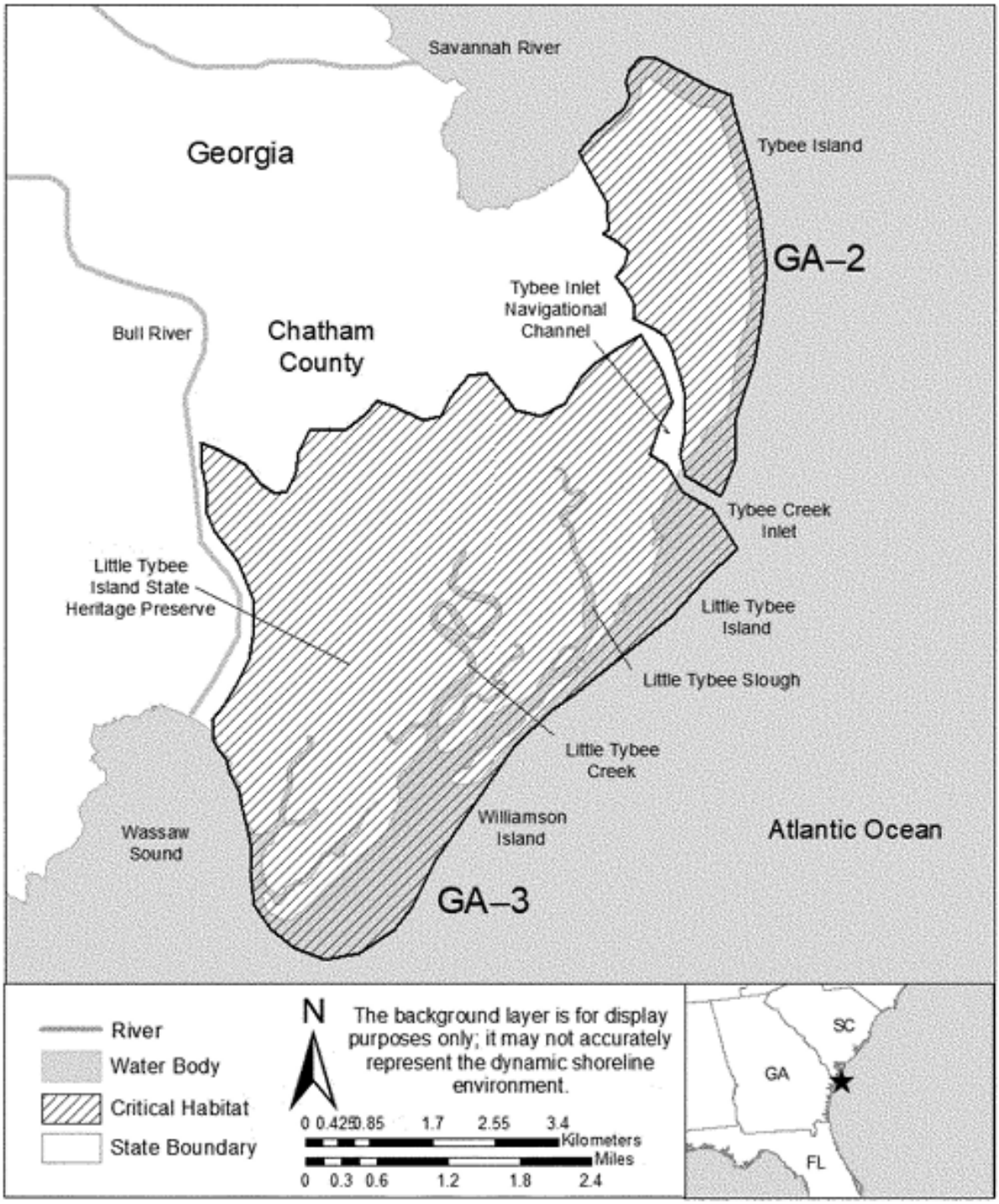

Figure 9. Rufa red knot proposed critical habitat unit GA-2 (USFWS 2023).

4.5 Sea Turtles

Modified for living in the open ocean, sea turtles have paddle-like front limbs for swimming and special respiratory mechanisms to excrete excess salt taken in with seawater when they feed. The green, hawksbill, Kemp's ridley, leatherback, and loggerhead sea turtles can be found in Georgia's near shore waters from April through November or nesting on beaches from May through October. According to the Sea Turtle Nest Monitoring System (seaturtle.org), greens and loggerheads are the primary sea turtle species to regularly nest on Tybee Island since 2009 (Table 3).

This BA only addresses topics related to nesting sea turtles for the following reasons: (1) ESA Section 7 consultation with USFWS is limited in scope to activities that may impact nesting sea turtles, their nests and eggs, and hatchlings as they emerge from the nest and crawl to the sea; (2) within the action area, nesting occurs almost exclusively by green and loggerhead sea turtles (seaturtle.org; Table 3); (3) sea turtles have similar life histories and reproductive behavior; and (4) protection measures in place for green and loggerhead sea turtles will serve as an "umbrella" for other sea turtles that may attempt to nest in the project area.

Table 3. Sea turtle nesting numbers on Tybee Island (seaturtle.org).

Year	Loggerhead Nests	Green Nests	Leatherback Nests	Unknown Nests
2009	3	1 false crawl		
2010	10			
2011	9			
2012	23	1 false crawl		
2013	21			
2014	18			
2015	10		1 false crawl	
2016	13			
2017	25			
2018	23			
2019	23			
2020	13			
2021	19			
2022	33	2 false crawls		2
2023	31	1		
2024	16			
2025	19	1 false crawl		

Species Effects Determination

Sand placement projects may result in changes in sand density (compaction), beach shear resistance (hardness), beach moisture content, beach slope, sand color, sand grain size, sand grain shape, and sand grain mineral content if the placed sand is dissimilar from the original beach sand (Nelson and Dickerson 1987). These changes could result in adverse impacts on nest site selection, digging behavior, clutch viability, and hatchling emergence (Ernest et al. 2024, Brock et al. 2009, Nelson 1988, Nelson

and Dickerson 1987). Sea turtles nest closer to the water the first few years after beach renourishment because of the altered profile (and perhaps unnatural sediment grain size distribution; Ernest et al. 2024, Trindell 2005, Ernest and Martin 1999). These impacts can be minimized by using suitable sand, beach compaction monitoring, and tilling (minimum depth of 36 inches) if needed. Immediately after completion of the beach renourishment project and prior to the next three sea turtle nesting seasons following a renourishment, the City of Tybee (non-Federal sponsor) will conduct beach compaction measurements and till, if needed. Tilling will only be needed if the compaction is greater than 500 cone penetrometer units (cpu).

The primary routes of effect to sea turtles are disturbance of existing nests (potentially missed during surveys), disturbance of females attempting to nest, and introducing an obstruction to species movement for turtles entering or existing the beach when nesting or moving along the shoreline. In addition, heavy equipment may be used to construct the beach profile. This equipment will have to traverse the beach portion, which could result in harm to nesting sea turtles, their nests, and emerging hatchlings. The placement of material and movement of sediment in the system may increase sea turtle nesting habitat because the sandy material is highly compatible (i.e., grain size, shape, color, etc.) with naturally occurring beach sediments in the area.

The proposed beach renourishment on Tybee Island may affect green, leatherback, and loggerhead sea turtles because these species do occur in the general vicinity of the action area. Any construction contract issued would include the following Georgia Department of Natural Resources (GADNR) Guidelines for Beach Nourishment Project (revised 2016; GADNR, 2016). The purpose of these guidelines is to minimize the effects of beach renourishment projects on sea turtle reproduction and to ensure nourished beaches are compatible with native beaches:

- Construction – Construction shall be allowed outside the loggerhead turtle nesting and hatching season (may not occur from May 1-October 31).
- Sediment Grain Size – Fill material shall be free of construction debris, rocks, or other foreign matter and shall not contain, on average, greater than 10% fines (i.e. silt and clay; passing through a #200 sieve; approx. 0.75 mm) and shall not contain, on average, greater than 5% course gravel or cobbles (retained by #4 sieve; approx. 4.5 mm). Sand grain size on Georgia beaches is generally between 0.15 and 0.3 mm.
- Sediment Composition – The sediment composition of Georgia beaches is generally fine-grained silica sand (>90%) with very little fragmented shell. Shell content should remain below 15% of total weight.
- Sediment Color – Sediment color should be between 10yr6.5/1 and 10yr7.0/1 on the Munsell soil color chart.
- Compaction – Sand compaction should be measured at a maximum of 500 ft. intervals along the fill area. Compaction will be measured at 3 stations along three transects corresponding to the landward, middle and seaward portion of the fill berm. At each measurement station, a cone penetrometer shall be pushed to depths of 6, 12, and 18 inches three times (3 replicates) and the compaction

readings will be averaged to produce a final reading at each depth for each station. If the average value for any depth exceeds 500 cpu for any 2 or more adjacent stations, than that area will be cross tilled from the high tide wave rush to the seaward toe of the dune prior to May 1. If a dune feature is constructed as part of the project, the dune feature should be tested for compaction prior to the planting of vegetation or sand fence construction. If compaction readings are greater than 500 cpu at any of the test depths (6", 12" 18") for 2 consecutive stations, the dune feature should be tilled prior to May 1.

- Beach Profile – The constructed beach profile should be gradually sloping rather than an elevated flat terrace to reduce scarping. The beach should be monitored for scarping prior to the nesting season. Escarpments more than 18" extending more than 100 ft should be mechanically leveled to natural beach contour prior to May 1.
- Sand Fence Construction – Sand fence construction will be in accordance with GADNR guidelines. GADNR Sand Fence Guidelines are designed to allow marine turtle access to nesting habitat and prevent trapping of marine turtles as they return to the sea following nesting.

Another route of effect to sea turtles would occur during placement operations. The noise of construction could temporarily displace individuals. However, construction, including placement activities, would occur outside the sea turtle nesting window (construction may not occur from May 1-October 31). Thus, fewer sea turtles are anticipated to be in the area in comparison to nesting season. Any effects to sea turtles potentially present would be short-term and minor as there is abundant adjacent habitat available.

Construction will take place outside the loggerhead sea turtle nesting and hatching season, which occurs from May 1 – October 31. Sufficient sand with the right characteristics (i.e. grain size and composition) and in the proper locations is crucial for sea turtles to nest, and for birds to nest and feed. Under current conditions and erosion rates, sea turtle nesting habitat would continue to decrease and inundation risk increase. The proposed action would provide long term benefits to sea turtle habitat by increasing the level of protection provided from incident storms, potentially decreasing the likelihood of nest inundation during coastal weather events.

For these reasons, USACE has made a "**may affect, likely to adversely affect**" determination for the green sea turtle and loggerhead sea turtle as these species nest annually on Tybee Island beaches (seaturtle.org). USACE has made a "**may affect, not likely to adversely affect**" determination for the leatherback sea turtle because this species has no recorded nest sites, aside from one nest attempt (i.e., false crawl), on Tybee Island beaches (seaturtle.org).

4.6 Best Management Practices (BMPs)

Best Management Practices (BMPs) to avoid adverse impacts to threatened and endangered species will be affixed to each construction contract for all beach

renourishments under this EA. BMPs include the Savannah District In-Water Construction Manatee Conditions as agreed upon between USACE Savannah District and the USFWS (Section 4.2), the GADNR Guidelines for Beach Nourishment Project (Section 4.5; GADNR, 2016), and measures listed below:

1. West Indian manatees, piping plover, rufa red knots, and sea turtles have been sighted in the general vicinity of the project. The Contractor shall maintain a special watch for these species for the duration of this contract for these animals and any sightings will be reported to the Contracting Officer.

2. The contractor will instruct all personnel associated with the dredging and renourishing of the beach of the potential presence of West Indian manatees, piping plover, rufa red knots, and sea turtles, and the need to avoid collisions with these species.

3. All personnel associated with the dredging and renourishing of the beach will be advised that there are civil and criminal penalties for harming, harassing, or killing of West Indian manatees, piping plover, rufa red knots, and sea turtles, which are protected under the Marine Mammal Protection Act of 1972, and/or the ESA of 1973. The contractor may be held responsible for any manatee or ESA-listed species that is harmed, harassed, or killed as a result of project activities.

4. All vessels associated with the project will operate at “no wake/idle” speeds at all times while in the immediate area and while in the water where the draft of the vessel provides less than four feet clearance from the bottom. All vessels will follow routes of deep water whenever possible.

5. Extreme care will be taken in lowering equipment or materials, including, but not limited to pipelines, dredging equipment, anchors, etc., below the water surface to the ocean floor; taking any precautions not to harm any manatee(s) that may have entered the project area undetected. All such equipment will be lowered at the lowest possible speed.

6. To prevent a crushing hazard to West Indian manatees, if plastic pipeline is used to transport material from the borrow site to the beach the pipeline will be secured to the ocean floor or to a fixed object along its length to prevent movement with the tides or wave action.

7. Dredge lighting must be shielded, or low sodium, to prevent potential disruption of courtship by sea turtles during 1 May through 30 August.

8. The contractor agrees that any adverse interactions with West Indian manatees, piping plover, rufa red knots, and sea turtles or any other threatened or endangered species shall be reported immediately to USACE (912-710-8885), the USFWS Coastal Suboffice (762-250-0613), and the GA DNR (Weekdays: 912-264-7218 or 1-800-241-4113; nights and weekends: 1-800-241-4113). Notification will also be

made to the above offices upon locating a dead, injured, or sick endangered or threatened species specimen. Care will be taken in handling dead specimens to preserve biological materials for later analysis of cause of death. Any dead manatee(s) found in the project area must be secured to a stable object to prevent the carcass from being moved by the current before the authorities arrive. The finder has the responsibility to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed. In the event of injury or mortality of a manatee, all aquatic activity in the project area must cease pending Section 7 consultation under the ESA between the USFWS and the USACE.

9. The contractor will keep a log detailing sightings, collision, or injury to piping plover, rufa red knots, manatees, sea turtles, sturgeon, whales, or other endangered species which have occurred during the contract period. Following project completion, a report summarizing the above incidents and sightings will be submitted to the USFWS (4980 Wildlife Dr. NE, Townsend, Georgia 31331), the GA DNR (Nongame Conservation Section, 1 Conservation Way, Brunswick, GA 31520), and to the U.S Army Corps of Engineers, Savannah District, Navigation Section (ATTN: CESAS-OP-SN, 100 W. Oglethorpe Ave., Savannah, Georgia 31401-3640).

10. All temporary project materials will be removed upon completion of the work. No construction debris or trash will be discarded into the water. Contractor will be required to remove all construction plastic, fencing and staking from the beach upon completion of the project and before ending up in the ocean. Contractor will be required to account for all construction debris to ensure that none is discarded into the ocean or left on the beach.

11. The TISPP is a covered project in the 2020 South Atlantic Regional Biological Opinion for Dredging and Material Placement in the Southeast United States (SARBO) on March 27, 2020, revised July 30, 2020. The USACE will follow all terms and conditions and all relevant project design criteria (PDCs) of the 2020 SARBO. Applicable PDCs include, but are not limited to the following: (See Appendix B of the 2020 SARBO):

- Placement of material does not obstruct species movement such as that of sea turtles entering or exiting the beach when nesting, species moving along the shoreline, or through an area.

- Placement does not create a mound in loggerhead sea turtle critical habitat nearshore reproductive habitat that may result in structure that could promote predators (i.e., nearshore predator concentration caused by submerged and emergent offshore structures) or disrupt wave patterns necessary for orientation, and/or create excessive longshore currents.

12. Contractor will be required to follow the Standard Manatee Conditions, which are listed in section 4.2 of this BA.

5.0 Conclusion

USACE has reviewed the proposed action and made a determination of the effects to ESA-listed species and designated critical habitat. Based on the individual species analysis above, and the described BMPs as outlined in Section 4.6, USACE has determined that proposed beach renourishment on Tybee Island, GA is likely to adversely affect (MALAA) green (*Chelonia mydas*) and loggerhead (*Caretta caretta*) sea turtles under USFWS jurisdiction. USACE determined that the proposed action may affect but is not likely to adversely affect (MANLAA) the following USFWS ESA Federally listed species: the West Indian manatee (*Trichechus manatus*), piping plover (*Charadrius melodus*) and its critical habitat, rufa red knot (*Calidris canutus rufa*) and its proposed critical habitat, and leatherback sea turtle (*Dermochelys coriacea*). For all other species under USFWS, USACE has determined the proposed action will have no effect. We have used the best scientific and commercial data available to complete this analysis. We request your concurrence with this determination.

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US Army Corps of Engineers®

Tybee Island Shoreline Protection Project (TISPP) Periodic and Emergency Nourishments Draft Environmental Assessment and Finding of No Significant Impact Tybee Island, Chatham County, GA

Appendix C.3

IPaC Species List

January 2026

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Georgia Ecological Services Field Office
355 East Hancock Avenue
Room 320
Athens, GA 30601-2523
Phone: (706) 613-9493 Fax: (706) 613-6059
Email Address: gaes_assistance@fws.gov

In Reply Refer To: 12/30/2025 16:34:23 UTC
Project Code: 2025-0126820
Project Name: Tybee Beach Renourishment

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Thank you for requesting information on federally listed species and important wildlife habitats that may occur in your project area. The U.S. Fish and Wildlife Service (Service) is responsible for managing certain species of wildlife under the Endangered Species Act (ESA) of 1973 as amended (16 USC 1531 et seq.), Migratory Bird Treaty Act (MBTA) as amended (16 USC 701-715), Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and Bald and Golden Eagle Protection Act as amended (16 USC 668-668c). We provide the following guidance for understanding which federally protected species and critical habitats may occur within your project area and to recommend conservation measures for your project if you determine those species or designated critical habitats may be affected by the project activities.

Federally-listed Species and Critical Habitat

Under the ESA, it is the responsibility of the Federal action agency, their designated non-Federal representative, or a project proponent to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service, to make “no effect” determinations. If you determine that your proposed action will have “no effect” on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally listed threatened or endangered fish or wildlife species without the appropriate permit. If you need additional guidance to inform your effect determination, please contact the Service.

If you determine that your proposed action may affect federally listed species, please consult with the Service. Through the consultation (for projects seeking Federal funding or permitting) or technical assistance (for non-Federal projects) process, we will work with you to evaluate

information contained in a biological assessment or equivalent documents that you provide. If your proposed action is associated with Federal funding or permitting, consultation will occur with the Federal agency under section 7(a)(2) of the ESA. Otherwise, an incidental take permit pursuant to section 10(a) (1)(B) of the ESA (also known as a Habitat Conservation Plan) may be necessary to exempt "take" of federally listed threatened or endangered fish or wildlife species when it cannot be avoided.

Action Area. The scope of ESA compliance includes direct and indirect effects of project activities (e.g., equipment staging areas, offsite borrow material areas, or utility relocations). The "action area" is the spatial extent of an action's direct and indirect modifications or impacts to the land, water, or air (50 CFR 402.02). Large projects may have effects to land, water, or air outside the immediate footprint of the project, and these areas should be included as part of the action area. Effects to land, water, or air outside of a project footprint could include things like lighting, dust, smoke, and noise. To obtain a complete list of species, the action area should be uploaded or drawn in IPaC rather than just the project footprint. Please note that a lead federal agency may consider an action area that excludes portions of the project footprint. In these cases, further coordination with our office may be required to ensure compliance with the ESA. It is the responsibility of the project proponent to coordinate with the lead federal agency to understand the action and action area being reviewed as part of ESA Section 7 consultation.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. An updated list may be requested through IPaC.

How to Submit a Project Review
If your action may affect any federally listed species and you would like technical assistance from our office, please send us a complete project review package. A step-by-step guide is available below and supplemental guidance is available at the Georgia Ecological Services Project Planning and Review page (https://www.fws.gov/office/georgia-ecological-services/project-planning-review).

Requests for threatened and endangered species project reviews must be submitted to our office using the process described below. All steps must be completed to ensure your project is reviewed by a biologist in our office and you receive a timely response.

Step 1. Request an official species list for your project through IPaC. You have just completed this step.

Step 2. Complete applicable Determination Keys (DKey's, for short)

Step 3. Send your complete project project review package to gaes_assistance@fws.gov for review if no DKey is applicable or certain project components have not been addressed (i.e. a

species returned by IPaC does not have a DKey). A complete project review package should include:

1. A description of the proposed action, including any measures intended to avoid, minimize, or offset effects of the action. The description shall provide sufficient detail to assess the effects of the action on listed species and critical habitat, such as the purpose of the action; duration and timing of the action; location (latitude and longitude); specific activities involving disturbance to land, water, and air, and how they will be carried out; current description of areas to be affected directly or indirectly by the action; and maps, drawings, or similar schematics of the action. Please submit all areas of a project as one single submission and do not separate into smaller components/submissions.
2. An updated Official Species List and Determination Key results
3. Biological Assessments (may include habitat assessments and information on the presence of listed species in the action area);
4. Description of effects of the action on species in the action area and, if relevant, effect determinations for species and critical habitat;
5. Conservation measures and any other available information related to the nature and scope of the proposed action relevant to its effects on listed species or designated critical habitat (e.g., management plans related to stormwater, vegetation, erosion and sediment plans). Visit the Georgia Conservation Planning Toolbox for more information.
6. In the email subject line, use the following format to include the Project Code from your IPaC species list and the county in which the project is located (Example: Project Code: 2023-0049730 Gwinnett Co.). For Georgia Department of Transportation related projects, please work with the Office of Environmental Services ecologist to determine the appropriate USFWS transportation liaison.

Our team will respond within approximately 30 days of receipt with technical assistance and recommendations.

Wetlands and Floodplains

Federal agencies are required to minimize the destruction, loss, or degradation of wetlands and floodplains, and preserve and enhance their natural and beneficial values. These habitats should be conserved through avoidance, or mitigated to ensure that there would be no net loss of wetlands function and value. We encourage you to use the National Wetland Inventory (NWI) maps in conjunction with ground-truthing to identify wetlands occurring in your project area. We also recommend you contact the U.S. Army Corps of Engineers for permitting requirements under section 404 of the Clean Water Act if your proposed action could impact floodplains or wetlands.

Migratory Birds

The MBTA prohibits the taking of migratory birds, nests, and eggs, except as permitted by the Service's Migratory Birds Program. To minimize the likelihood of adverse impacts to migratory birds, we recommend construction activities occur outside the general bird nesting season from March through August, or that areas proposed for construction during the nesting season be surveyed, and when occupied, avoided until the young have fledged. Information related to

industry best practices and migratory birds can be found at the Service's Reducing Impacts to Migratory Birds page.

Bald and Golden Eagles

The Service works to manage and conserve both bald eagle and golden eagle populations. We provide guidance on living and working near eagles, updates on the status of the populations of bald and golden eagles, and permits for the take, possession, or transportation of eagles and their parts, nests, and eggs. For more information, please visit the Service's Eagle Management page.

Other Species Considerations

Bats. If your species list includes Indiana bat (*Myotis sodalis*), northern long-eared bat (*M. septentrionalis*), or tricolored bat (*Perimyotis subflavus*) and the project is expected to impact forested habitat, tree clearing should occur outside of the periods when bats may be present and most vulnerable. Federally listed bats could be actively present in forested landscapes from spring through fall of any year. In much of Georgia, our winters are mild enough that tricolored bats are likely active on the landscape to some extent year-round. Pups are incapable of flight and vulnerable to disturbance from the spring to summer. Our recommended seasonal clearing restriction windows depend on species and region in Georgia. Please reach out to us for guidance.

Indiana, northern long-eared, tricolored, and gray (*M. grisescens*) bats are all known to utilize bridges and culverts in Georgia. If your project includes maintenance, construction, or any other modification or demolition to transportation structures, a qualified individual should complete a survey of these structures for bats and submit your findings via the “GADNR Bats in Bridges” form in the Survey123 App, free on Apple and Android devices. Please include these findings in any biological assessment(s) or other documentation that is submitted to our office for technical assistance or consultation.

Eastern Indigo Snake. The Standard Protection Measures for the Eastern Indigo Snake (*Drymarchon couperi*) include educational materials and training that can help protect the species by making staff working on a project site aware of their presence and traits. In Georgia, indigo snakes are closely associated with the state-listed gopher tortoise (*Gopherus polyphemus*), a reptile that excavates extensive underground burrows that provide the snake shelter from winter cold and summer desiccation. **T**o assist project proponents in avoiding and minimizing potential impact to the eastern indigo snake, the Service provides the Visual Encounter Survey Protocol for the Eastern Indigo Snake (*Drymarchon couperi*) in Georgia for project proponents or their designees to evaluate the possible presence of the Eastern indigo snake at a proposed project site.

Solar Energy Development

The Recommended Practices for the Responsible Siting and Design of Solar Development in Georgia, Version 2.0 (published in May 2024) are intended to provide voluntary guidance to support consideration of natural resources during the development of photovoltaic solar in Georgia. Furthermore, the Georgia Low Impact Solar Siting Tool (LISST) is also available as a map layer in IPaC (Find it in the “Layers” Box > “Environmental Data”) to provide project managers with the data to identify areas that may be preferred for low-impact development. The

tool seeks to support the acceleration of large-scale solar development in areas with less impact to the environment.

State Agency Coordination

Environmental review staff at the Georgia Department of Natural Resources (GA DNR) Wildlife Conservation Section can assist with information requests and the review of Georgia rare species and natural community data for specific projects or actions within the state. Please visit their Environmental Review page. Additional information that addresses at-risk or high priority natural resources can be found in the Georgia State Wildlife Action Plan, at Georgia Department of Natural Resources, Wildlife Resources Division Biodiversity Portal, Georgia's Natural, Archaeological, and Historic Resources GIS portal pages.

Thank you for your concern for endangered and threatened species. We appreciate your efforts to identify and avoid impacts to listed and sensitive species in your project area. For further consultation on your proposed activity, please email gaes_assistance@fws.gov and reference the project county and your FWS Project Number. This letter constitutes Georgia Ecological Services' general comments under the authority of the Endangered Species Act.

Attachment(s):

- Official Species List
- Marine Mammals

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Georgia Ecological Services Field Office
355 East Hancock Avenue
Room 320
Athens, GA 30601-2523
(706) 613-9493

PROJECT SUMMARY

Project Code: 2025-0126820
Project Name: Tybee Beach Renourishment
Project Type: Beach nourishment
Project Description: The U.S. Army Corps of Engineers, Savannah District (USACE) is seeking to perform periodic and emergency beach renourishments on Tybee Island, GA in support of the Tybee Island Shoreline Protection Project (TISPP). The TISPP is a Federally designed and constructed hurricane and storm damage risk reduction project to shield the project area from waves, erosion, and inundation. The Tybee Island Storm Risk Management Act, part of Water Resources Development Act (WRDA) 2022, extends Federal participation in the TISPP to 2036. USACE is seeking to perform periodic beach renourishments every 7 years, with the first planned for 2026-2027. Emergency beach renourishments may occur based on authorizations and funding provided as needed (i.e., in the event of damages incurred by a storm or other event).

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.00803705,-80.84002934492082,14z

Counties: Chatham County, Georgia

ENDANGERED SPECIES ACT SPECIES

There is a total of 14 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
West Indian Manatee *Trichechus manatus*	Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
This species is also protected by the Marine Mammal Protection Act, and may have additional consultation requirements.
Species profile: https://ecos.fws.gov/ecp/species/4469

BIRDS

NAME	STATUS
Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/10477

Piping Plover *Charadrius melodus* — Threatened

Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered.
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/6039

Rufa Red Knot *Calidris canutus rufa* — Threatened

There is **proposed** critical habitat for this species. Your location overlaps the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/1864

Wood Stork *Mycteria americana* — Threatened

Population: AL, FL, GA, MS, NC, SC
No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/8477

REPTILES

NAME	STATUS
Eastern Indigo Snake *Drymarchon couperi*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/646

Green Sea Turtle *Chelonia mydas* — Threatened

Population: North Atlantic DPS
There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/6199

Hawksbill Sea Turtle *Eretmochelys imbricata* — Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/3656

Kemp's Ridley Sea Turtle *Lepidochelys kempii* — Endangered

There is **proposed** critical habitat for this species.
Species profile: https://ecos.fws.gov/ecp/species/5523

NAME	STATUS
Leatherback Sea Turtle *Dermochelys coriacea* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1493	Endangered
Loggerhead Sea Turtle *Caretta caretta* Population: Northwest Atlantic Ocean DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1110	Threatened
Southern Hognose Snake *Heterodon simus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3248	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Pondberry *Lindera melissifolia* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1279	Endangered

CRITICAL HABITATS

There are 2 critical habitats wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Piping Plover *Charadrius melodus* https://ecos.fws.gov/ecp/species/6039#crithab	Final
Rufa Red Knot *Calidris canutus rufa* https://ecos.fws.gov/ecp/species/1864#crithab	Proposed

MARINE MAMMALS

Marine mammals are protected under the Marine Mammal Protection Act. Some are also protected under the Endangered Species Act[1] and the Convention on International Trade in Endangered Species of Wild Fauna and Flora[2].

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries[3] [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the Marine Mammals page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

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1. The Endangered Species Act (ESA) of 1973.
2. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

NAME

West Indian Manatee *Trichechus manatus*
Species profile: https://ecos.fws.gov/ecp/species/4469

IPAC USER CONTACT INFORMATION

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