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 A

Clean Water Act (CWA)

January 2026

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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 A.2 401 Water Quality Certification

Clean Water Act (CWA)

January 2026

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

December 12, 2025

David Hedeen
Manager - Wetlands Unit
Georgia Department of Natural Resources
Environmental Protection Division
Watershed Protection Branch
2 Martin Luther King Jr. Drive SE Suite 1456, East Tower
Atlanta, Georgia 30334

Dear Mr. Hedeen:

The U.S. Army Corps of Engineers, Savannah District (USACE), hereby requests a Clean Water Act 401 Water Quality Certification (CWA 401 WQC) from the Georgia Department of Natural Resources, Environmental Protection Division (GADNR EDP) for the Tybee Island Shoreline Protection Project (TISPP) at Tybee Island, Georgia. The USACE proposes to place beach-quality material from the Tybee Island Borrow Area onto the degraded shoreline of Tybee Island, Georgia using a hydraulic cutterhead dredge. The proposed locations on Tybee Island, were chosen with consideration toward recreational, environmental, and economic resources.

The proposed project includes the periodic and emergency renourishment of the federal template as currently authorized through 2036, as defined by the 13,200 linear feet of beach along Front Beach, 1,100 linear ft along the South Tip (South Tip Beach), and the 1,800 linear feet of the eastern bank of Tybee Creek to the city fishing pier (referred to as Back River Beach). Placement will occur with a hydraulic cutterhead dredge. Heavy equipment such as bulldozers will be used to shape the material to design specifications. The Front Beach design includes a berm at elevation 11.2 ft MLLW with a tolerance of +0.5 ft and a slope of 1-vertical to 25: horizontal. The design for the Back River and South Tip Beach includes a berm at elevation 11.2 ft MLLW with a tolerance of +0.5 ft and a slope of 1-vertical to 15-horizontal. Beach tilling and sand compaction testing is required upon completion of fill placement.

The USACE will comply with the National Environmental Policy Act through the development of an environmental assessment. The USACE will obtain compliance for all other applicable Federal and State laws prior to placement.

A prefiling meeting for the project was conducted on August 14, 2025. USACE hereby certifies that all information contained herein is true, accurate, and complete to

the best of my knowledge and belief. The project proponent hereby requests that the certifying authority review and take action of this Clean Water Act 401 certification request within the applicable reasonable period of time. Please find enclosed the required information for a CWA 401 WQC application. For proposed actions to be undertaken by the USACE, the agency does not issue itself a permit but includes an evaluation designed to demonstrate compliance with the 404(b)(1) Guidelines; this determination and a Tier 1 analysis is attached.

If you have any questions, please contact Dr. Kaitlyn Murphy-Wefel, Biologist, at Kaitlyn.M.Murphy-Wefel@usace.army.mil or 912-710-8885.

Respectfully,

Suzanne Hill

Suzanne Hill
Environmental Section Chief

Enclosure

1. Description of the Proposed Action

The United States Army Corps of Engineers, Savannah District (USACE) proposes to place beach-quality sand along the federal template as defined by the 13,200 linear feet of beach along Front Beach, 1,100 linear ft along the South Tip (South Tip Beach), and the 1,800 linear feet of the eastern bank of Tybee Creek to the city fishing pier (referred to as Back River Beach; Figure 1).The proposed federal action includes beach nourishments that will occur periodically or as needed under emergency conditions for the remaining duration of the Tybee Island Shoreline Protection Project (TISPP) (through 2036). Periodic nourishments would occur every 7 years, with the first anticipated in 2026-2027. Emergency nourishments would occur based on supplemental funding and authorizations provided as needed (i.e., in the event of damages incurred by a tropical storm system).

TISPP will replenish the volume of sand lost due to erosion and storm events, increase the storm protection function of the beaches, and maintain or improve resiliency of the beaches within the project limits and over the project's lifetime. USACE will utilize hydraulic cutterhead dredges for this project. USACE will place approximately 1.5 million cubic yard (cy) of dredged material from the Tybee Island Borrow Area (Figure 2) onto the degraded beach.

2. Specific Location of Any Discharge(s)

The proposed placement site is along the federal template on Tybee Island, including the Front Beach, South Beach Tip, and Back River Beach (Figure 1). Placement will occur with hydraulic cutterhead pipeline and support equipment. A submerged pipeline will extend from the borrow site to the southerly tip of Tybee Island. Shore pipe will be progressively added to perform fill placement along the federal template areas to be renourished. Temporary toe dikes will be utilized in a shore parallel direction to control the hydraulic effluent and reduce turbidity. The sand will be placed in the form of varying design templates based upon longshore volumetric fill requirements which reflect beach conditions at the time of construction. Additional beach fill will be strategically placed in areas of documented highest erosional stress such as the 2nd Street "hot spot". Heavy equipment such as bulldozers will be used to shape the material to design specifications.

The Front Beach and South Tip Beach 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 design for the Back River Beach includes a berm at elevation 11.2 ft MLLW with a tolerance of +0.5 ft and a slope 1:15 (vertical: horizontal) (Figure 4). Beach tilling and sand compaction testing is required upon completion of fill placement.

3. Maps of the Proposed Activity Site

Figure 1. Beach Renourishment Locations on Tybee Island (attached below)

Figure 2. Tybee Offshore Borrow Area (attached below)
Figure 3. Front Beach and South Tip Beach Example Cross Section (attached below)
Figure 4. Back River Beach Example Cross Section (attached below)

4. Description of Current Site Conditions

The shoreline of Tybee Island experiences significant erosional loss along the Oceanfront area and the Back River. Historic erosion rates across the beach, in areas known as hot spots, have generated increased coastal storm risks. Recent surveys indicate that the shoreline loses approximately an average of 178,432 cy of material annually. These hot spots create areas that are vulnerable to storm surge and wave attack. This can cause damage to infrastructure and existing dunes, which would lead to breaches in the federal template.

5. Proposed Construction Dates

- Start of Construction: Late 2026
- Completion Date: Early 2027
- Approximate Date of Discharge: Discharge of fill material onto the placement site would approximately begin in late 2026, as soon as issuance of required permits and dredge timelines. Estimated construction duration is approximately 65 days.

6. Other Agency Authorizations Required

USACE will comply with the National Environmental Policy Act through the completion of an Environmental Assessment (EA) for the proposed action. The public comment period for the EA will be January 9 through January 23, 2026. USACE will obtain concurrence for CZMA from the Georgia Department of Natural Resources Coastal Resources Department. USACE is also consulting under Section 7 of the Endangered Species Act (ESA) with the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) Protected Resources Division (PRD) for ESA-listed species within the project area. Finally, USACE is consulting with NMFS Habitat Conservation Division (HCD) for essential fish habitat under the Magnuson-Stevens Fishery and Conservation Act in the project area.

7. Pre-Filing Meeting Request Documentation

USACE conducted a prefiling meeting for the project on August 14, 2025.

Figure 1. Beach Renourishment Locations on Tybee Island

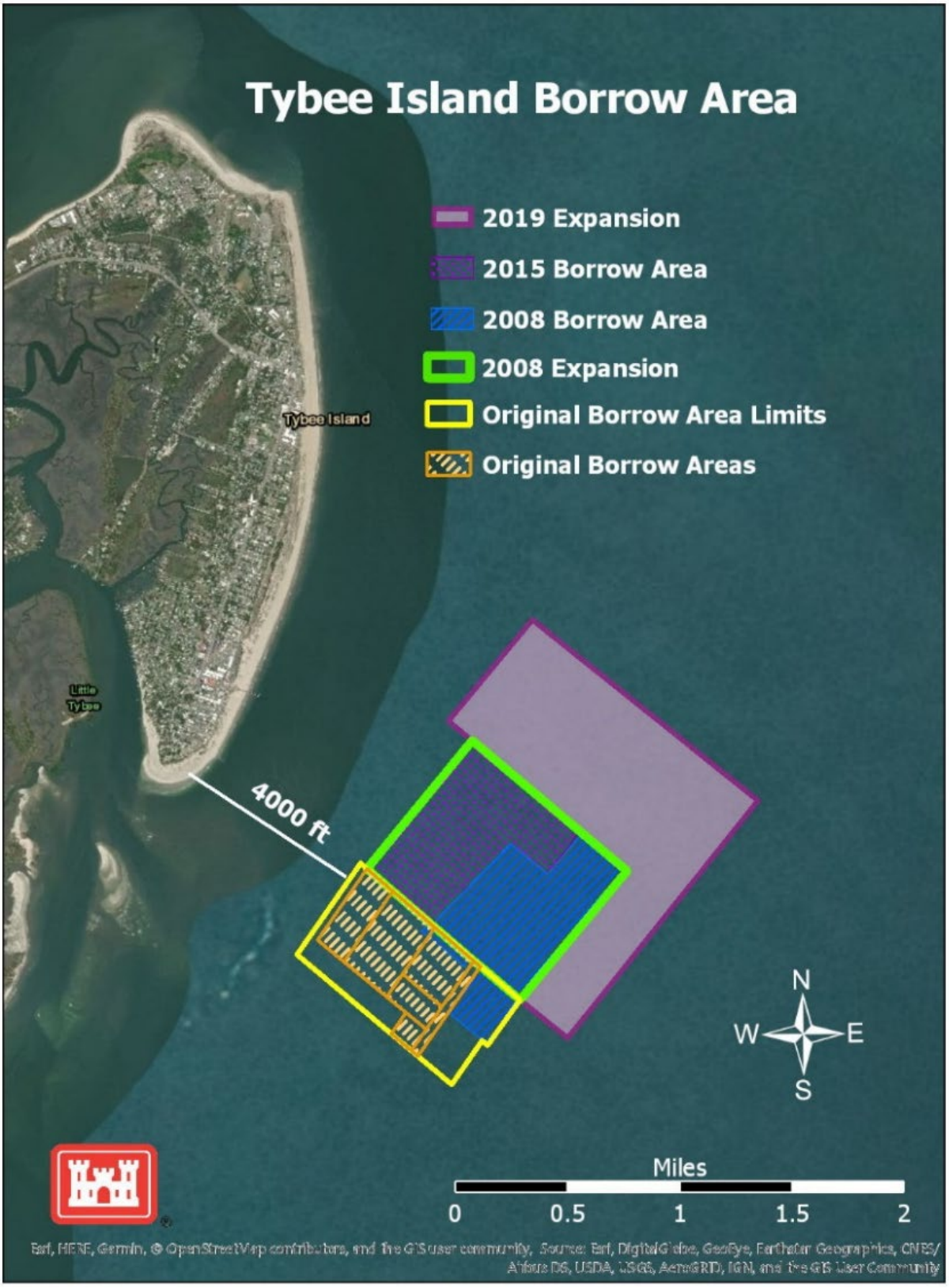

Figure 2. Tybee Island Offshore Borrow Area

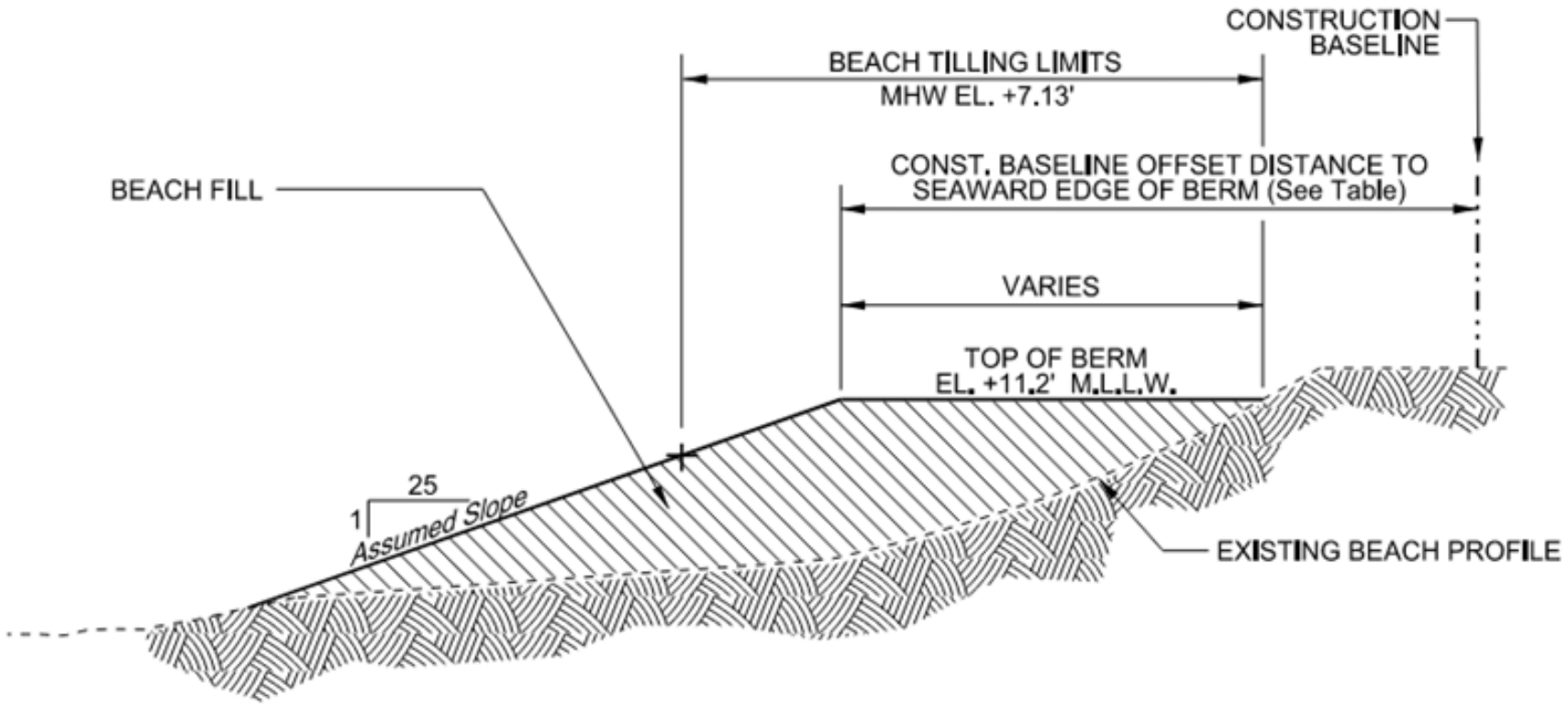

Figure 3. Front Beach and South Tip Beach Example Cross Section

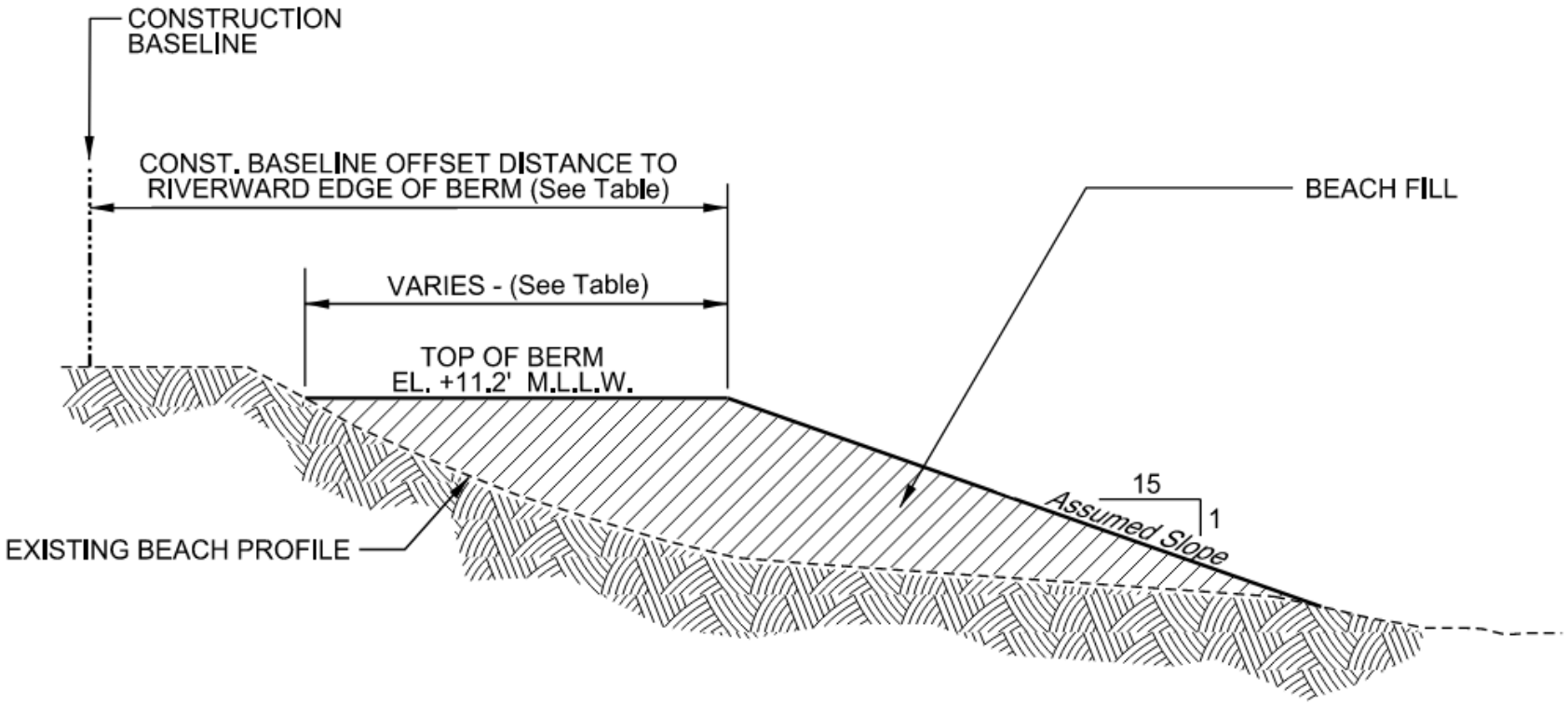

Figure 4. Back River Beach Example Cross Section

ENVIRONMENTAL PROTECTION DIVISION
PUBLIC NOTICE
WATERSHED PROTECTION BRANCH

December 18, 2025 Notice Issue Date	Chatham County City / County
January 20, 2026 Notice Close Date	TISPP-2026 Control Number

Sec. 401 Water Quality Certification
Tybee Island Shoreline Protection Project – US Army Corps of Engineers Civil Works Project

This notice is issued to inform the public that a request has been received for water quality certification (WQC) in accordance with Section 401 of the Clean Water Act. The public is invited to comment during this 30-day period on the proposed activity. Information pertaining to the project is attached to this notice. Since the request is specific to 401 WQC, only comments pertaining to water quality are considered under the certification review process. Comments may be submitted via e-mail to: EPD.WQC@dnr.ga.gov. Comments may also be provided in writing to: Program Manager, Wetlands Unit, 2 Martin Luther King, Jr. Dr. SE, Suite 1052 East, Atlanta, GA 30334. Include the words "Water Quality Certification Comment" and the Control Number above in the e-mail subject line or on the top of the first page of written comments to ensure that your comments will be forwarded to the appropriate staff. For additional information, contact Dewey Richardson at dewey.richardson@dnr.ga.gov.

Type of Permit Application: 401 Water Quality Certification

Applicable Law: Federal Clean Water Act, 33 U.S.C. § 1341

Applicable Rules: 40 CFR part 121

Description and Location of Proposed Activity:

U.S. Army Corps of Engineers, Savannah District, is seeking a Section 401 Water Quality Certification for the periodic and emergency renourishment of the federal template as currently authorized through 2036, as defined by the 13,200 linear feet of beach along Front Beach, 1,100 linear ft along the South Tip (South Tip Beach), and the 1,800 linear feet of the eastern bank of Tybee Creek to the city fishing pier (referred to as Back River Beach). Periodic nourishments would occur approximately every 7 years or as needed based on rate of erosion, with the first anticipated in 2026-2027. Emergency nourishments would occur based on supplemental funding and authorizations provided as needed (i.e., in the event of damages incurred by a tropical storm system). Placement will occur with a hydraulic cutterhead dredge. Heavy equipment such as bulldozers will be used to shape the material to design specifications. The Front Beach design includes a berm at elevation 11.2 ft MLLW with a tolerance of +0.5 ft and a slope of 1-vertical to 25: horizontal. The design for the Back River and South Tip Beach includes a berm at elevation 11.2 ft MLLW with a tolerance of +0.5 ft and a slope of 1-vertical to 15-horizontal. Beach tilling and sand compaction testing is required upon completion of fill placement.

Name and Address of Permit Applicant: Ms. Suzanne Hill, Environmental Section Chief
U.S. Army Corps of Engineers Savannah District
Planning Branch
100 West Oglethorpe Ave.
Savannah, GA 31401

1. Description of the Proposed Action

The United States Army Corps of Engineers, Savannah District (USACE) proposes to place beach-quality sand along the federal template as defined by the 13,200 linear feet of beach along Front Beach, 1,100 linear ft along the South Tip (South Tip Beach), and the 1,800 linear feet of the eastern bank of Tybee Creek to the city fishing pier (referred to as Back River Beach).The proposed federal action includes beach nourishments that will occur periodically or as needed under emergency conditions for the remaining duration of the Tybee Island Shoreline Protection Project (TISPP) (through 2036). Periodic nourishments would occur approximately every 7 years or as needed based on rate of erosion, with the first anticipated in 2026-2027. Emergency nourishments would occur based on supplemental funding and authorizations provided as needed (i.e., in the event of damages incurred by a tropical storm system).

The original Federal TISPP was authorized by Senate and House Resolutions dated June 22 and June 23, 1971, respectively, pursuant to Section 201 of the Flood Control Act of 1965 (Public Law 89-298), as presented in House Document No. 92-105, for a life of 10 years. The authority for Federal participation in periodic renourishment of beach projects was increased from 10 years to 15 years by Section 156 Water Resources Development Act (WRDA) 1976 (P.L. 94-587, as amended (42 U.S.C. 1962d-5f)). Since these initial authorizations, there were several revisions to the WRDA with the most recent occurring in WRDA 2022.

USACE has previously placed material within the federal template with the first renourishment occurring in 1975, the latest renourishment was an emergency renourishment occurring in 2020 as a result of Hurricanes Harvey, Irma, and Maria. USACE recently received Congressional authorization to extend the project through 2036, the initial placement under the reauthorization is expected to occur in 2026-2027.

TISPP will replenish the volume of sand lost due to erosion and storm events, increase the storm protection function of the beaches, and maintain or improve resiliency of the beaches within the project limits and over the project’s lifetime. USACE will utilize hydraulic cutterhead dredges for this project. USACE will place approximately 1.5 million cubic yard (cy) of dredged material from the 2019 Expansion Area in the Tybee Island Borrow Area onto the degraded beach.

2. Specific Location of Any Discharge(s)

The proposed placement site is along the federal template on Tybee Island, including the Front Beach, South Beach Tip, and Back River Beach. Placement will occur with hydraulic cutterhead pipeline and support equipment. A submerged pipeline will extend from the borrow site to the southerly tip of Tybee Island. Shore pipe will be progressively added to perform fill placement along the federal template areas to be renourished. Temporary toe dikes will be utilized in a shore parallel direction to control the hydraulic effluent and reduce turbidity. The sand will be placed in the form of varying

design templates based upon longshore volumetric fill requirements which reflect beach conditions at the time of construction. Additional beach fill will be strategically placed in areas of documented highest erosional stress such as the 2nd Street “hot spot”. Heavy equipment such as bulldozers will be used to shape the material to design specifications.

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3. Map or Diagram of the Proposed Activity Site

Figure 1. Beach Nourishment Locations on Tybee Island
Figure 2. Tybee Offshore Borrow Area. The purple 2019 Expansion Area is the source of material for this effort.

4. Description of Current Site Conditions

The shoreline of Tybee Island experiences significant erosional loss along the Oceanfront area and the Back River. The risks from coastal storms have increased in the area because of the historic erosion rates across the beach, in areas known as hot spots, have decreased available protection. Recent surveys indicate that the shoreline loses approximately an average of 178,432 cy of material annually. These hot spots create areas that are vulnerable to storm surge and wave attack. This can cause damage to infrastructure and existing dunes, which would lead to breaches in the federal template.

5. Proposed Construction Dates

- Start of Construction: Late 2026
- Completion Date: Early 2027
- Approximate Date of Discharge: Discharge of fill material onto the placement site would approximately begin in late 2026, as soon as issuance of required permits and dredge timelines. Estimated construction duration is approximately 65 days.

6. Other Agency Authorizations Required

The USACE will comply with the National Environmental Policy Act through the completion of an Environmental Assessment (EA) for the proposed action. The public comment period for the EA will be January 10 through January 24, 2026. The USACE will obtain concurrence for CZMA from the Georgia Department of Natural Resources Coastal Resources Department. USACE is also consulting under Section 7 of the Endangered Species Act (ESA) with the United States Fish and Wildlife Service (USFWS) for ESA-listed species within the project area. The project is covered by the

2020 SARBO, and therefore section 7 consultation with NMFS is completed. Finally, the USACE is consulting with NMFS Habitat Conservation Division (HCD) for essential fish habitat under the Magnuson-Stevens Fishery and Conservation Act in the project area.

7. Pre-Filing Meeting Request Documentation

USACE conducted a prefiling meeting for the project on August 14, 2025.

Figure 1. Beach Nourishment Locations on Tybee Island

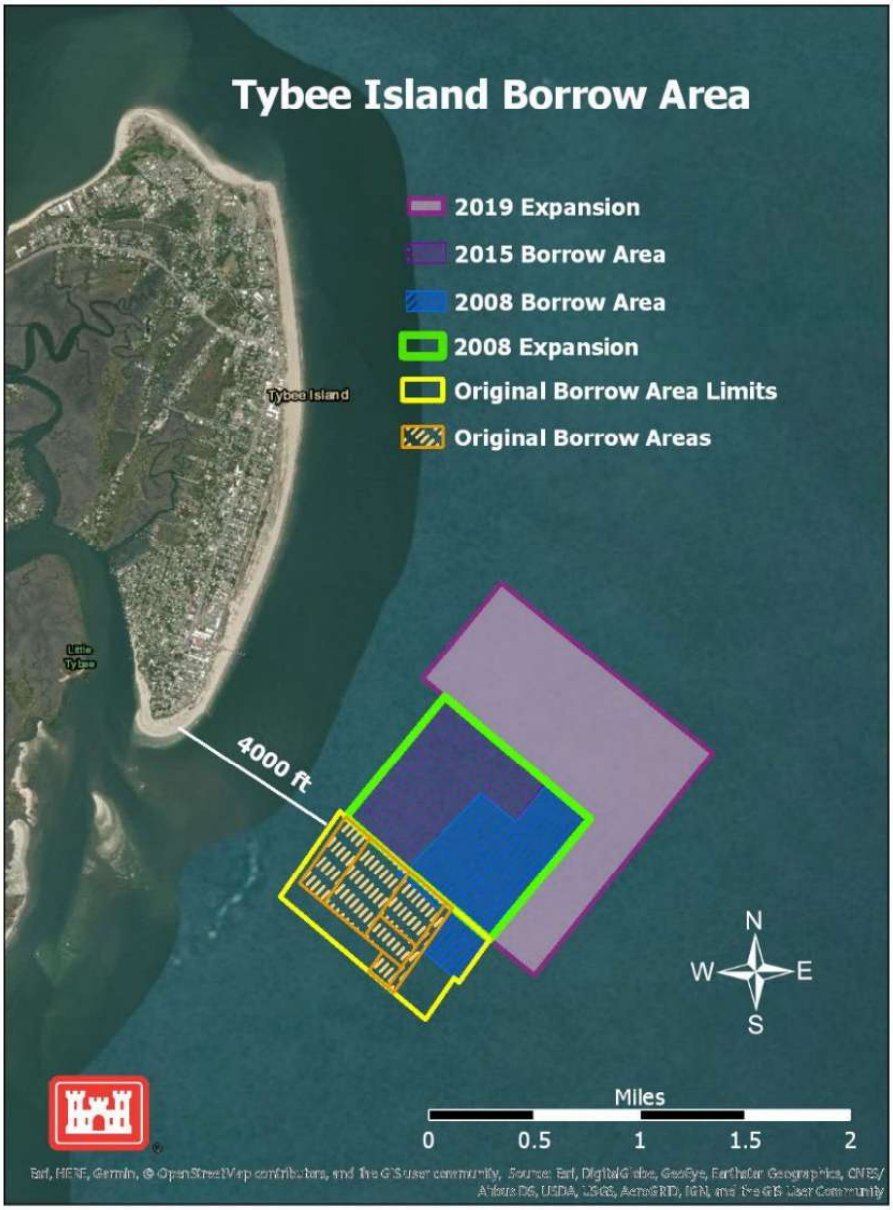

Figure 2. Tybee Island Offshore Borrow Area. The purple 2019 Expansion Area is the source of material for this effort.

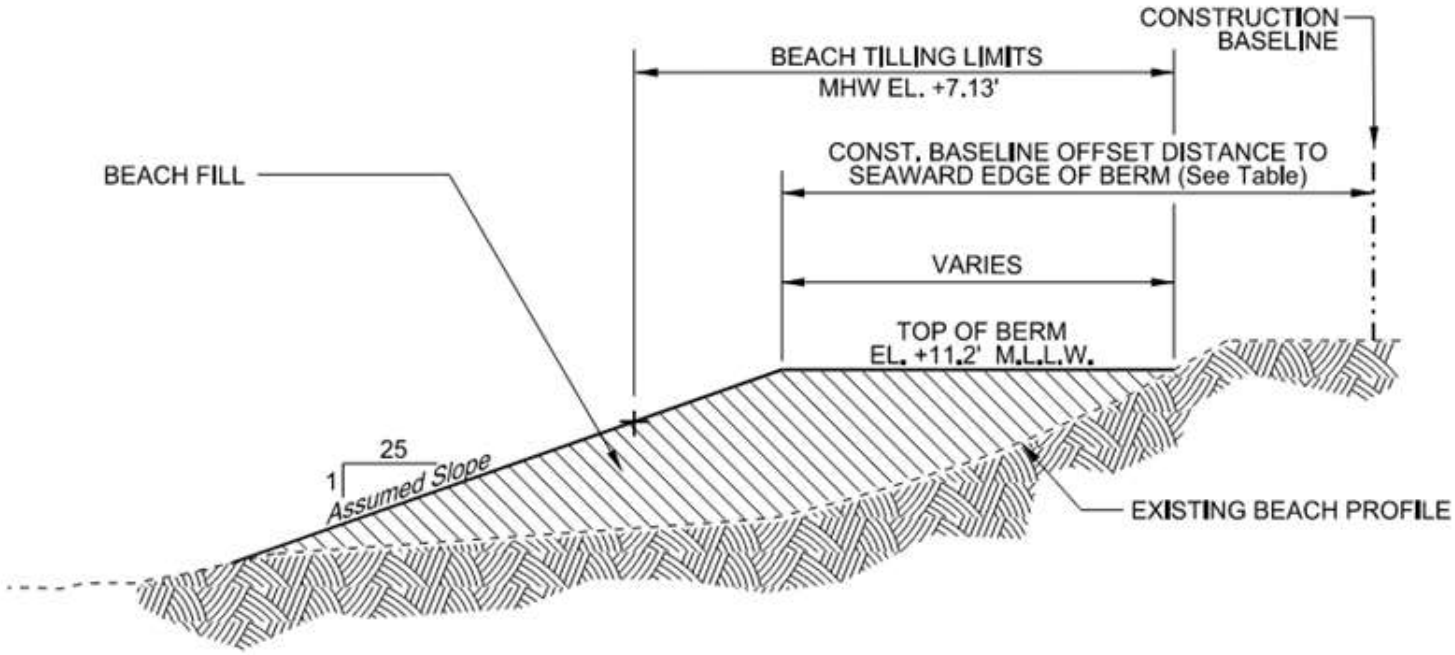

Figure 3. Front Beach and South Tip Beach Example Cross Section

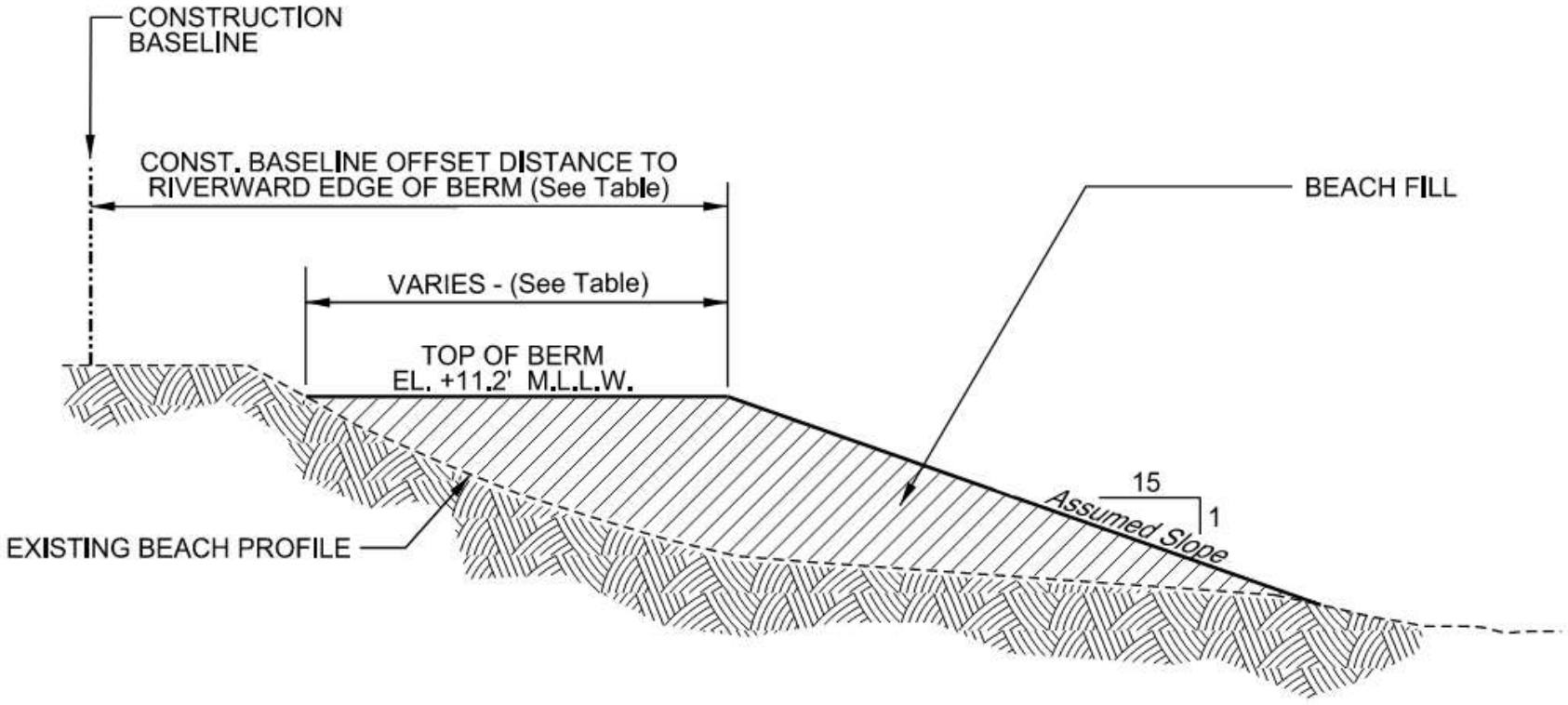

Figure 4. Back River Beach Example Cross Section

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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 A.3 404(b)1 Evaluation

Clean Water Act (CWA)

January 2026

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1. Introduction

The following evaluation is prepared in accordance with Section 404(b)(1) of the Clean Water Act of 1977 to evaluate the environmental effects of the beach nourishment activities along the degraded shoreline of Tybee Island, as part of the Tybee Island Shoreline Protection Project (TISPP). Specific portions of the regulations (Title 40, Part 230 of the Code of Federal Regulations) are cited, and an explanation of the regulation is given as it pertains to the project.

2. Regulatory Framework of Section 404(b)(1) Evaluation

Under the Clean Water Act (CWA), pollutants are prohibited from being discharged into any waters of the U.S. except in compliance with several statutory provisions (33 United States Code [U.S.C.] § 1311; see 33 U.S.C.§ 136). Under Section 404 of the CWA, United States Army Corps of Engineers (USACE) has the authority to permit discharges of dredged and fill materials into waters of the U.S. (33 U.S.C. § 1342, 1344; 33, Code of Federal Regulation [C.F.R.] §§ 322.5, 323.6). A Section 404 permit is required prior to discharging dredged or fill material into waters of the United States.

Section 404(b)(1) provides that USACE must issue such permits through the application of guidelines developed by the United States Environmental Protection Agency (USEPA) (33 C.F.R. §§ 320.2(f), 320.4(a)(1), 320.4(b)(4), 323.6(a)), which were issued in 1980 (40 C.F.R. Part 230). These guidelines, referred to as Section 404(b)(1) Guidelines, establish various criteria to be considered by USACE in evaluating permit applications, one of which calls for evaluation of alternatives to the proposed discharge. For proposed actions to be undertaken by USACE, the agency does not issue itself a permit but includes an evaluation designed to demonstrate compliance with the 404(b)(1) Guidelines.

To satisfy the requirements of CWA 404(b)(1), this evaluation has been prepared for the subject project.

3. Project Description

3.1. Location

3.1.1. Location Description

Tybee Island is a barrier island located on the coast of Georgia, approximately 18 miles east of the city of Savannah and directly south of the Savannah River. It is bounded on the north by the Savannah Harbor, to the east by the Atlantic Ocean, and on the south and west by Tybee Creek and a vast tidal marsh system. The City of Tybee occupies the major portion of the land mass above high tide. The City of Tybee is the only population center on the island with the major portion of its economy oriented toward tourism. The federal footprint for the project is defined by defined by 13,200 linear feet of beach along Front Beach, 1,100 linear ft along the South Tip (South Tip Beach), and

the 1,800 linear feet of the eastern bank of Tybee Creek to the city fishing pier (referred to as Back River Beach).

3.1.2. Project Vicinity Map

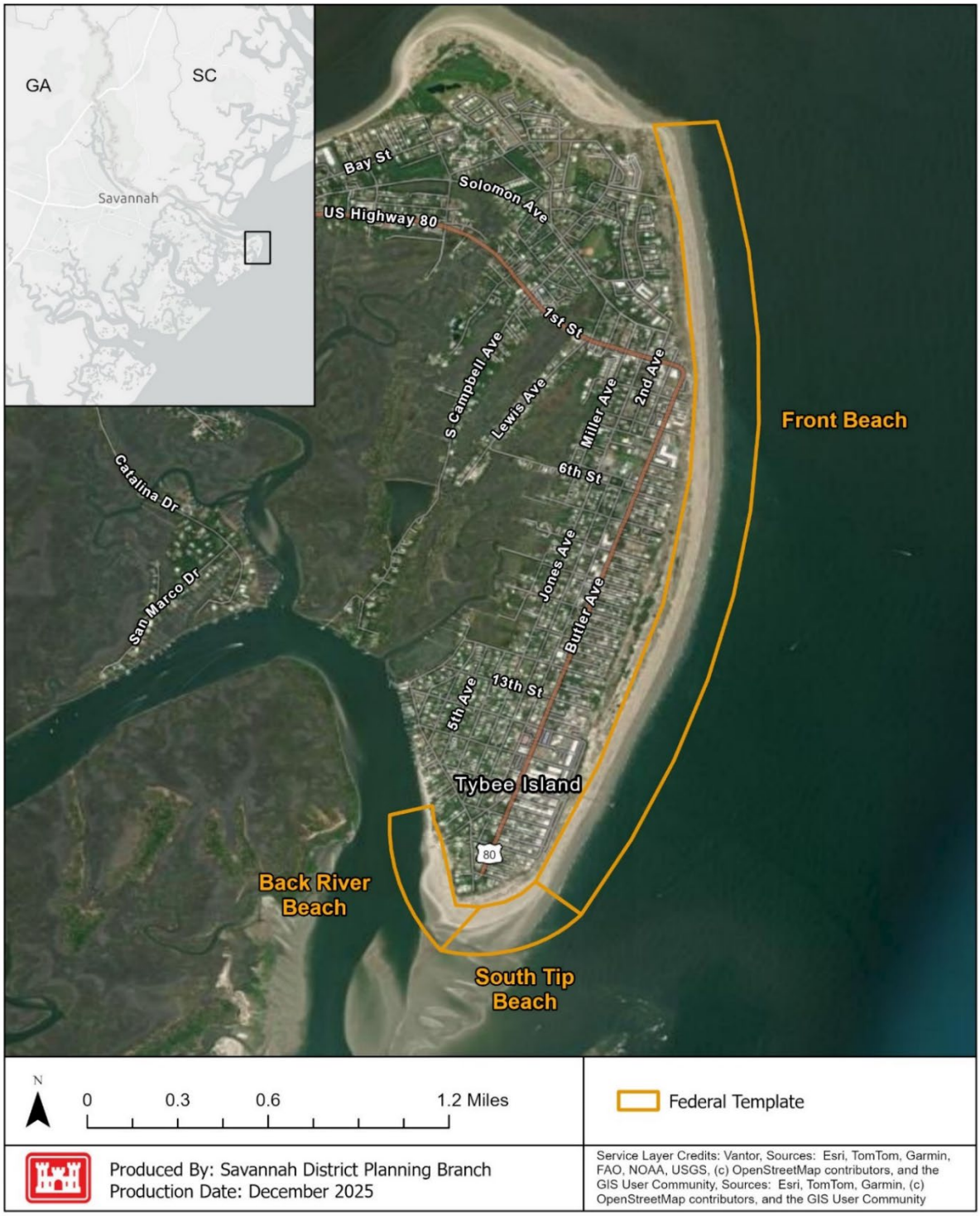

Figure 1. Beach Renourishment Locations on Tybee Island

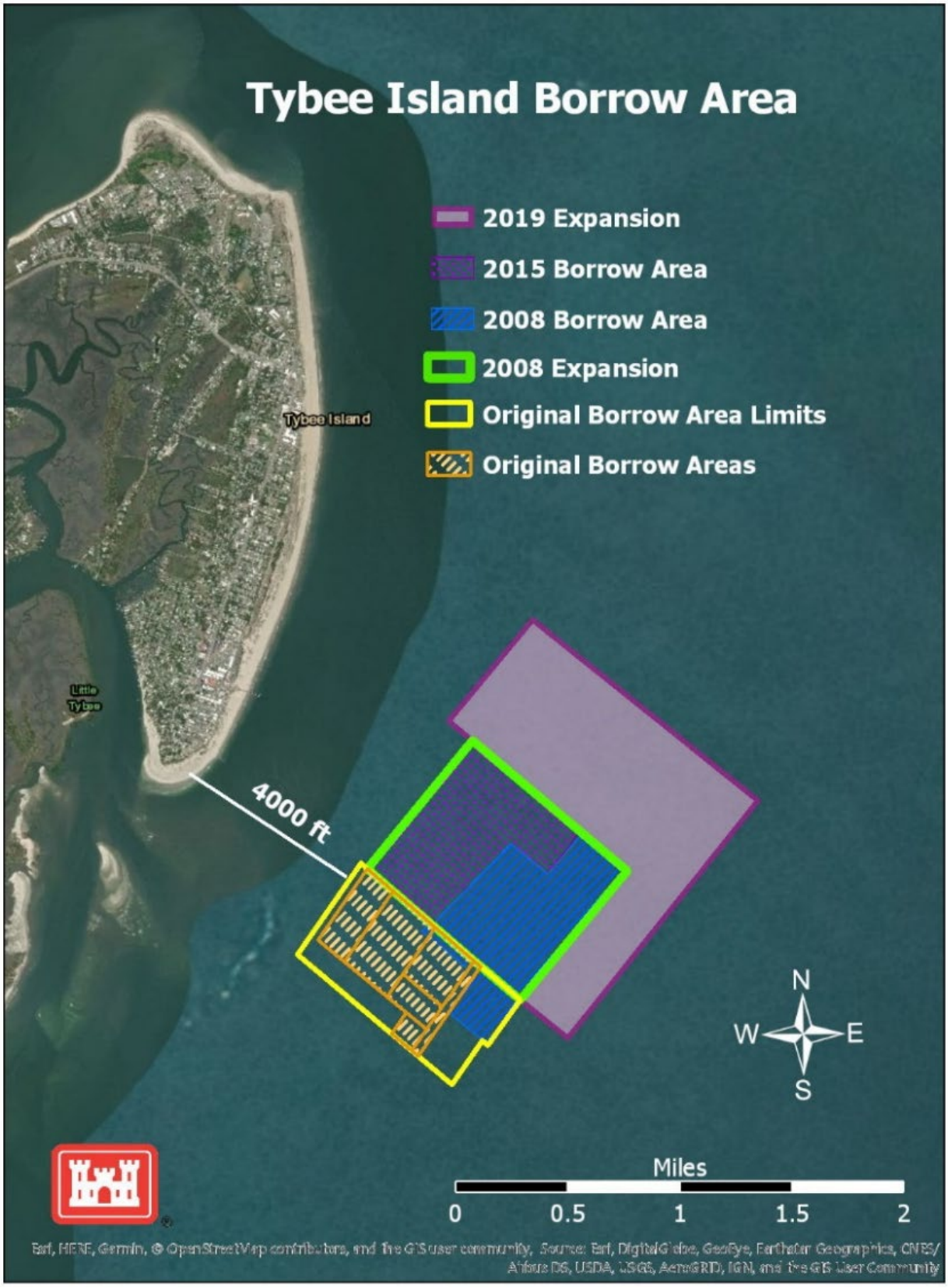

Figure 2. Tybee Island Borrow Area History

3.2. Authority and Purpose

3.2.1. Overall Project Purpose

The purpose of the proposed project is to provide beach nourishment to Tybee Island to replenish the volume of sand lost due to erosion and storm events, increase the storm protection function of the beaches, and maintain or improve resiliency of the beaches within the project limits and over the project's lifetime.

3.2.2. Proposed Federal Action

The proposed federal action is to directly place approximately 1.5 million cubic yards (cy) of primarily sandy material from the Tybee Island Borrow Area onto the degraded shoreline on the eastern side of Tybee Island. The purpose of the proposed action is to replenish the volume of sand lost due to erosion and storm events, increase the storm protection functions of the beaches, and to maintain or improve resiliency of the beaches within the project limits and over the project's lifetime. Placement of sediment in this area will provide valuable protection and attenuate wave energy along the shoreline. Table 1 provides the location, size of the area, reach source, and the construction method for the site.

Initial placement is expected to occur in late 2026- early 2027. This site will not receive any hardened structure after sediment placement completion as part of this effort; therefore, material is expected to migrate within the system over time from natural forces. The proposed locations were chosen with considerations toward recreational, environmental, and economic resources.

Beach nourishments within the Federal template will occur periodically (every 7 years) or as needed under emergency conditions (i.e., post-tropical system) for the remaining duration of the TISPP (through 2036). Emergency nourishments will occur as supplemental funding and authorizations are provided. Impacts to ESA-listed species and critical habitat are evaluated below for beach nourishment.

Table 1. Proposed Action Locations.

Name	Sand Source	Placement Location	Dimensions/Size (area)	Construction Method
Tybee Island Beach Nourishment	**Tybee Island Borrow Area** 2.1 km offshore of Tybee Island and 4 km south of the Savannah River navigation channel	**Beach Nourishment:** Front Beach, South Tip Beach, Back River Beach	**First Nourishment:** Upland: 85 acres Intertidal: 60 acres Subtidal: 80 acres	Placement will occur with a cutterhead dredge, heavy equipment such as bulldozers will be used to shape material to design specifications

3.2.3. Authority

The original Federal TISPP was authorized by Senate and House Resolutions dated June 22 and June 23, 1971, respectively, pursuant to Section 201 of the Flood Control Act of 1965 (Public Law 89-298), as presented in House Document No. 92-105, for a life of 10 years. The authority for Federal participation in periodic renourishment of beach projects was increased from 10 years to 15 years by Section 156 Water Resources Development Act (WRDA) 1976 (P.L. 94-587, as amended (42 U.S.C. 1962d-5f)). Since these initial authorizations, there were several revisions to the WRDA with the most recent occurring in WRDA 2022.

Section 8129(a)(2)(B) of WRDA 2022, extends Federal participation in the TISPP by 12 years. The expected expiration of the TISPP was September of 2024; however, through this Act, Federal participation was extended to 2036.

4. Project Alternatives

4.1. No Action Alternative

The No Action Alternative would be to not renourish the Federal template. This alternative would result in continued erosion to the Federal template, including potential loss of property and structures. Based on survey data collected from July 2020 to April 2025, there is an annualized loss of 178,432 cy from the Federal template. The data from July 2020 to April 2025 indicate an increase in shoreline loss (Table *2*). Most erosion occurs at the Second Street “hot spot” with a lesser degree of erosion in the vicinity of the Tybrisa Pier. With no renourishment, the beach would continue to erode, with a concomitant loss in storm damage protection and recreational benefits. In addition, if erosion were to be allowed to continue unimpeded, dune damage would be expected to occur at an accelerated rate.

Table 2. Shoreline erosion rate **calculated from USACE surveys from 2020 – 2025.**

Year	Time between Surveys [Months (Yrs)]	Annualized Erosion (CY)
July 2020 to June 2022	23 (1.96)	125,500
June 2022 to June 2023	12 (1.00)	220,500
June 2023 to March 2024	9 (0.75)	149,300
***March 2024 to September 2024 (Post-Helene)**	*8 (0.67)	*56,716
***September 2024 to April 2025**	*6 (0.50)	
March 2024 to April 2025	14 (1.17)	171,450
	Average	**178,432**

* The September 2024 (Post-Helene) survey includes Sta 0+00 to 120+00. These erosion rates were not included in the average erosion rate calculation because surveys only covered about half the beach. The total loss for 2024 was calculated using the April 2025 survey.

4.2. Action Alternative

The proposed action alternative is to directly place approximately 1.5 million cubic yards (cy) of primarily sandy material from the Tybee Island Borrow Area onto the degraded shoreline on the eastern side of Tybee Island. This action will occur periodically (approximately every 7 years) or as a result of emergency conditions (post-storm events, provided there is authorization and funding. The purpose of the proposed action is to replenish the volume of sand lost due to erosion and storm events, increase the storm protection functions of the beaches, and to maintain or improve resiliency of the beaches within the project limits and over the project's lifetime. Placement of sediment in this area will provide valuable protection and attenuate wave energy along the shoreline.

4.2.1.1 General Description and Quantities of the Placement Material

1) *General Characteristics of Material*

The source material that would be placed in the federal template along Tybee's beaches would be dredged from the Tybee Island Borrow Area. Sediment sampling and analysis was conducted in 2018 and found that the sediment consists of light gray (10YR7/1) to light brownish gray (10YR6/2), well graded (poorly sorted), fine sized sand with a shell content of approximately 8%. The average percentage of fines (sediment passing the No. 200 sieve) was 3.27%., which is well within the state requirement of less than 10%. In addition, the shell content was within the state requirement of less than 15% of total volume. No contaminants were found during the investigation that exceed sediment ecological screening values set forth in the USEPA Region 4 Ecological Risk Assessment Supplemental Guidance (USEPA, 2015).

2) *Quantity of Material*

Approximately 1.5 million cy of material will be used for initial placement at the site. It is expected that some material will be lost during transport and placement activities. Subsequent placement volumes using material in the future will be dependent on material loss and suitable material available for placement from the borrow area.

3) *Source of Material*

The material used for initial placement will be sourced from the Tybee Island Borrow Area. Subsequent placements will utilize material from the borrow area and will be dependent erosional rates and need.

4) *Impacts to Aquatic Environment*

Direct placement of dredged material onto the proposed beach nourishment site will temporarily cover soft substrate/intertidal non-vegetated flats, burying some organisms while others more motile will likely avoid and survive the dispersal event. These impacts are expected to be minor in nature and are expected to quickly dissipate once

construction is completed. It is expected that during construction activities mobile aquatic species would move out of the way and find other suitable areas until construction activities are completed. Due to abundant adjacent benthic habitat, it is expected that the site would recolonize rapidly after initial placement and future maintenance placements.

5. Evaluation for compliance with the 404(b)(1) guidelines

5.1. Restrictions on Discharge - (Section 230.10)

"(a) ***except as provided under Section 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practical alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences."***

The 404(b)(1) guidelines consider an alternative practicable “if it’s available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.” The following alternatives were thoroughly reviewed in the TISPP Periodic and Emergency Nourishments Draft Environmental Assessment, which includes the beach nourishment site. The Action Alternative is the only other action being considered apart from the No Action Alternative. The Proposed Action Alternative is expected to meet the goals of the proposed placement due to protecting the eroding shoreline. The Proposed Action Alternative was determined feasible in respect to cost and constructability.

"(b) ***Discharge of dredged material shall not be permitted if it;***

"(1) ***Causes or contributes, after consideration of disposal dilution and dispersions, to violations of any applicable state water quality standard;"***

"(2) ***Violates any applicable toxic effluent standard or prohibition under Section 307 of the Clean Water Act."***

Beach nourishment activities will result in the temporary discharge of dredged material into the Atlantic Ocean and Tybee Creek. Placement and construction of the initial beach nourishment is expected to have a duration of 65 days. The increase in turbidity as a result of the placement actions will be temporary in nature and is expected to dissipate quickly.

In 2018, as part of the 2019 Hurricane Harvey, Irma, and Maria Emergency Supplemental Renourishment EA and FONSI, USACE characterized sediment from the proposed borrow area using hydrographic survey, vibracore borings, and materials testing. The sampling areas are shown in Figure 3 and the physical and metal testing results are shown in tables 3 and 4, respectively.

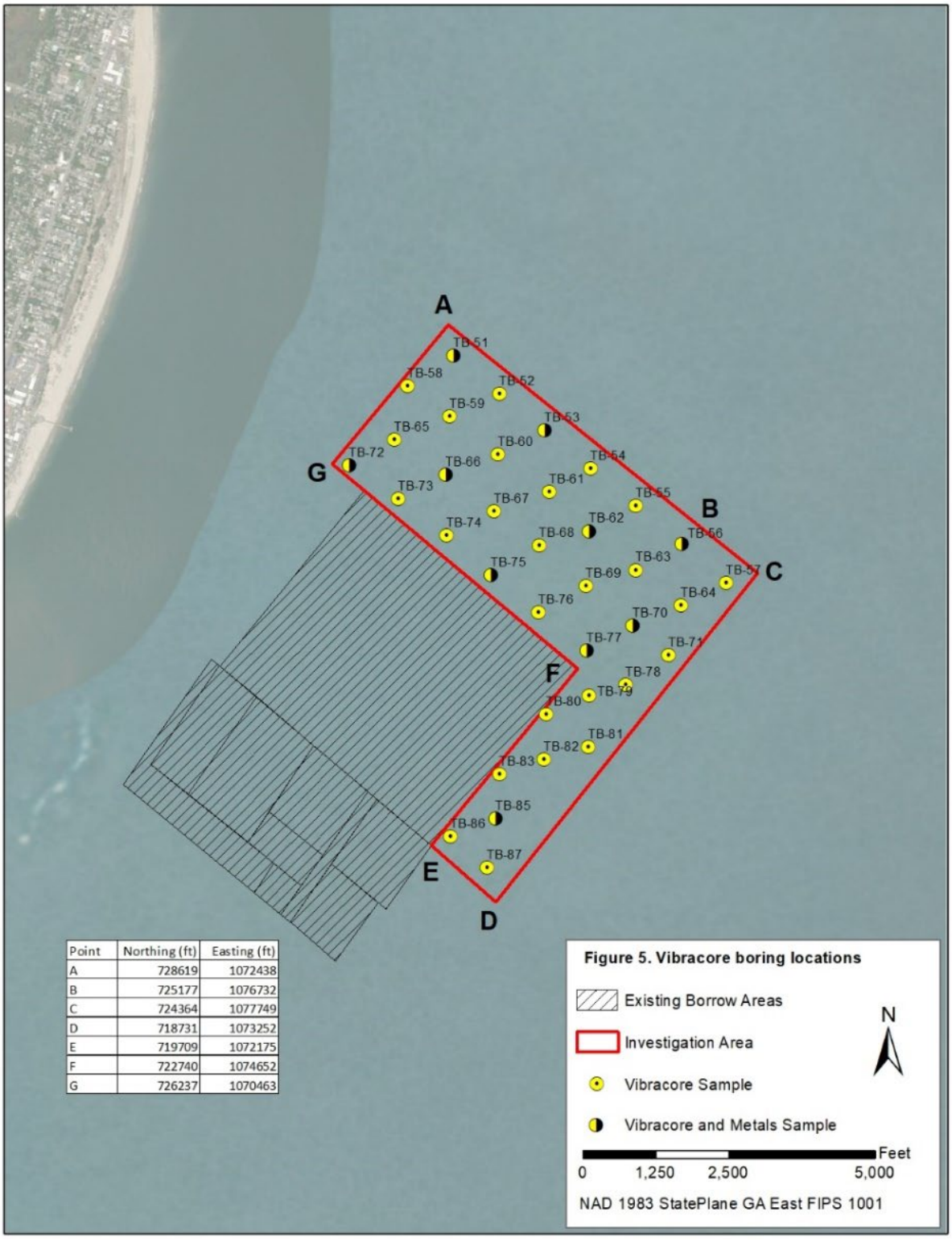

Figure 3. Vibracore boring locations.

Table 3. Sediment characteristics of expanded borrow area compared with native beach material.

Area	Median (phi)	Median (mm)	Percent Fines	Percent Shell	Mean (phi)	Mean (mm)	Sorting Coefficient (phi)	Overfill Factor	
								SPM[a]	Dean (1974)[b]
Area 18A	2.28	0.21	3.70[c]	8.23	2.05	0.24	1.19	1.40	1.20
Area 18B	2.31	0.20	2.51[c]	8.09	2.14	0.23	1.05	1.60	1.30
Entire Study Area	2.29	0.20	3.27[c]	8.18	2.09	0.24	1.13	1.45	1.25
2018 Native Beach Material	1.83	0.28	0.49[c]	4.54	1.75	0.30	0.87	--	--
2008 Borrow Area Material	2.13	0.23	0.23[d]	9.0	1.71	0.31	1.39	1.14	1.06
2007 Native Beach Material	2.02	0.25	0.05[d]	12.6	1.53	0.35	1.31	--	--

[a] Overfill factor was calculated according to the method described in the Short Protection Manual and USACE (2008)

[b] Overfill factor was calculated according to the method described in Dean (1974)

[c] Percent passing the #200 sieve

[d] Percent passing the #230 sieve

Table 4. Summary of results of metals analysis.

Sample	Units	Arsenic	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
TB-51	mg/kg	1.2 J	*0.11 U*	4.7	1.8	*0.0094 U*	*1.0 U*	0.064 U
TB-53	mg/kg	1.4 J	*0.10 U*	3.4	0.97 J	*0.0097 U*	*1.0 U*	0.063 U
TB-56	mg/kg	2.6	*0.11 U*	2.3	0.99 J	*0.0094 U*	1.2 J	0.064 U
TB-62	mg/kg	1.6 J	*0.10 U*	3.3	1.4	*0.0082 U*	*1.0 U*	0.062 U
TB-66	mg/kg	1.9 J	*0.10 U*	3.9	1.5	*0.0084 U*	*1.0 U*	0.062 U
TB-70	mg/kg	1.2 J	*0.10 U*	4.8	1.8	*0.0080 U*	*1.0 U*	0.063 U
TB-72	mg/kg	4.4	*0.10 U*	2.9	1.3	*0.0091 U*	*0.99 U*	0.061 U
TB-75	mg/kg	*0.88 U*	*0.11 U*	3.5	1.2	*0.010 U*	*1.1 U*	0.066 U
TB-77	mg/kg	3.1	*0.11 U*	2.6	1.2	*0.0098 U*	*1.1 U*	0.068 U
TB-85	mg/kg	2.1	*0.10 U*	3.4	0.98 J	*0.0094 U*	*0.99 U*	0.061 U
Maximum Value	mg/kg	4.4	*0.11 U*	4.8	1.8	*0.010 U*	1.2 J	0.068 U
Screening Level[a]	mg/kg	7.24	0.68	52.3	30.2	0.13	NL	0.73

[a] Screening level for metals based on the Georgia Ecological Screening Value for Marine/Estuarine Sediment (USEPA, 2015).

NL – Not listed

U – The analyte was not detected at the method limit of detection

J – The analyte was positively identified; the quantitation is an estimation

In general, the sediment consists of light gray (10YR7/1) to light brownish gray (10YR6/2), well graded (poorly sorted), fine sized sand with a shell content of approximately 8%. The average percentage of fines (sediment passing the No. 200 sieve) was 3.27%, which is well within the state requirement of less than 10%. In addition, the shell content was within the state requirement of less than 15% of total volume. A portion of the moist samples tested were outside of the desired Munsell color range of 10YR6.5/1 to 10YR7/1, however, once the sand is placed on the beach, the color will lighten as the sediment is dried by the sun.

Sediment from the proposed borrow area was tested for heavy metals, consistent with previous borrow area investigations. In November 2018, 10 sediment samples were collected according to USEPA Region 4 guidance (USEPA, 2014) from selected vibracore borings at a depth above -16 ft MLLW (Figure 3). All samples were analyzed for heavy metals using USEPA Method 6010D by a National Laboratory Accreditation Program (NELAP) certified laboratory (Test America in Savannah, GA). Previous sediment testing at adjacent borrow area sites have revealed no issues of concern. Similarly, no contaminants were found during the current investigation that exceed sediment ecological screening values set forth in the USEPA Region 4 Ecological Risk Assessment Supplemental Guidance (USEPA, 2015).

It was found in the 2018 testing effort that previous renourishment projects have used similarly compatible material from nearby borrow areas with satisfactory results and it is expected that material from the expanded borrow area will perform similarly well.

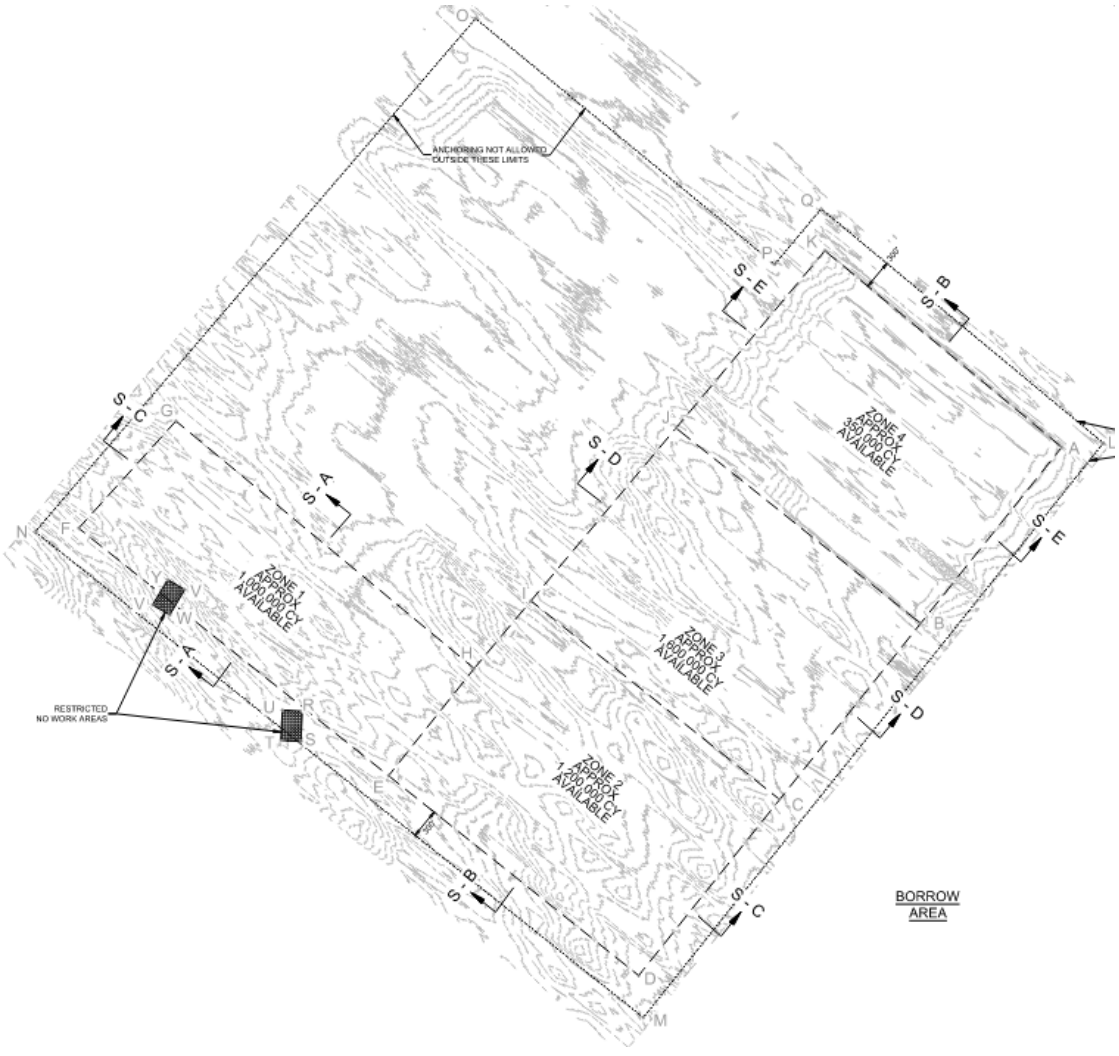

Figure 4. 2018 expanded Borrow Area with volumes from 2025 bathymetry.

In October 2025, bottom sediment grab samples were collected and analyzed of Zone 4 of this area. In the project delivery team meetings, there were concerns about silt filling in the dredged areas of Zone 4, making this area less usable. Grab samples were proposed in Zone 4 to confirm the quality of material in this area. Grab sample locations were chosen based on the division of the borrow area into zones and avoidance of the cultural anomaly identified. Laboratory tests to include gradation, visual classification, and Munsell color were performed on the samples. Laboratory analysis confirmed that Zone 4 of the borrow area mostly consisted of poorly graded sands (SP) with some silt. In comparison to the native beach samples, this zone is siltier, in some areas characterizing of poorly graded silty sand (SP-SM). Because of these areas of greater silt content, it is recommended that the contractor does not use Zone 4 for this contract. The three remaining zones have approximately 0.7, 1, and 1.7 MCY remaining. This borrow area will be used in this renourishment. The assumption is that the Contractor will use Zone 3, because it is the next closest borrow area to the beach (compared to Zone 4).

The results of the grain size analysis for Zone 4 of the borrow area are summarized below and in table 5.

- GS-1: Poorly Graded Sand (SP), with a trace of gravel size shell fragments.
- GS-2: Poorly Graded Silty Sand (SP-SM).
- GS-3: Poorly Graded Sand (SP).
- GS-4: Poorly Graded Sand (SP), with a trace of gravel size shell fragments.
- GS-5: Poorly Graded Silty Sand (SP-SM).

Table 5. Zone 4 Grab samples Mean Grain Size.

Sample No.	Mean Grain Size (mm)
GS-1	0.55
GS-2	0.12
GS-3	0.46
GS-4	1.17
GS-5	0.13

Additionally, in August 2025, 14 samples of the native beach sediment were collected from the same locations used during previous nourishments in 1998, 2008, and 2018 (Figure 5). It is important to note that although the existing beach sediment is referred to as “native”, it is actually the result of several previous renourishment projects from different borrow areas. One sample each was collected from the beach berm and the intertidal beach. Samples were collected from the upper 18 inches of sand with a clean 2.5-inch diameter hand auger and placed into a new 16oz screw-top plastic jar.

Samples were transported to USACE Environmental Materials Unit in Marietta, Georgia for laboratory testing. Samples were washed and sieved according to ASTM Method D422. In addition, the Munsell color was determined by ASTM Method 1535.

In general, the native beach sediment consisted of light gray (10YR7/1) to very pale brown (10YR7/4), moderately to poorly graded, fine to medium sized sand. Mean grain size ranged from 0.19 to 1.11 mm, with an average value of 0.57 mm. Samples with relatively high mean grain size also had relatively high shell content, indicating that the larger fraction of sediment is generally made up of shells. Sorting coefficients ranged from 1.22 to 2.45 phi, with an average value of 1.81 phi. The percentage of fines (i.e. sediment passing the No. 200 sieve) was less than or equal to 1.4% for all samples.

Sediment characteristics varied significantly along the beach. In general, the mean grain size, sorting coefficient, and percentage shell content were greater on the north-beach than on the south-beach, however these values were greatest at the mid-beach sample location (6th street). The trend of more coarse, well graded sand at the north-beach, and finer, poorly graded sand at the south-beach was also observed in the 2018 study and likely reflects greater erosion at the north-beach. Mean grain size and sorting were fairly consistent between the berm and the intertidal beach.

Native beach material from the 2025 study was coarser (mean grain size of 0.57 mm) than native beach material from the 2018 study (mean grain size of 0.30 mm). The 2025 native beach material was also less poorly graded (well sorted) than the 2018 study, with an average sorting coefficient of 1.81 phi compared to 0.87 phi.

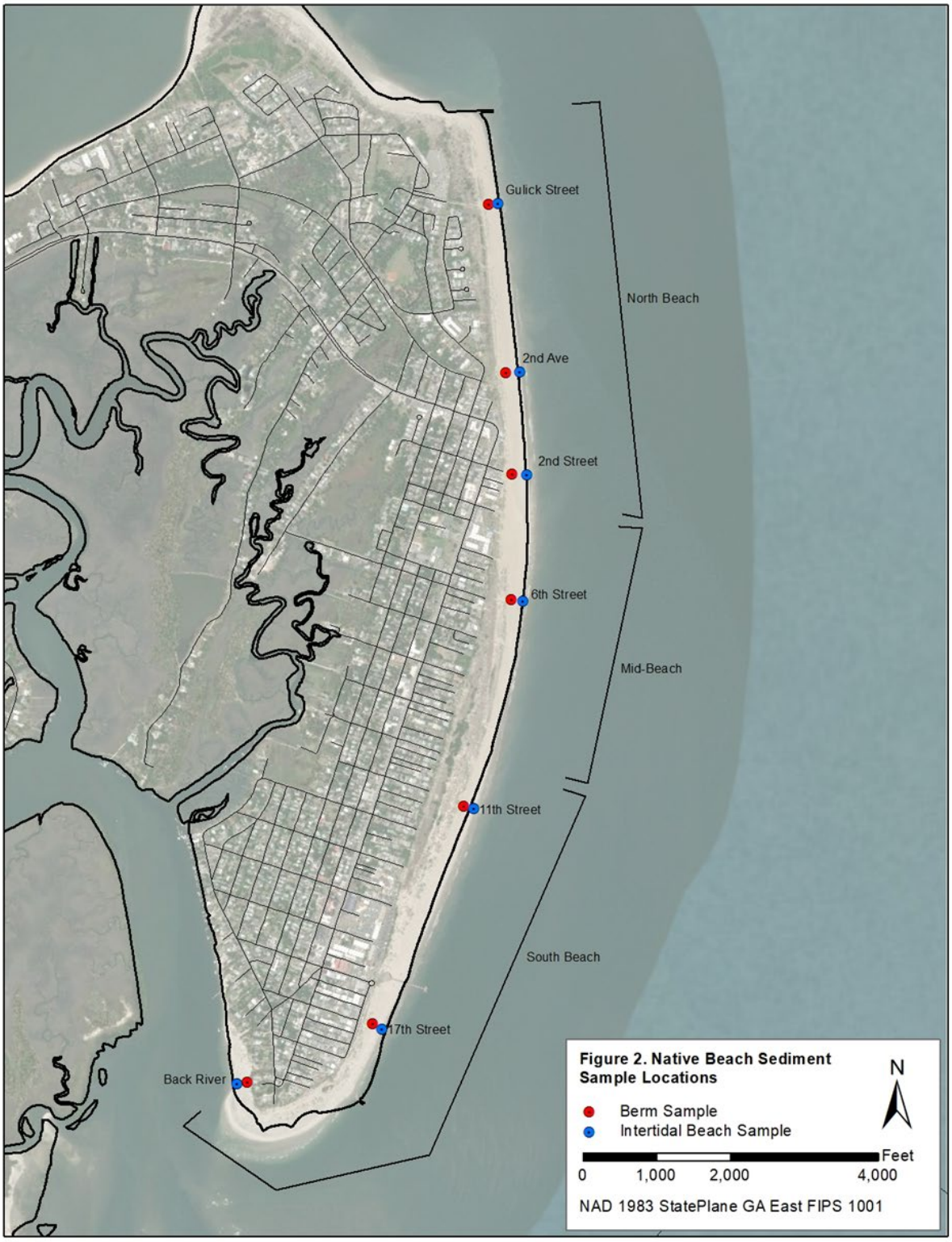

Figure 5. Native beach sediment sampling locations.

Based on this recent testing and information provided in the 2018 testing, the offshore borrow material, excluding Zone 4, is compatible with existing beach sediment and the 2016 GADNR Beach Nourishment Guidelines.

"(3) ***Jeopardizes the continued existence of species listed as endangered and threatened under the Endangered Species Act of 1973, as amended, or results in likelihood of the destruction or adverse modification of a habitat which is determined by the Secretary of Interior or Commerce, as appropriate, to be a critical habitat under the Endangered Species Act of 1973, as amended."***

The proposed action would not jeopardize the continued existence of any ESA-listed species. A full evaluation of effects to ESA-listed species under US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) jurisdiction can be found in Section 3.11 of the EA. A summary of Section 7 consultation under ESA can also be found in Section 4.1 of the EA. For USFWS ESA-listed species, USACE has made a may affect, not likely to adversely affect 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).A may affect, likely to adversely affect determination was made for the green (Chelonia mydas) and loggerhead (Caretta caretta) sea turtles. A no effect determination was made for all other ESA-species within the project area. USACE will include the manatee conditions provided by USFWS into contract specifications. USACE is consulting with USFWS on the completed Section 7 analysis.

For NMFS ESA-listed species, the 2020 South Atlantic Regional Biological Opinion (SARBO) provides compliance with all species listed under NMFS (SARBO 2020)

"(4) ***Violates any requirements imposed by the Secretary of Commerce to protect any marine sanctuary designated under Title III of the Marine Protection Research and Sanctuaries Act of 1972."***

No marine sanctuaries would be affected by the proposed action.

"(c) ***Except as provided under Section 404(b)(2), no discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States. Findings of significant degradation related to the proposed discharge shall be based upon appropriate factual determinations, evaluations, and tests required by Subparts B and G of the consideration of Subparts C-F with special emphasis on the persistence and permanence of the effects contributing to significant degradation considered individually or collectively include:"***

"(1) Significantly adverse effects of the discharge of pollutants on human health or welfare including, but not limited to effects on municipal water supplies, plankton, fish, shellfish, wildlife, and special aquatic sites."

The proposed action will not result in significant adverse effects on human health or welfare. All appropriate measures will be implemented to avoid and minimize adverse effects to the environment. The proposed beach nourishments is expected to result in an overall benefit to wildlife and recreational resources.

Special aquatic sites include wetlands. No placement will be occurring on wetlands. No impacts to wetlands are anticipated.

Fish and shellfish may experience temporary impacts as a result of placement in the benthic environments. Beach nourishments may adversely affect bottom-dwelling organisms at the site by smothering immobile organisms or forcing mobile organisms to migrate from the area. It is expected that this direct impact will be temporary after initial placement and future maintenance placements.

5.2. Factual Determination. - (Section 230.11)

5.2.1 Physical Substrate Determinations

Consideration shall be given to the similarity in particle size, shape, and degree of compaction of the material proposed for discharge and the material constituting the substrate at the disposal site and any potential changes in substrate elevation and bottom contours.

1) Substrate Elevation and Slope

The proposed beach nourishment actions through 2036 will include placement of dredged material that will alter existing contours and elevations at the placement location; however, alteration of existing contours and elevations are necessary to shape the design. Placement of the dredged sediment will be designed to mimic the natural slope and elevation.

2) Sediment Type

The Tybee Island Borrow Area sediment being placed in the Federal template will be predominately sand. The borrow area material is anticipated to be similar to the sediment at the Federal template in size and shape as well. Future maintenance placements are anticipated to be similar to the sediment in the Federal template as well.

3) Dredged/Fill Material Movement

The placement material will be mainly subjected to wave refraction along the shoreline, riverine flows, and tidal activity along Tybee Creek and the Atlantic Ocean. Material placement-generated turbidity plumes are limited to an area only a few hundred feet to a few thousand feet and most turbidity settles out quickly once material placement is complete (2020 SARBO, Section 3.1.1.2). It is expected that most of the material placed will remain in the template, but there may be some minor turbidity plumes generated during each placement event. It is expected that the material placed will erode slowly over time after each beach nourishment event.

4) Physical Effects on Benthos

Existing benthic organisms will be adversely affected in the immediate areas of the placement; however, benthic organisms are expected to quickly rebound from the short-term impacts of material placement after each beach nourishment event.

5.2.2. Water Circulation, Fluctuation, and Salinity Determinations

Determine the nature and degree of effect that the proposed discharge will have individually and cumulatively on water, current patterns, circulation including downstream flows, and normal water fluctuation.

1) *Water Column*
    a. **Salinity:** There are no anticipated impacts expected to salinity as a result of any of beach nourishment placement.
    b. **Water Chemistry:** There are no anticipated impacts expected to water chemistry as a result of beach nourishment placement.
    c. **Clarity and Color:** There may be local and temporary increase in turbidity during placement; however, the turbidity plumes will dissipate quickly.
    d. **Odor:** Placement activities are not expected to have any effects on odor in the action areas.
    e. **Taste:** Not applicable. Water in the proposed placement area is not used as a drinking water source.
    f. **Dissolved Gas Levels:** Dissolved oxygen levels are not expected to be impacted by placement.
    g. **Nutrients:** There are no anticipated impacts expected to nutrients.

2) *Current Patterns and Circulation*
    a. **Current Patterns and Flow.** Currents in the project area are primarily tidally influenced. Placement for beach nourishment will cause effects to flow in the general location of the placement site.
    b. **Velocity:** Effects on water velocity would be minimal to non-existent for the placement site.
    c. **Stratification:** No change in stratification is anticipated.
    d. **Hydrologic Regime:** The hydrologic regime in this area is primarily tidally influenced. Therefore, the hydrologic regime would not be affected.

3) *Normal Water Level Fluctuations and Salinity Gradients*
    The beach nourishment events through 2036 will have no adverse impact to these characteristics and would not affect salinity gradients in the area.

5.2.3. Suspended Particulate/Turbidity Determinations

1) *Expected Changes in Suspended Particulates and Turbidity Levels in the Vicinity of the Disposal Site*

There will be temporary increases in turbidity levels in the placement area during placement activities. However, turbidity will be temporary and localized, and no significant adverse effects are expected.

2) *Effects (degree and duration) on Chemical and Physical Properties of the Water Column*
    a. **Light Penetration:** Light penetration will decrease temporarily during placement in the immediate area where dredged material is being placed. This will be temporary and have no impact on the environment.
    b. **Dissolved Oxygen:** Dissolved oxygen levels will not be altered by beach nourishment. No anoxic layers of sediment will be exposed or placed.
    c. **Toxic Metals, Organics, and Pathogens:** No toxic metals, organics, or pathogens will be released or placed as a result of the placement and dredging activities. Clean dredged material will be used as determined by the testing completed in 2018. No contaminants were found during the current investigation that exceed sediment ecological screening values set forth in the USEPA Region 4 Ecological Risk Assessment Supplemental Guidance.
    d. **Aesthetics:** Aesthetic quality of the specified portion of Tybee Island will be temporarily reduced due to placement activities while the work is occurring.

3) *Effects on Biota*
    a. **Primary Production and Photosynthesis:** In the portion of the shoreline along Tybee Island where placement is proposed, minor impacts may occur to these organisms temporarily due to initial and future placements.
    b. **Suspension/Filter Feeders:** Placement of dredged material may contribute to the clogging of siphons or filter-feeders. This is expected to be a temporary condition. Conditions for existing filter-feeders should return to normal once as placement activities in the area are complete.
    c. **Sight Feeders:** Elevated turbidity levels will have a short-term adverse effect on sight feeder organisms. However, these organisms are highly mobile and can migrate to more favorable areas to fulfill their nutritional requirements during the short-term.

5.2.4. Contaminant Determinations

Deposited borrow area material into the Proposed action area will be similar to the surrounding area and would not introduce, relocate, or increase contaminants in the proposed beach nourishment location. No contaminants were found during the 2018 investigation that exceed sediment ecological screening values set forth in the USEPA Region 4 Ecological Risk Assessment Supplemental Guidance (USEPA, 2015). Additionally, the average percentage of fines (sediment passing the No. 200 sieve) was 3.27%, which is well within the state requirement of less than 10%.

5.2.5. Aquatic Ecosystem and Organism Determinations

1) *Effects on Plankton*
   Decreased light transmission caused by suspended placement material may have a temporary adverse effect on plankton; however, due to the existing turbid conditions, this effect is expected to be minor and temporary.

2) *Effects on Benthos*
   Existing benthic organisms may be permanently lost in the beach nourishment location. Elevation of the placement will be above the mean highwater (MHW) mark; therefore, repopulation of benthic organisms will not occur in the areas above the MHW mark. However, repopulation of benthic organisms will occur below the MHW mark once as placement activities have ceased due to their high fecundity and turnover rate.

3) *Effects on Nekton*
   Direct impacts to mobile organisms will be minor due to their ability to avoid adverse conditions. Some larval fishes may be impacted by placement. Impacts will be temporary and minor and would not significantly affect the local fish stocks.

4) *Effect on Aquatic Food Web*
   a. **Sanctuaries and Refuges:** Not applicable. There are no special aquatic sites in the proposed placement location.
   b. **Wetlands:** Wetlands exist adjacent to the proposed beach nourishment location. Placement of dredged material will not be occurring on any wetlands. Placement will have no effect on wetlands.
   c. **Mud Flats:** Placement will occur on intertidal and subtidal flats, including mudflats. The impacts of beach nourishment events would be temporary and minor. Small invertebrates may be smothered due to sediment placement, but most mobile organisms will avoid the placement area. Recovery will occur shortly after construction activities.
   d. **Vegetated Shallows:** Not applicable; there are no species of submerged aquatic vegetation in the placement areas.
   e. **Coral Reefs:** Not applicable; there are no coral reefs in the action area.
   f. **Riffle and Pool Complexes:** Not applicable; not found in the action area.

5) *Threatened and Endangered Species*
   The proposed action would not jeopardize the continued existence of any ESA-listed species. A full evaluation of effects to ESA-listed species can be found in Section 3.11 of the EA. A summary of Section 7 consultation under ESA can also be found in Section 4.1 of the EA. The USFWS coordination and biological assessment is located in Appendix C. The 2020 SARBO covers this action and provides analysis for NMFS species.

6) *Other Wildlife*
Placement of borrow area material is not expected to have long-term adverse impacts on wading birds or terrestrial foraging animals. Nourishment of the Federal template is expected to have long-term benefits to shorebirds and seabirds.

5.2.6. Proposed Disposal Site Determinations

1) *Mixing Zone Determination*
Borrow area material placement in the proposed area will not cause unacceptable changes in the mixing zone specified in the Water Quality Certificate in relation to depth, current, velocity, direction and variability, degree of turbulence, stratification, or ambient concentrations of constituents.

2) *Determination of Compliance with Applicable Water Quality Standards*
The project would comply with all applicable water quality standards.

3) *Potential Effects on Human Use Characteristics*
   a. **Municipal and Private Water Supply:** Not applicable; municipal drinking water is not supplied within the action area. USACE is not aware of any private water supplies.
   b. **Recreational and Commercial Fisheries:** Recreational and commercial fisheries may be temporarily impacted by the placement of material during placement activities. Boaters may have to avoid the dredging vessels and the placement location but will still be able to maneuver around the vessels and placement areas.
   c. **Water Related Recreation:** Tybee Island is used for recreational boating. During placement activities, recreational boaters may have to avoid dredge vessels and placement areas, but this will be temporary.
   d. **Aesthetics:** No long-term loss to visual aesthetics will occur; however, during construction equipment will be visible. This would be considered only a temporary and insignificant impact to aesthetics.
   e. **Parks, National and Historic Monuments, National Seashores Wilderness Areas, Research Sites, and Similar Preserves:** There are no parks, national and historical monuments, national seashores, wilderness areas, research sites, or preserves within the project area. Therefore, there will be no effects to these resources.

5.2.7. Determination of Secondary and Cumulative Effects on the Aquatic Ecosystem

The proposed placement of borrow area material would have no adverse impacts that would result in degradation of the natural, cultural, or recreational resources of the project area. The project would have no incremental impacts that, when considered with past, present, and reasonably foreseeable future project, would result in major

cumulative impairment of water resources, or interfere with the productivity and water quality of the existing aquatic ecosystem. The proposed beach nourishment activities are temporary in nature.

5.3. Actions to Minimize Adverse Effects

In efforts to avoid environmental adverse effects, a number of measures will be taken. No dredged material or construction equipment will be placed on adjacent wetlands or vegetation. There are no active oyster reefs within the placement area.

5.4. Findings of Compliance or Non-Compliance with the Restrictions on Discharge (Section 230.12)

A. No significant adaptation of the Section 404(b) guidelines was made relative to this evaluation.

B. There are no practicable alternatives to the proposed beach nourishment site that would have less adverse impact on the aquatic ecosystem.

C. The proposed actions described in this evaluation would not cause or contribute to violations of any known applicable state water quality standards.

D. The proposed action would not jeopardize the continued existence of any ESA-listed species.

E. The proposed beach nourishment actions will not result in significant adverse effects on human health and welfare, recreational and commercial fishing, plankton, fish, shellfish, wildlife, special aquatic sites, or overall ecosystem diversity, productivity, and stability.

F. The composition of the borrow area material would not contribute organics or pollutants to the aquatic environment. All responsible precautions will be taken to prevent hazardous materials discharge from all activity or equipment.

G. Appropriate steps to minimize potential adverse impacts from the proposed action will be implemented.

H. On the Basis of the Guidelines, the Proposed Disposal Site(s) for the Discharge of Fill Material is specified as complying with the requirements of the Clean Water Act Section 404(b)(1) guidelines, with the inclusion of appropriate and practical conditions to minimize adverse effects on the aquatic ecosystem.

Table 6 below is a summary of the effects on public interest factors under the CWA. USACE concludes that the proposed beach nourishment is in the public interest.

Table 6. Analysis of Public Interest Factors Under the CWA.

Table 6: Public Interest Factors	Effects					
	None	Detrimental	Neutral (mitigated)	Negligible	Beneficial	Not Applicable
1. Conservation: The study area largely consists of open water that receive semidiurnal tidal flushing. No sanctuaries or refuges are located within the study area. Therefore, USACE has determined that the proposed action would have no effect on conservation.	X					
2. Economics: It has been determined that the proposed beach nourishment will have minor benefits to the project, as it protects infrastructure and provides recreational benefits.					X	
3. Aesthetics: During construction, equipment used for placement will be visible, resulting in a temporary change in the visual aesthetics. Placement within the beach nourishment site would mimic natural habitats in the project area. Therefore, the project would have a temporary minor effect on aesthetics.				X		
4. General Environmental Concerns: The environmental concerns for the proposed action focuses on the potential impacts on hydrology, sediment characteristics, essential fish habitat, aquatic resources, vegetation, cultural resources, fish, wildlife, food chain organisms, and others. Each of these concerns were discussed in Section 3 of the EA and described further herein. No adverse environmental impacts are anticipated. Therefore, USACE has determined that the net effect of this action on the environmental factors, beneficial due to increased resilience from erosion.					X	
5. Wetlands: The evaluation of impacts of the proposed action on wetlands has been analyzed in Section 3 in the EA and here this 404(b)(1) Evaluation. USACE has determined that the proposed action would have no effect on wetlands. Adjacent wetlands on Little Tybee Island are not expected to be impacted based on the beach nourishment project.	X					
6. Historic Properties: The evaluation of impacts of the proposed action on historic properties has been analyzed in Section 3.8 of the EA.					X	

Table 6: Public Interest Factors	Effects					
	None	Detrimental	Neutral (mitigated)	Negligible	Beneficial	Not Applicable
7. Fish and Wildlife Values: The evaluation of impacts of the proposed action on fish and wildlife values has been analyzed in Section 3.11, Protected Species and Section 3.6, Essential Fish Habitat in the EA and here in the 404(b)(1) Evaluation. USACE has determined that the proposed action would have an overall beneficial effect on fish and wildlife values. There will be an overall benefit to birds and sea turtles due to providing foraging and nesting habitat as a result of the beach nourishment.					X	
8. Flood Hazards: USACE has determined that the proposed action would have no effect on flood hazards.	X					
9. Floodplain Values: USACE has determined that the proposed action would have no effect on floodplain values.	X					
10. Land Use: The proposed placement area is subject to recreational boaters, fisheries, and consists largely of beachfront habitat. The proposed action would not change the present land use in the study area. Therefore, USACE has determined that the proposed project would have no effect on land use.	X					
11. Navigation: The proposed beach nourishment action would have no effect to navigation. Boaters will still be able to navigate around the restored beachfront. Navigation is included in Section 3 in the EA. USACE has determined that the proposed action would have no effect on navigation.	X					
12. Shoreline Erosion and Accretion: The proposed beach nourishment area is exposed to tidal activity. The area experiences an annualized loss of 178,432 cy from the Federal template. Placement in this location is expected to reduce beach erosion. USACE has determined that the proposed action would have a beneficial effect on beach erosion.					X	
13. Recreation: The evaluation of impacts of the proposed action on recreation has been analyzed in Section 3.12 in the EA. Recreational boaters use the area around Tybee Island. It is expected that boaters will be able to navigate around dredging vessels and the placement location. Tybee Island is a popular recreational area, and there may be minor negative impacts to recreation in the placement area during placement, but beneficial in the long-term.					X	

Table 6: Public Interest Factors	Effects					
	None	Detrimental	Neutral (mitigated)	Negligible	Beneficial	Not Applicable
14. Water Supply and Conservation: The primary raw water source for communities located within and adjacent to the placement area is the Upper Floridan Aquifer, a limestone formation that supplies fresh drinking water to the Savannah-Tybee Island area. USACE has determined that the proposed action would have no effect on water supply and conservation.	X					
15. Water Quality: The evaluation of impacts of the proposed action on water quality has been analyzed in Section 3.13, Water Quality, in the EA and in this 404 (b)(1) Evaluation. USACE has determined that the proposed action would have a negligible effect on water quality due to temporary turbidity plumes generated by placement.				X		
16. Energy Needs: Energy in the form of electricity, petroleum fuels, natural gas, etc. would be used during the construction phases of the proposed action. These energy sources are readily available and are expected to be available in the future. Therefore, USACE has determined that the proposed action would have no effect on energy needs.	X					
17. Safety: USACE has determined that the proposed action would have no effect on safety.	X					
18. Food and Fiber Production: The proposed action area is subject to the recreational activities. The proposed action would provide no opportunity for food or fiber production. Therefore, USACE has determined that there would be no effect to food or fiber production.	X					
19. Mineral Needs: Construction materials associated with the disposal of sediment would be used during the construction phase of the proposed action. These materials are readily available and are expected to be available in the future. Therefore, USACE has determined that construction of this project would have no effect on mineral needs concerns.	X					
20. Consideration of Property Ownership: Tybee Island is the owner of the placement area. Therefore, USACE has determined that the proposed action would have no effect on considerations of property ownership.	X					
21. Needs and Welfare of the People: USACE has determined that the proposed action would have no effect on needs and welfare of the people.	X					

5.5. Conclusions

At this time and based on the foregoing analysis, the proposed action alternative is consistent with applicable 404(b)(1) Guidelines and state water quality standards. The proposed beach nourishments through 2036 as part of the TISPP would not cause or contribute to significant degradation of the waters of the United States. The proposed action is considered the least environmentally damaging practicable alternative (LEDPA) as it will not result in significant adverse environmental consequences and is expected to have beneficial effects to the environment.

6. References

NMFS. 2020. South Atlantic Regional Biological Opinion for Dredging and Material Placement Activities in the Southeast United States (SARBO). https://media.fisheries.noaa.gov/dam-migration/sarbo_acoustic_revision_6-2020-opinion_final.pdf. Website accessed October 2025.

USEPA, 2015. Region 4 Ecological Risk Assessment Supplemental Guidance Interim Draft. Scientific Support Section Superfund Division. U.S. Environmental Protection Agency.