



**US Army Corps  
of Engineers**®  
Jacksonville District

**November 2021**

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# **SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT**

## **BREVARD COUNTY SHORE PROTECTION PROJECT – NORTH REACH SAND BYPASS BORROW AREA**

**BREVARD COUNTY, FLORIDA**

**FINDING OF NO SIGNIFICANT IMPACT**  
**BREVARD COUNTY SHORE PROTECTION PROJECT – NORTH REACH SAND**  
**BYPASS BORROW AREA**

**BREVARD COUNTY, FLORIDA**

The U.S. Army Corps of Engineers, Jacksonville District (Corps), has prepared a Supplemental Environmental Assessment (SEA) in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, and its implementing regulations to evaluate the continued use of the sand bypass area for the Brevard County Shore Protection Project (SPP) North Reach located in Brevard County, Florida. The SEA evaluated the dredging of sand in the area to the north of the Canaveral Harbor and pumping the sand via pipeline (i.e. bypassing the jetty and harbor channel) to the receiving beaches in the Brevard County SPP North Reach. The SEA did not consider the placement of the sand on the receiving beaches as this was previously evaluated in prior NEPA documents. The Preferred Alternative is for the dredging of sand within the borrow area and bypassing the jetty and harbor for use as a sand source for the North Reach beaches. The SEA evaluated the effects of the Preferred Alternative and the No Action Alternative.

I have reviewed the SEA, incorporated herein by reference. The analysis performed and the information presented in the SEA are summarized below:

- a. The Preferred Alternative is in compliance with Section 7 of the Endangered Species Act of 1973, as amended. The Corps has determined that the Preferred Alternative may affect but is not likely to adversely affect endangered or threatened nesting sea turtles, the endangered North Atlantic Right whale, and the West Indian manatee. The project would have no effect to the threatened piping plover and the threatened red knot. Additionally, the project is not likely to adversely modify loggerhead sea turtle designated critical habitat. The Corps requested concurrence from the U.S. Fish and Wildlife Service (USFWS) with this determination on August 26, 2021. The USFWS provided concurrence with the Corps' determination on November 4, 2021 and concluded consultation. The Corps determined the project is covered under the South Atlantic Regional Biological Opinion (SARBO). The project has been coordinated with National Marine Fisheries Service and U.S. Army Corps of Engineers South Atlantic Division.
- b. The Preferred Alternative will be coordinated with the State of Florida, and all applicable water quality standards will be met. A water quality certification pursuant to section 401 of the Clean Water Act (CWA) of 1972, as amended, will be obtained from the Florida Department of Environmental Protection (FDEP) prior to construction. Pursuant to the CWA of 1972, as amended, the discharge of dredged or fill material associated with the Preferred Alternative is compliant with the section 404(b)(1) Guidelines (40 CFR 230). The project remains in compliance with 404(b)(1), as determined in prior NEPA documents for the preferred alternative. In addition, final concurrence with the Corps' determination

of consistency with the Florida Coastal Management Program pursuant to the Coastal Zone Management Act of 1972 will be obtained from FDEP prior to construction.

- c. Pursuant to section 106 of the National Historic Preservation Act of 1966, as amended, the U.S. Army Corps of Engineers determined that historic properties would not be adversely affected by the recommended plan. Consultation with the Florida State Historic Preservation Officer (SHPO) regarding this determination was initiated on March 11, 2021. No comments were received in the 30-day consultation period and the consultation is complete pursuant to 36 C.F.R. 800.3(c)(4).
- d. The Corps has determined there are no significant adverse impacts to Essential Fish Habitat (EFH) or federally managed fisheries. The Preferred Alternative was coordinated with the National Marine Fisheries Service Habitat Conservation Division (NMFS-HCD) in accordance with the Magnuson-Stevens Fishery Conservation and Management Act via email on August 26, 2021. NMFS-HCD responded on October 7, 2021 with no additional conservation recommendations for EFH.
- e. Benefits to the public will include an additional sand source for the shore protection program within Brevard County. Use of this borrow area will save taxpayer money through a more efficient and readily available source of sand.

In view of the above and the attached SEA, and after consideration of public and agency comments received, I conclude that the Preferred Alternative would not result in a significant effect on the quality of the human environment and is not contrary to the public interest, therefore preparation of an Environmental Impact Statement is not required.

17 November 2021

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James L. Booth  
Colonel, U.S. Army  
District Commander

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# **1 PROJECT PURPOSE AND NEED**

## **1.1 INTRODUCTION**

The U.S. Army Corps of Engineers, Jacksonville District (Corps), has determined the need for the renewal of the sand source for the Brevard County, Florida Shore Protection Project (SPP) North Reach.

This Supplemental Environmental Assessment (SEA) considers alternatives that could provide the SPP with sand for beach renourishment within the Brevard County SPP North Reach. This SEA updates the previous National Environmental Policy Act (NEPA) of 1969, as amended, documents for the existing sand bypass area north of the Port Canaveral entrance for the Brevard County SPP North Reach. The *1996 Final Environmental Impact Statement, Brevard County, Florida, Shore Protection Project Review Study, U.S. Army Corps of Engineers, Jacksonville District* previously evaluated the use of the sand bypass for this project. This document is a supplemental environmental assessment to update environmental regulations pertinent to the project and review the proposed action within the sand bypass area to ensure compliance with current environmental regulations. The SEA will provide updated information to the 1996 EIS for the use of the sand bypass area. This SEA will only evaluate the effects of the dredging of the sand bypass area and does not cover placement activities. Placement activities are sufficiently covered in prior NEPA documents and are incorporated herein by reference.

## **1.2 PROJECT AUTHORITY**

The Brevard County, Florida Federal Shore Protection Project is authorized by Section 101(b)(7) of the Water Resources Development Act of 1996, Public Law 104-303, to reduce damage to structures and shorefront property related to erosion and storms. Initial construction of the North and South Reach segments was completed in 2002 and 2003 and involved the placement of approximately 5 million cy (3,822,774 m<sup>3</sup>) of sand on the beach. The North and South Reach were renourished in 2005 with approximately 2 million cy (1,529,109 m<sup>3</sup>) of sand under authorization of the Flood Control and Coastal Emergencies Act. In 2010, approximately 640,000 cy (489,315 m<sup>3</sup>) of sand from Canaveral Shores II (Outer Continental Shelf Sand Borrow Area) was dredged and placed along 3.8 miles (6 km) of South Reach. Since then, storm activity has severely eroded portions of Brevard County North Reach and South Reach. Tropical Storm Debby and Hurricane Sandy caused increased erosion to both the North and South Reaches in 2012.

## **1.3 PROJECT LOCATION AND DESCRIPTION**

Brevard County is located on the east coast of Florida, east of Orlando, bordered by Volusia County to the north, Indian River County to the south, Orange and Osceola Counties to the west, and the Atlantic Ocean to the east. The eastern limit of Brevard County consists of barrier islands split by the Banana River. The project is located along the Atlantic Ocean shoreline, to the north and the south of the Canaveral Harbor entrance. Figure 1-1. Sand Bypass and North Reach Project Location Map Figure 1-1 shows the location of the existing sand bypass area. Figure 1-2 shows the sand bypass reaches.



## Section 1: Project Purpose and Need

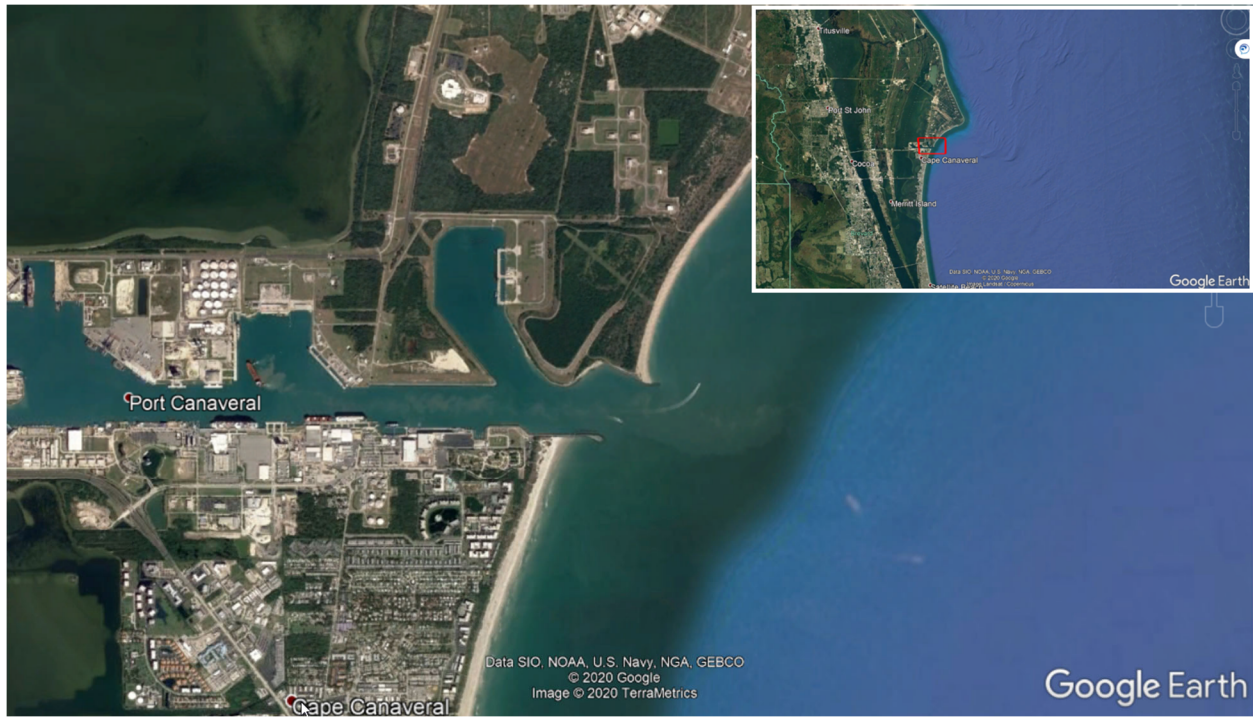


Figure 1-1. Sand Bypass and North Reach Project Location Map

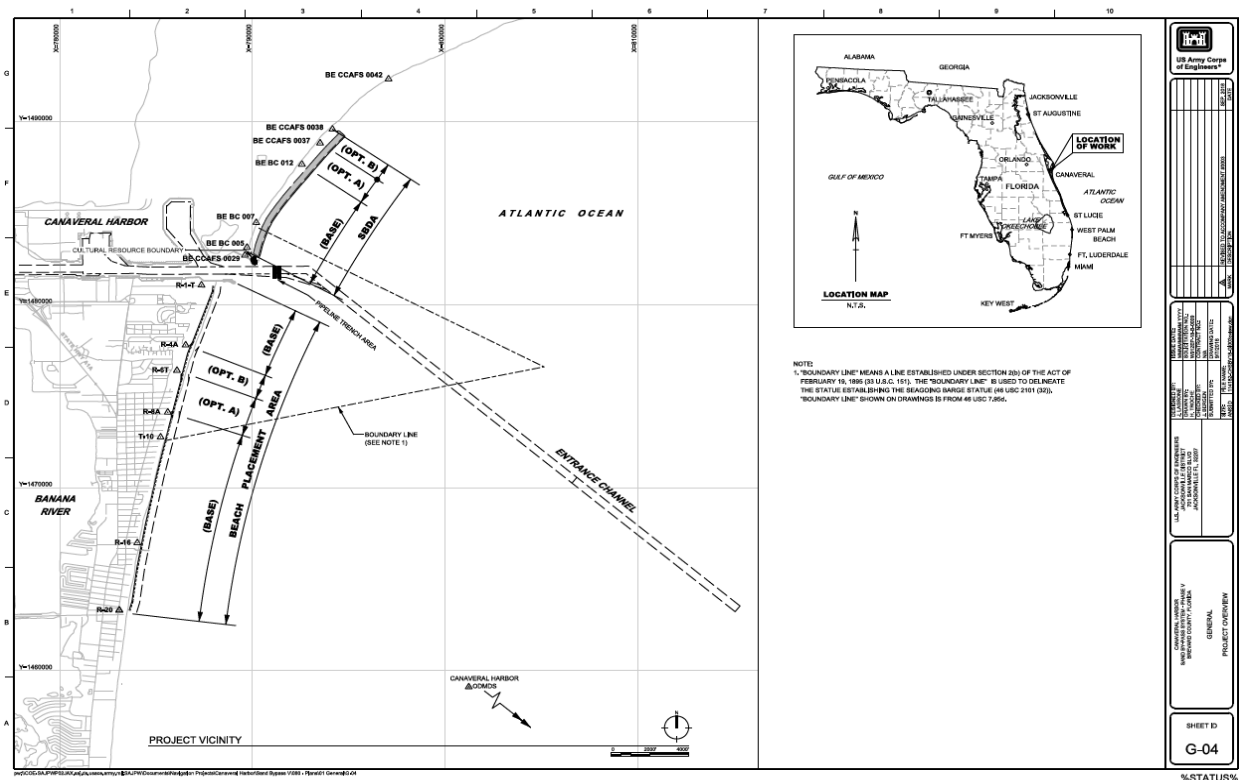


Figure 1-2. Sand Bypass and North Reach Locations

The Brevard County SPP North Reach spans approximately 9.6 miles, from Patrick Air Force Base to Canaveral Harbor. Cape Canaveral and Cocoa Beach lie within the limits of the North Reach project area. The project area consists of the shoaled area to the north of Canaveral Harbor where the north jetty has accumulated sand and interrupted the longshore transport. The shoreline to the south of Canaveral Harbor has been continuously renourished to provide storm protection and to mitigate for the beach erosion caused by the man-made harbor. The proposed project is to intercept and transfer an annual volume of approximately 106,000 cubic yards to the receiving beaches.

## 1.4 PROJECT NEED OR OPPORTUNITY

Long-term beach renourishment projects require a constant supply of beach-compatible sand. The Brevard County SPP North Reach has been authorized and is an ongoing shore protection project. Multiple sand sources have been used to supply the beach with sand material over the course of the project life. Offshore and nearshore borrow areas have been used previously and are unable to provide the amount of sand necessary to continue renourishment activities. The reassessment of the sand bypass area to the north of Canaveral Harbor will allow for continued use of the sand available. Table 1-1 provides a history of the sand bypass projects at this location. Figure 1-3 shows the locations of the dredge and fill.

Section 1: Project Purpose and Need

Table 1-1. Summary of Sand Bypass Projects

Phase	Start Date	End Date	Volume Dredged (cy)	Volume Placed (cy)	Placement Rate (cy/yr)	Placement Area
I	Jan. 1995	May 1995	1,277,500	956,800		R-1 to R-9
II	Feb. 1998	Jun. 1998	1,034,500	1,035,400	375,294	R-3 to R-14
III*	Nov. 2007	Dec. 2007	761,000	750,000	79,578	R-4 to R-10
IV	Mar. 2010	Apr. 2010	715,150	683,100	303,692	R-2 to R-3 & R-4 to R-12.6
Total			3,788,150	3,425,300		
Volume estimates based on pre-post construction surveys unless otherwise noted						
* Corps estimate of dredge volume due to timing issues with pre-post dredge survey						

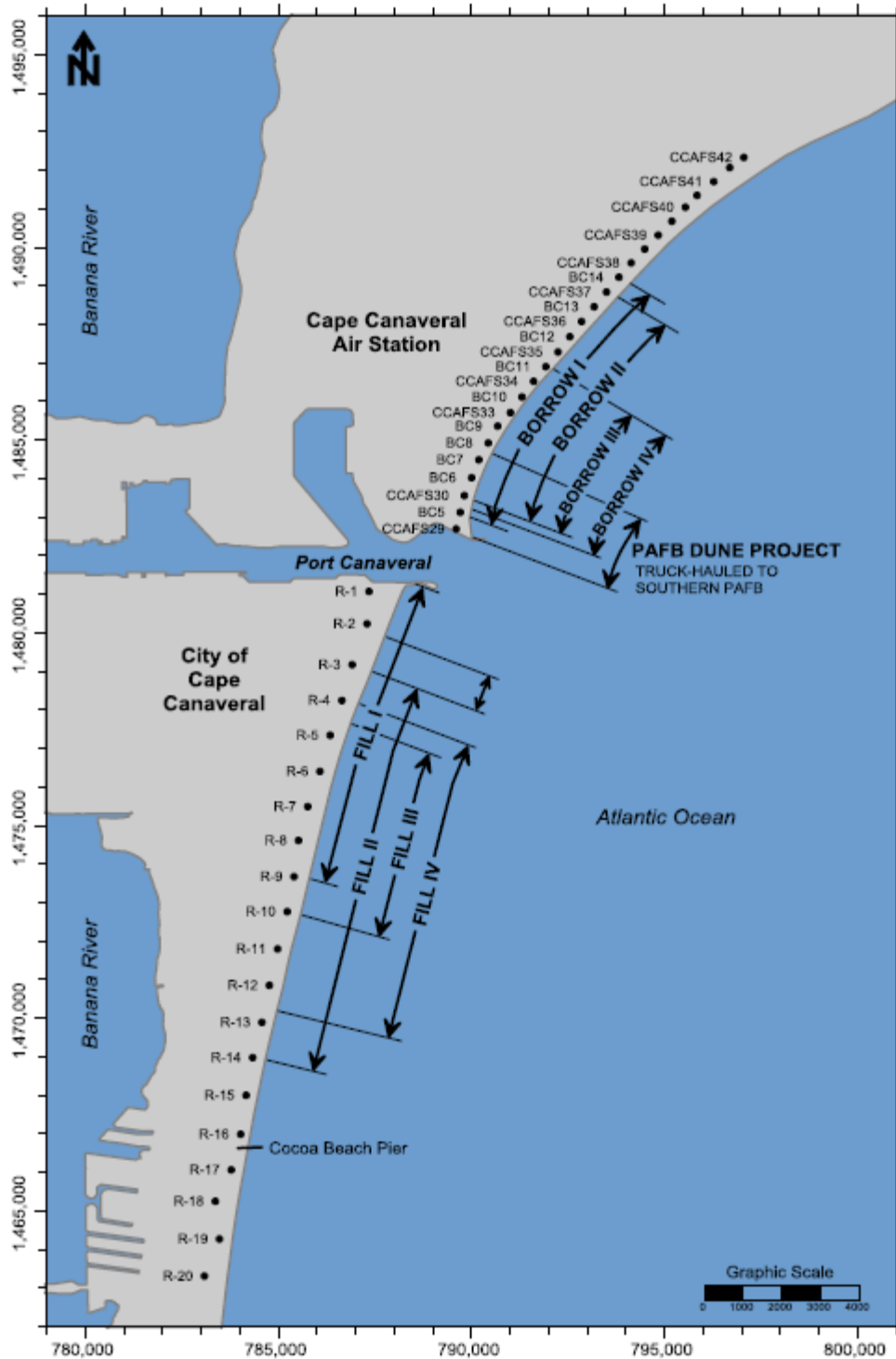


Figure 1-3. Locations of dredge and discharge.

## 1.5 RELATED DOCUMENTS

Related NEPA, design, and planning reports for the sand bypass system and beach renourishment activities, to include the placement of sand from the bypass projects, include the following documents, hereby incorporated by reference:

*1992 (Revised 1993). General Re-Evaluation Report with Environmental Assessment, Canaveral Harbor, Florida, Sand Bypass System. U.S. Army Corps of Engineers, Jacksonville District.*

*1996. Final Environmental Impact Statement, Brevard County, Florida, Shore Protection Project Review Study. U.S. Army Corps of Engineers, Jacksonville District.*

*1999. Limited Reevaluation Report, Brevard County, Florida, Shore Protection Project. U.S. Army Corps of Engineers, Jacksonville District.*

*2004. Department of the Army Permit SAJ-2003-09051 (IP-TSB). Issued to Canaveral Port Authority authorizing the extension of the sand fill placement area associated with the Canaveral Harbor Federal Sand Bypass Project.*

*2013. Environmental Assessment, Issuance of a Negotiated Agreement for Use of Outer Continental Shelf Sand from Canaveral Shoals II in the Brevard County Shore Protection Project (North Reach and South Reach). U.S. Department of the Interior, Bureau of Ocean Energy Management, Division of Environmental Assessment, Environmental Assessment.*

*2017. Environmental Assessment, Issuance of a Negotiated Agreement for Use of Outer Continental Shelf Sand from Canaveral Shoals II in the Brevard County Shore Protection Project (North Reach and South Reach). U.S. Department of the Interior, Bureau of Ocean Energy Management, Division of Environmental Assessment, Environmental Assessment.*

Please use the following link (and select Brevard County) to access the current environmental documentation for these Federal projects:

<https://www.saj.usace.army.mil/About/Divisions-Offices/Planning/Environmental-Branch/Environmental-Documents/>

## 1.6 DECISIONS TO BE MADE

The decisions to be made upon completion of this SEA are whether to use the sand bypass system as a borrow area, or not, for the nourishment of the North Reach of the Brevard County SPP and whether that would result in significant environmental effects on the quality of the human environment. This SEA will address the effects of the project in regard to the current conditions at the project location and the latest environmental laws and regulations pertinent to the proposed actions, as an addendum to the initial 1996 EIS. The need for mitigation measures or best management practices (BMPs) to reduce any potentially adverse effects, particularly regarding associated activities, is also a decision to be made. If no significant impacts are identified during the NEPA process for the Preferred Alternative, the Corps will make the decision to sign a Finding of No Significant Impact (FONSI) and to move forward with the Preferred Alternative. If significant impacts are identified, the Corps will decide to implement mitigation measures to reduce the impacts to a lower-than-significant threshold, to proceed with the Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS), or to not implement the Preferred

Alternative. This SEA supports the decisions/recommended plans for the Brevard SPP Sand Bypass Borrow Area.

## **1.7 SCOPING AND ISSUES**

### **1.7.1 ISSUES EVALUATED**

The following issues were identified to be relevant to the proposed sand bypass project:

1. general environmental effects;
2. threatened and endangered species;
3. essential fish habitat (EFH);
4. migratory birds;
5. other wildlife resources;
6. cultural, historic, and archaeological resources;
7. coastal barrier resources;
8. water quality;
9. aesthetic resources;
10. recreation resources;
11. air quality;
12. noise;
13. economic and social effects;
14. Native Americans.

### **1.7.2 ISSUES ELIMINATED FROM DETAILED ANALYSIS**

The following issues were not considered relevant to the proposed action or were adequately discussed in the previous documents, have not significantly changed, and are incorporated herein by reference: 404(b) evaluation; hazardous, toxic, and radioactive waste (HTRW). There are no known HTRW in the project area.

### **1.7.3 PUBLIC INTEREST FACTORS**

While the Corps does not process and issue Federal permits for its own activities pursuant to 33 CFR 336.1, the Corps authorizes its own discharges of dredged or fill material by applying all applicable substantive legal requirements, including public notice, opportunity for public hearing, and application of the section 404(b)(1) guidelines (which was done in previous NEPA documents for the North Reach project under the 2013 and 2017 BOEM Environmental Assessments). As part of its review, the Corps evaluates the probable impacts of the proposed activity and its intended use on the public interest. All factors that may be relevant to the proposed action must be considered, including the cumulative effects thereof. The public interest factors are listed in Subsection 1.7.1 and evaluated in Section 4 and Table 2-1. As stated in Section 1.4, the project

need or opportunity is to provide a sand source for the continual renourishment of the Brevard County SPP North Reach. Specifically, the sand would help control beach erosion and the landward retreat of the shoreline that would cause property and infrastructure damage. Effects resulting from the proposed alternatives were evaluated and, where appropriate, environmental protection measures shall be implemented to balance the project need with all of the stated public interest factors. For the reasons discussed in Section 4 and Table 2-1, the Corps concludes that the proposed project is in the public interest.

## **2 ALTERNATIVES**

This section describes the no-action alternative and the various action alternatives. Other reasonable alternatives were evaluated in the environmental documents discussed in Section 1.5 and are incorporated herein by reference. The Preferred Alternative was selected based on the information and analysis presented in the Affected Environment and Environmental Effects sections of this SEA.

### **2.1 DESCRIPTION OF ALTERNATIVES**

In accordance with NEPA and its implementing regulations, the Corps considered a reasonable range of alternative sand sources, including a no-action alternative. The potential sand sources include the existing sand borrow area, open water borrow areas, and upland sand sources. The open water borrow areas and upland sand sources were eliminated from consideration and is further explained in Section 2.1.2.

#### **2.1.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

The no-action alternative would not renew the NEPA for the sand bypass area and the bypass area would not be utilized as a sand source for the Brevard North Reach SPP. Alternative sand sources for the beach renourishment would need to be identified if continued renourishment activities were to proceed. Major storm events could threaten infrastructure as a result of erosion and loss of beach template, in which emergency sand sources would need to be identified in a short amount of time.

#### **2.1.2 ACTION ALTERNATIVES**

To develop action alternatives, the Corps evaluated the prior NEPA documents, as well as the practices and methods utilized in past renourishment activities, which are discussed in further detail in the following subsections.

The action alternatives listed below describe various sources for acquiring beach-compatible sand for the renourishment of the Brevard North Reach.

##### **2.1.2.1 Alternative 1: Sand Bypass at Canaveral Harbor**

Alternative 1 is continued sand bypass across Canaveral Harbor. This work has been performed in the past and is authorized and part of the federal O&M responsibility for the Corps. This SEA provides an updated NEPA review for this alternative and continued use of the accumulated sediment north of Canaveral Harbor for the renourishment of the beaches within the North Reach. The work will involve the dredging of the identified borrow area along the beach, extending approximately 8,000 feet north of the jetty. The borrow area has shifted from past bypassing activities and natural currents. The material has historically been dredged via pipeline cutter suction dredge and piped south to be placed on the beaches within the North Reach. It is anticipated future projects will employ the same methodology. It is expected that the sand bypass area has approximately 106,000 cubic yards dredged and piped annually. The pipeline trench will need to be excavated under the required depth of Canaveral Harbor to ensure maintenance of navigation. The material dredged to install the pipe will be side-casted within the Canaveral Harbor Channel.



The *1996 Final Environmental Impact Statement, Brevard County, Florida, Shore Protection Project Review Study and 1999 Limited Reevaluation Report, Brevard County, Florida, Shore Protection Project* provide specifics on the placement of the sand within the North Reach segment of the Brevard County SPP.

#### **2.1.2.2 Alternative 2: Open Water Borrow Areas**

There are two open water borrow areas within the vicinity of the North Reach project. These borrow areas have been utilized in the past for renourishment activities. Canaveral Shoals I (nearshore) and Canaveral Shoals II (outer continental shelf sand borrow area) have been permitted and utilized historically. It is estimated that the borrow areas have been used to their maximum extent at the present time and there is not currently sufficient beach compatible material available within them.

#### **2.1.2.3 Alternative 3: Upland Sand Sources**

There are several upland sand sources available within the vicinity of the project. This alternative would be significantly more expensive to perform, as it involves trucking the sand overland and additional placement activities. There would also be no benefit to the beach north of the jetty where all of the accumulated material would need to be removed. This alternative would be more expensive, has the potential for greater environmental effects, and reduces the overall benefit to the beaches within the project footprint.

## **2.2 PREFERRED ALTERNATIVE**

Alternative 1 is the Preferred Alternative and includes the continued use of the sand bypass borrow area, with material dredged from north of Canaveral Harbor and piped south to be placed on the beaches within the Brevard County SPP North Reach.

## **2.3 ISSUES AND BASIS FOR CHOICE**

Alternatives 2 and 3 are additional sand sources that would be utilized for future projects within the Brevard County SPP North Reach and are adequately addressed in prior NEPA documents, specifically the 2013 BOEM Environmental Assessment, Issuance of a Negotiated Agreement for Use of Outer Continental Shelf Sand from Canaveral Shoals II in the Brevard County Shore Protection Project (North Reach and South Reach) and the 2017 BOEM Environmental Assessment, Issuance of a Negotiated Agreement for Use of Outer Continental Shelf Sand from Canaveral Shoals II in the Brevard County Shore Protection Project (North Reach and South Reach). These alternative sand sources are not discussed further in this SEA. This SEA will only evaluate the dredging of the Canaveral sand bypass as a borrow area for the Brevard North Reach. The preferred alternative is a viable option and would be used periodically as required. The other alternate borrow sources are eliminated from further discussion within this SEA as they have been adequately addressed in prior NEPA documents and are incorporated by reference herein. This SEA will proceed with the analysis of the no action alternative and the sand bypass project.

## 2.4 COMPARISON OF ALTERNATIVES

Table 2-1 provides a summary of the environmental effects of the no-action alternative and the preferred alternative considered, based on the issues identified in Subsection 1.7.1. Section 4, Environmental Effects, contains more detailed discussions of potential impacts associated with the proposed action.

Table 2-1. Summary of Direct and Indirect Effects Associated with the Preferred Alternative and the "No Action" Alternative.

Environmental Factor	Alternatives	
	No Action	Sand Bypass Project (Preferred Alternative)
General Environmental Effects	No effect.	The overall effect to the general environment would be a temporary displacement of wildlife, turbidity at the project location, and disturbance of the natural system.
Threatened and Endangered Species	No effect to threatened and endangered species.	Protection measures for swimming and nesting sea turtles will be utilized during all project operation to avoid and minimize adverse effects. South Atlantic Regional Biological Opinion (SARBO) Project Design Criteria (PDCs) will be adhered to during design and operations. Coordination with the USFWS was concluded on November 4, 2021. .
Essential Fish Habitat	No effect.	Coordination with National Marine Fisheries Service Habitat Conservation Division (NMFS-HCD) was concluded on October 7, 2021 and ensures continued protection of essential fish

Section 2: Alternatives

Environmental Factor	Alternatives	
	No Action	Sand Bypass Project (Preferred Alternative)
		habitat in the area of the sand bypass. There are no adverse effects expected from the project.
Migratory Birds	No effect.	Migratory birds will not be affected by the sand bypass project.
Other Wildlife Resources	No effect.	Protection measures will be incorporated to ensure minimization of wildlife disturbance in the project area during operations. There are no permanent negative effects expected in the sand bypass area.
Cultural and Historic Resources	No effect.	Consultation with the State Historic Preservation Officer (SHPO) and applicable tribes was initiated on March 11, 2021. No comments were received in the 30-day comment period and consultation is complete. is ongoing. The Corps has determined there is no adverse effect to cultural or historic resources.
Coastal Barrier Resources	No effect.	The project is not located within a Coastal Barrier Resource System Unit.
Water Quality	No effect.	Applicable permits will be obtained prior to commencement of the project. Turbidity within the

Section 2: Alternatives

Environmental Factor	Alternatives	
	No Action	Sand Bypass Project (Preferred Alternative)
		sand bypass area will be present during the dredging operations and will be monitored to ensure water quality standards are met.
Aesthetic Resources	Increased accumulation of sediment to the north of the harbor would reduce the aesthetic value of the beach system.	There will be a minor, short-term effect to aesthetic resources due to the presence of equipment in a natural area.
Recreation Resources	The recreational opportunities on the north side of the harbor would be unimpacted.	There will be a short-term impact to recreation in the project area due to the presence of equipment. Restrictions on accessing the beach locations where the project occurs will limit recreational opportunities during the dredge and placement. There is a long-term, beneficial effect to recreation in the project area through the removal of accumulated sediment and renourishment of the beaches.
Air Quality	No effect.	There will be a temporary, minor effect to air quality from the presence of emissions from the heavy equipment being utilized. Coastal breezes will dissipate any emissions in the local area. Project expected to be in attainment with National

Section 2: Alternatives

Environmental Factor	Alternatives	
	No Action	Sand Bypass Project (Preferred Alternative)
		Ambient Air Quality Standards.
Noise	No effect.	There will be a temporary noise impact from the operation of the equipment within the project area during construction.
Economic and Social Effects	No effect.	Reduction of the accumulated sediment will provide a more natural system, which will provide economic benefits through storm protection and recreational activities in the general area.
Native Americans	No effect.	There are no known Native American resources in the area. Consultation with the appropriate tribes has been completed.

### **3 AFFECTED ENVIRONMENT**

The Affected Environment section describes the existing environmental resources of the areas that would be affected if the preferred alternative were implemented. This section describes only those environmental resources that are relevant to the decision to be made. It does not describe the entire existing environment, but only those environmental resources that would be affected by the preferred alternative if it is implemented. This section, in conjunction with the description of the "no-action" alternative, forms the baseline conditions for determining the environmental impacts of the proposed action and reasonable alternatives.

#### **3.1 GENERAL PHYSICAL FEATURES**

The proposed sand bypass area is a natural shoreline bordered on the south by a rock jetty. The jetty was installed for the stabilization of Canaveral Harbor. Figure 3-1 shows the sand bypass location. The jetty has interrupted the longshore transport and sand accumulates at a fast rate on the beach and nearshore waters adjacent to the beach above the jetty. The shoreline landward of the beach is a natural system with vegetated dunes, transitioning into coastal scrub habitat. The nearshore waters are typical for east coast Florida, bare sand bottom, with no vegetation. Nearshore hardbottom existed historically and impacts from previous dredging operations have been mitigated. Information regarding the nearshore hardbottom can be found within the previous NEPA documents, including the 1996 Final Environmental Impact Statement, Brevard County, Florida, Shore Protection Project Review Study (USACE) and the 2017 Environmental Assessment, Issuance of a Negotiated Agreement for Use of Outer Continental Shelf Sand from Canaveral Shoals II in the Brevard County Shore Protection Project (North Reach and South Reach). (Bureau of Ocean Energy Management [BOEM]). Those discussions and conclusions are incorporated by reference.

### Section 3: Affected Environment

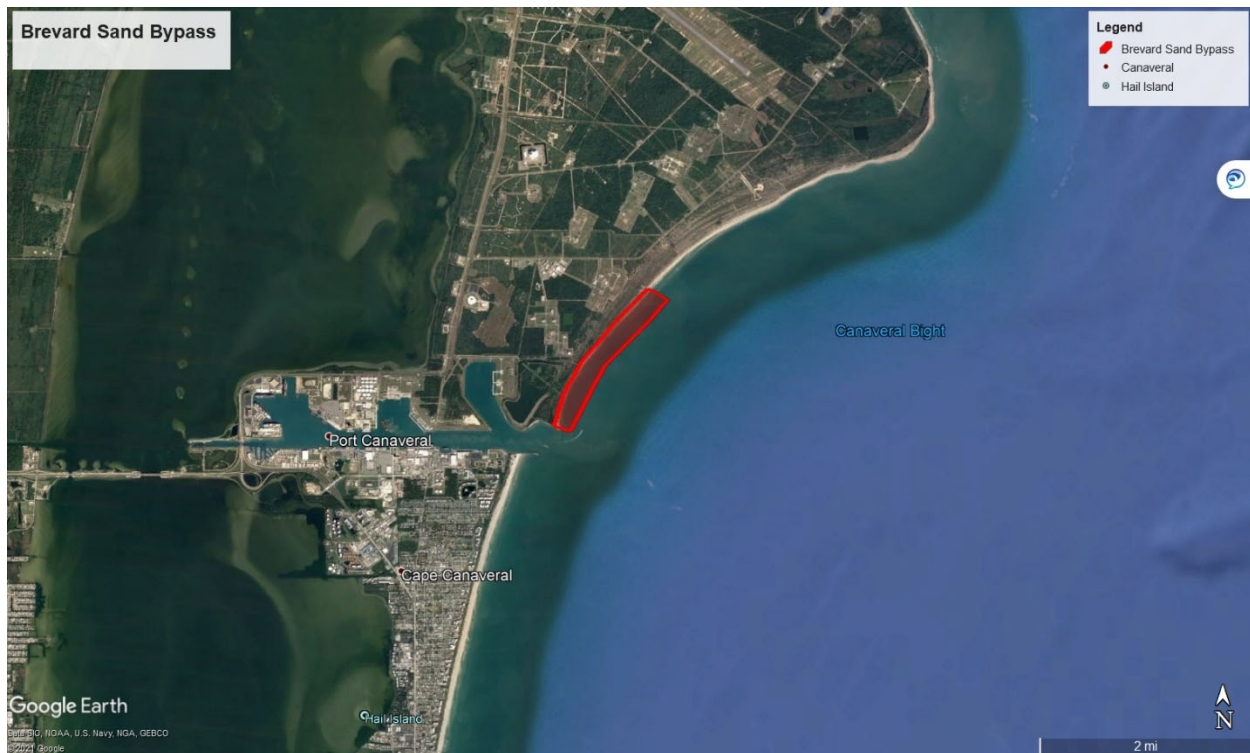


Figure 3-1. Sand Bypass Borrow Area Location

## 3.2 THREATENED AND ENDANGERED SPECIES

### 3.2.1 SEA TURTLES

Loggerhead, leatherback and green sea turtles are known to nest in the project area. The affected environment for the proposed action is limited to the nesting beach above the mean high-water line; sea turtle habitat below the mean high-water line is discussed in previous NEPA documents, which are incorporated herein by reference (USACE 1992 and 1996; BOEM 2013 and 2017).

All sea turtles found in state and Federal waters are Federally protected under the Endangered Species Act. The U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA) designated critical habitat to support the recovery of the threatened Northwest Atlantic Ocean population of loggerhead sea turtles in 2014. The waters at the sand bypass area have been designated as Nearshore Reproductive Critical Habitat for the loggerhead (See Figure 3-2). The nearshore reproductive habitat serves an important role for nesting females and hatchlings. Females transition between nesting sites utilizing this nearshore water. Hatchlings utilize the nearshore habitat immediately after hatching and entering a swim frenzy, in which they migrate away from shore and into the safety of deeper waters (Witherington, Herren, and Bresette, 2006 and Pankaew & Milton, 2018). The bottom profile of the nearshore habitat is important for both nesting females and hatchlings, as impediment free navigation of the waters is necessary for free movement.

### Section 3: Affected Environment

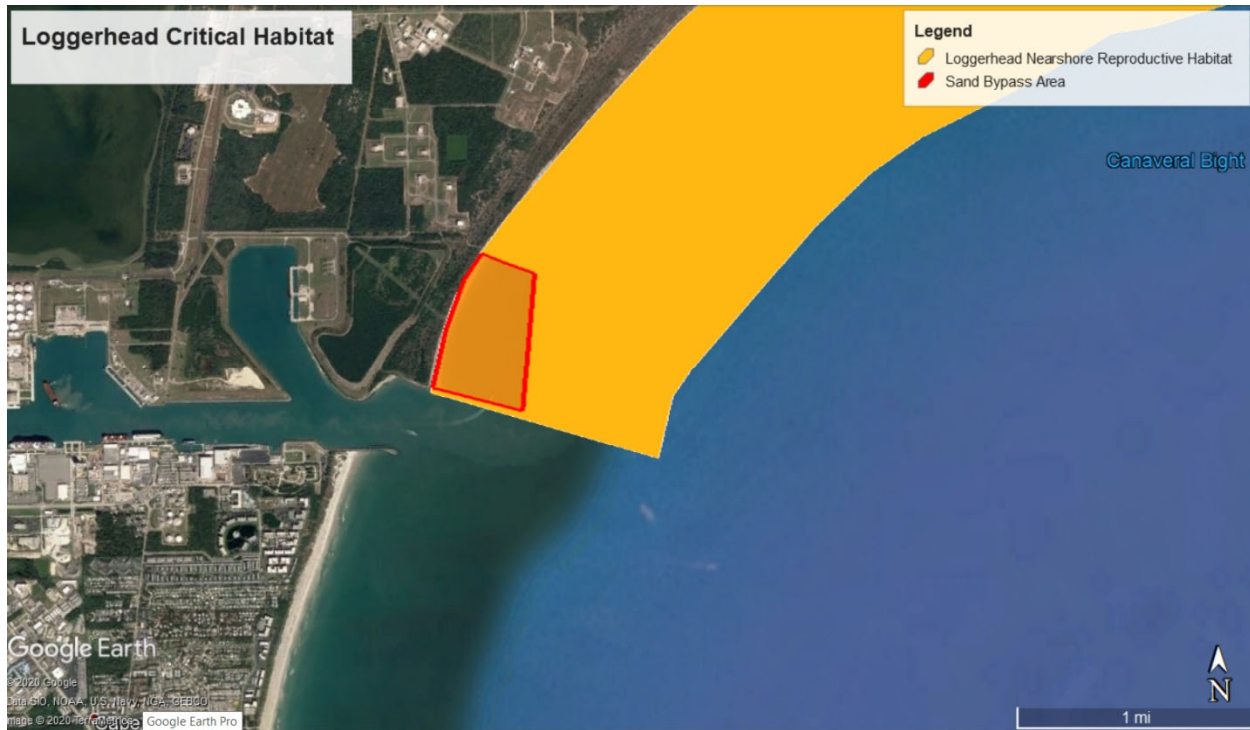


Figure 3-2. Loggerhead Nearshore Reproductive Critical Habitat

Leatherback and green sea turtles nest on the beaches in the project area from medium to high density frequencies (Witherington, Bresette, and Herren, 2006; and Stewart, and Johnson, 2006). The beaches within the dredging and placement areas are suitable nesting habitat and play a vital role in the lifecycle of the turtles who return to the same beaches year after year to lay their clutch (Carmichael, 2018).

#### 3.2.2 PIPING PLOVER

The piping plover (*Charadrius melodus*) is a small shorebird that occurs very rarely along the Atlantic Coast of Florida during the winter. The winter population of plovers is mainly (88%) located along the Gulf Coast. However, the project site lies within the consultation area for the plover and Brevard County has documented individuals occurring during winter months (Florida Natural Areas Inventory, 2001). Wintering habitats are important to piping plover as foraging habitats to gain sufficient energy stores to fuel their long migrations. Piping plover forage on marine worms, crustaceans, and other marine invertebrates along beaches and coastal systems. Optimal habitat is sustained by unimpeded coastal processes where features such as emergent nearshore sand bars, washover fans, and shoals can form and migrate. Piping plover are typically not present in the project area during the months of May through early August. The piping plover is listed as a threatened species under the Endangered Species Act. USFWS has designated critical habitat for this species but it does not overlap with the project area.



### 3.2.3 RED KNOT

The red knot (*Caladris canutus rufa*) is a small shorebird that is federally threatened. The red knot utilizes Florida beaches year-round, but especially during winter months. Similar to the piping plover, the red knot is more abundant on the Gulf Coast but is still documented on east coast beaches (Niles, et al, 2008). Foraging and optimal habitat features are similar to the piping plover. While USFWS has not yet designated critical habitat for this species, the project area does contain the optimal habitat features described above.

### 3.2.4 FLORIDA SCRUB JAY

The Florida Scrub Jay (*Aphelocoma coerulescens*) has no designated critical habitat listed in the federal register (52 FR 20715-20719). However, information from the USFWS indicates that the Florida Scrub Jay has extremely specific habitat requirements. It is endemic to peninsular Florida's ancient dune ecosystem or scrubs, which occur on well drained to excessively well drained sandy soils. Relict oak-dominated scrub, or xeric oak scrub, is essential habitat to the Florida Scrub Jay. Optimal habitat incorporates four species of stunted, low growing oaks [sand live oak (*Quercus geminata*), Chapman oak (*Quercus chapmanii*), myrtle oak (*Quercus myrtifolia*), and scrub oak (*Quercus inopina*)] that are 1-3 meters high, interspersed with 10 to 50 percent non-vegetated sandy openings, with a sand pine (*Pinus clausa*) canopy of less than 20 percent. Florida Scrub Jay habitat is absent from the project site. It is likely that this species only opportunistically forages within forested areas in the vicinity of the project site. There are identified scrub jay colonies within half a mile of the project site, within the coastal forests to the northwest of the beach.

### 3.2.5 WOOD STORK

Wood storks are large, long-legged wading birds, about 45 inches tall, with a wingspan of 60 to 65 inches. The current population of adult birds is difficult to estimate, since not all nest each year. Presently, the wood stork breeding population is believed to be greater than 8,000 nesting pairs (16,000 breeding adults) (U.S. Fish and Wildlife Service, 2020). Nesting has been restricted to Florida, Georgia, and South Carolina. Storks are birds of freshwater and estuarine wetlands, primarily nesting in cypress or mangrove swamps. They feed in freshwater marshes, narrow tidal creeks, or flooded tidal pools. Particularly attractive feeding sites are depressions in marshes or swamps where fish become concentrated during periods of falling water levels. The project site does not encompass wood stork nesting or foraging habitat; however, the sand bypass area lies within a colony buffer for the 612127 Lake Poinsett-Leo's-CR524 colony site.

### 3.2.6 SOUTHEASTERN BEACH MOUSE

The Southeastern beach mouse (*Peromyscus polionotus niveiventris*) is one of six existing coastal subspecies of the oldfield mouse. The oldfield mouse is a wide-ranging species in the Southeast. The southeastern beach mouse is the largest beach mouse; it averages 139 millimeters in total length and 52 millimeters in tail length. The distribution of the southeastern beach mouse has declined significantly, particularly in the southern part of its range. Historically, it was reported to occur from Florida's Ponce Inlet in Volusia County to Hollywood Beach in Broward County. More recently, the southeastern beach mouse has been reported only from Volusia County (Smyrna

Dunes Park), Federal lands in Brevard County (Canaveral National Seashore, Merritt Island National Wildlife Refuge, and Cape Canaveral Air Force Station), and in Indian River County (Sebastian Inlet State Recreation Area). Large, healthy populations of the southeastern beach mouse are still found on the beaches of Merritt Island National Wildlife Refuge and Cape Canaveral Air Force Station in Brevard County, all federally protected lands. This beach mouse is no longer found in the southern portion of its historic range (Broward, Palm Beach, and Martin Counties).

The southeastern beach mouse inhabits sand dunes which are vegetated by sea oats and dune panic grass. The scrub adjoining these dunes is populated by oaks and sand pine or palmetto. A study conducted on Merritt Island indicated that the southeastern beach mice may prefer open sand habitat with clumps of palmetto and sea grapes, or dense scrub habitat dominated by palmetto, sea grape, and wax myrtle; over seaward habitat with sea oats (Extine and Stout, 1987 and Kalkvik, 2012). Little specific information exists about the burrowing habits, although they are presumed to be similar to those of beach mice on the Gulf Coast. Sometimes beach mice use the former burrows of ghost crabs, but usually they dig their own. Burrow entrances are generally found on the sloping side of a dune at the base of a clump of grass. The burrows are used for nesting and food storage as well as a refuge. Predictably, beach mice feed on sea oats and beach grasses. During the spring and early summer when seeds are scarce, beach mice may eat invertebrates. The project is located adjacent to the habitat described above but will not directly impact any of the areas where beach mice may burrow or forage.

### **3.2.7 WEST INDIAN MANATEE**

Manatees (*Trichechus manatus*) are large, marine mammals that inhabit marine, brackish, and freshwater systems in coastal and riverine areas throughout Florida. Preferred habitats include areas near the shore featuring underwater vegetation like seagrass and eelgrass. They feed along grass bed margins with access to deep water channels, where they flee when threatened. Manatees can be found throughout Florida for most of the year. However, they cannot tolerate temperatures below 68 degrees Fahrenheit for extended periods of time, and during the winter months these cold temperatures keep the population concentrated in peninsular Florida. Many manatees rely on the warm water from natural springs and power plant outfalls. The coastal waters of the project site are potential habitat for manatees during migration or movement. The lack of submerged vegetation indicates the project area is not suitable foraging habitat for manatees. The shallower and protected waters of Port Canaveral and the Banana River provide safe harbor for manatees escaping inclement weather or colder temperatures.

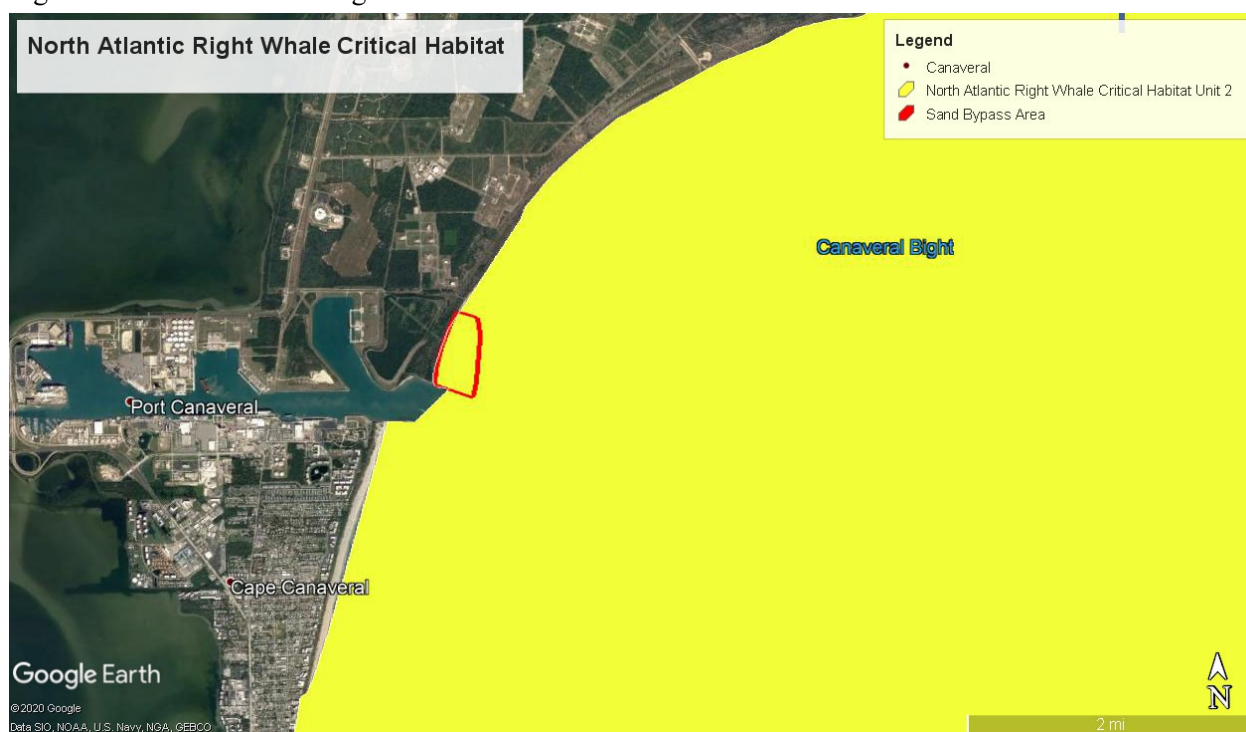
### **3.2.8 NORTH ATLANTIC RIGHT WHALE**

The North Atlantic right whale (*Eubalaena glacialis*) is the rarest of the world's baleen whales, with a North Atlantic population of 325 – 350 individuals. They range from Iceland to eastern Florida and are seasonal “residents” in inner shelf and mid-shelf waters (Hammer et al., 2005). Southward migration to calving grounds within inner shelf waters off southeastern Georgia and northeastern Florida occurs from mid-October to early January (Kraus et al., 1993 and Kraus et al., 2020). Calving occurs from December through March. The ESA designates one calving and

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two feeding areas in U.S. waters as critical habitat for North Atlantic right whales (<http://www.nmfs.noaa.gov/pr/species/criticalhabitat.htm>). The project area is within designated North Atlantic right whale critical habitat. Figure 3-3 shows the project area in relation to the designated critical habitat.

Figure 3-3. North Atlantic Right Whale Critical Habitat



### 3.3 ESSENTIAL FISH HABITAT

Pursuant to the Magnuson-Stevens Fishery Conservation and Management Act of 1976, 16 USC § 1801 et seq, waters and substrate within the project area have been identified as essential fish habitat (EFH) by the South Atlantic Fishery Management Council. EFH is defined as those waters and substrate necessary for fish to spawn, breed, feed, or grow to maturity. Marine EFH within the footprint of the project consists of marine water column and unconsolidated substrate. According to the best available data from the Florida Fish and Wildlife Conservation Commission (FWC) and South Florida Water Management District (SFWMD) sources, seagrass is absent from the project area. Species managed by the NMFS that may occur within the project location can be found in

Table 3-1.

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Table 3-1. Federally Managed Fish Species that May Occur Within the Project Area

\*A = Adult, J = Juvenile, L = Larva, E = Eggs

<b>Species</b>	<b>Life Stage</b>
Brown Shrimp <i>Farfantepenaeus aztecus</i>	A, J
Pink Shrimp <i>Farfantepenaeus setiferus</i>	A, J
Rock Shrimp <i>Sicyonia brevirostris</i>	A, J
White Shrimp <i>Litopenaeus setiferus</i>	A, J
Bull Shark <i>Carcharhinus leucas</i>	A, J
Spinner Shark <i>Carcharhinus brevipinna</i>	A, J
Nurse Shark <i>Ginglymostoma cirratum</i>	A, J
Lemon Shark <i>Negaprion brevirostris</i>	A, J
Sailfish <i>Istiophorus spp.</i>	A, J
Sandbar Shark <i>Carcharhinus plumbeus</i>	A

DRAFT SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

Brevard County, Florida, Federal Shore Protection Project (SPP) – North Reach Sand Bypass Borrow Area

Brevard County, Florida

Section 3: Affected Environment

<b>Species</b>	<b>Life Stage</b>
Great Hammerhead Shark <i>Sphyrna mokarran</i>	A, J
Scalloped Hammerhead Shark <i>Sphyrna lewini</i>	A, J
Tiger Shark <i>Galeocerdo cuvier</i>	A, J
Blacktip Shark <i>Carcharhinus limbatus</i>	A, J
Blacknose Shark <i>Carcharhinus acronotus</i>	A, J
Atlantic Sharpnose Shark <i>Rhizoprionodon terraenovae</i>	A, J
Bonnethead Shark <i>Sphyrna tiburo</i>	A, J
Finetooth Shark <i>Carcharhinus isodon</i>	A, J
Yellowfin Tuna <i>Thunnus albacares</i>	J
Bluefish <i>Pomatomus saltatrix</i>	A, J, L, E
Summer Flounder <i>Paralichthys dentatus</i>	A, J, L

### **3.4 MIGRATORY BIRDS**

Migratory birds have been described in prior NEPA documents for this project, and this information is incorporated herein by reference. Numerous bird species may nest immediately adjacent to the beaches or within dune systems in the adjoining habitats.

### **3.5 OTHER WILDLIFE RESOURCES**

Marine life common to east-central Florida can be found within the project boundary. Macroinvertebrates commonly found in marine habitat within Florida include annelids, a variety of mollusks besides oysters, arthropods, sponges, and polyps (Hoffman and Olsen 1982). The water depths, currents, and past dredging events in the sand bypass area have left the project area devoid of resources. Prior NEPA documents have described the wildlife resources and any potential mitigation provided for impacts to those resources and are incorporated by reference.

### **3.6 CULTURAL, HISTORIC, AND ARCHAEOLOGICAL RESOURCES**

Cultural resources have been described in prior NEPA documents for the project, which are incorporated herein by reference. Numerous cultural resources surveys have been conducted within the area of potential effects (APE). The APE includes the borrow area north of Canaveral Harbor, the renourishment area within the North Reach, and any pipeline corridors for sand placement. Multiple submerged cultural resources surveys and diver assessments have been investigated within the APE, including A Cultural Resources Magnetometer Survey of Canaveral Sand Bypass Borrow Site and Jetty Extension, Brevard County (Mid-Atlantic Technology 1993), Underwater Archaeological investigation of Two Potentially Significant Magnetic Anomalies near Canaveral Harbor, Brevard County, Florida (Hall 1995), Historic Property investigation Pursuant to Canaveral Sand Bypass Brevard County, Florida (Baer 1996), Submerged Historic Properties Survey, Canaveral Harbor Entrance Channel Widener, Brevard County, Florida (Watts 1997), and Canaveral Harbor Sand Bypass, Submerged Cultural Resources Survey and Archaeological Reconnaissance Survey, Brevard County, Florida (Panamerican Consultants 2019). These investigations have identified five potentially significant magnetic anomalies (Targets T-6, T-7, T-8, USACE-0001, and USACE-0002). The Corps has previously avoided effects to historic properties by maintaining a buffer where no dredging, spudding, or anchoring is allowed within 150 feet of these targets. The Corps made the determination of no effect to cultural or historical resources and consultation with SHPO was initiated on March 11, 2021. No comments were received in the 30-day consultation period and the consultation is complete pursuant to 36 C.F.R. 800.3(c)(4).

### **3.7 COASTAL BARRIER RESOURCES**

The project lies on a coastal barrier island; however, there is no designated Coastal Barrier Resources Act system unit within the footprint or adjacent to the project location.

### **3.8 WATER QUALITY**

Water quality has been described in prior NEPA documents for the project, which are incorporated herein by reference (Section 1.5Error! Reference source not found.). Water quality conditions have not changed within the project area since documented in previous NEPA documents.

### **3.9 AESTHETIC RESOURCES**

The sand bypass area consists of a beach adjacent to the open water of the Atlantic Ocean. The area remains in its natural state with no development immediately along the beach. Aesthetic resources have been described in prior NEPA documents for the project, which are incorporated herein by reference (Section 1.5Error! Reference source not found.).

### **3.10 RECREATION RESOURCES**

The sand bypass area can be utilized for water related recreation activities such as swimming, boating, fishing, or leisure. Recreation resources have been described in prior NEPA documents for the project, which are incorporated herein by reference (Section 1.5Error! Reference source not found.).

### **3.11 AIR QUALITY**

Air quality has been described in prior NEPA documents for the project, which are incorporated herein by reference (Section 1.5Error! Reference source not found.).

### **3.12 NOISE**

The lack of immediate development adjacent to the project site limits the amount of ambient noise in the area. The active port at Port Canaveral produces intermittent noise from vessel traffic and operations. Additional existing ambient noise levels have been described in prior NEPA documents for the project, which are incorporated herein by reference (Section 1.5Error! Reference source not found.).

### **3.13 ECONOMIC AND SOCIAL EFFECTS**

Tourism and recreation provide a significant economic resource to the region. The sand bypass area and receiving beaches play a role in the attraction of visitors to the local area. Additional economic conditions in the project area have been described in prior NEPA documents for the project, which are incorporated herein by reference (Section 1.5Error! Reference source not found.).

### **3.14 NATIVE AMERICANS**

Native American resources have been described in prior NEPA documents for the project, which are incorporated herein by reference. No portion of the proposed action is located within or adjacent to known Native American-owned lands, reservation lands, or Traditional Cultural Properties. However, Native American groups have lived throughout the region in the past and their descendants continue to live within the State of Florida and throughout the United States.

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Prior consultation on the project with Native American groups has not indicated any historic use of the project area. Consultation with Native American tribes having ancestral ties to this region, including the Seminole Tribe of Florida, the Seminole Nation of Oklahoma, the Thlopthlocco Tribal Town, and the Miccosukee Tribe of Indians of Florida has been initiated and no comments have been received from any of the tribes.



## **4 ENVIRONMENTAL EFFECTS**

This section is the scientific and analytic basis for the comparisons of the alternatives. See Table 2-1 in Section 2.4 for a summary of impacts. The following includes anticipated changes to the existing environment including direct, and indirect effects. Information on the sand placement and on other effects associated with beach renourishment are included in previous EAs referenced in Section 1.5, those discussions are incorporated by reference herein and will not be discussed in further detail in this report.

### **4.1 GENERAL ENVIRONMENTAL EFFECTS**

#### **4.1.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

The no-action alternative would result in no sand bypass at Canaveral Harbor. This would ensure no impacts from equipment or removal operations but would negatively affect the beach and nearshore waters. The accumulation of sand against the north jetty would compound and eventually result in the loss of open water habitat. The increased sand would likely strain the jetty and potentially endanger the harbor entrance/channel. Effects to the overall environment would be negative and long-term without remedial action, to include the removal of the accumulated sand.

#### **4.1.2 ALTERNATIVE 1: SAND BYPASS AT CANAVERAL HARBOR (PREFERRED ALTERNATIVE)**

The preferred alternative would result in the designation of an additional sand source for the Brevard SPP North Reach beaches. The sand bypass area has been authorized and used in the past; therefore, all actions being performed have been evaluated in the past. The general environmental effects associated with the project have been analyzed and deemed to have a net benefit on the environment, both at the bypass location and the North Reach beaches. The sand bypass would remove accumulated sand from the borrow area and remove the strain on the jetty. It would provide additional open water habitat and restore the area to a more natural state, as it was prior to jetty construction. The adverse effects to the environment are temporary and negligible, as there are no permanent structures or features being placed.

### **4.2 THREATENED AND ENDANGERED SPECIES**

#### **4.2.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

The no-action alternative would result in no adverse effects to listed species resulting from direct construction or operation activities. Continuing accumulation of sand would eliminate some open water habitat but would not affect T&E species. The no-action alternative has the possibility of leaving the North Reach beaches without a reliable sand source, resulting in erosion of prime sea turtle nesting habitat and potential shorebird nesting and foraging areas.

#### **4.2.2 ALTERNATIVE 1: SAND BYPASS AT CANAVERAL HARBOR (PREFERRED ALTERNATIVE)**

##### **4.2.2.1 Sea Turtles**

The Corps has determined that the proposed sand bypass project may affect, but is not likely to adversely affect swimming sea turtles based on protective measures. As with all projects located within the water, species interaction with construction equipment is a concern. The likelihood of

sea turtle take resulting from this project is low, as the open water location of the project would facilitate the avoidance of the area by any species. The dredging within the sand bypass area would not affect the loggerhead nearshore reproductive habitat, as the work will be required to be performed outside of sea turtle nesting season. The removal of the accumulated sediment will provide continued open water access and free navigation of the nearshore by females and hatchlings. The Corps determined the project will be covered under the SARBO. The project has been coordinated with NMFS and the U.S. Army Corps of Engineers South Atlantic Division (SAD). Recommendations from NMFS will be incorporated, as applicable and practicable, into the final project design and implementation. The proposed action is not likely to adversely affect sea turtles with implementation of the following protection measures:

- The contractor would instruct all personnel associated with construction activities about the potential presence of sea turtles in the area and the need to avoid collisions with them.
- If siltation barriers are used, they shall be made of material in which sea turtles cannot become entangled, are properly secured, and are regularly monitored to avoid entrapment. Barriers must not block entry to or exit from essential habitat.
- If a sea turtle were sighted within 100 yards of the project area, all appropriate precautions would be implemented by the contractor to ensure protection of these species. These precautions would include the operation of all moving equipment no closer than 50 feet of these species. If a sea turtle were closer than 50 feet to moving equipment, the equipment would be shut down and all dredging activities would cease to ensure protection of the animal. Dredging activities would not resume until the species has departed the project area.
- All vessels associated with the project would operate at ‘no wake’ speeds at all times while in shallow waters or channels where the draft of the boat provides less than three feet clearance from the bottom. Boats used to transport personnel would be shallow draft vessels, preferably of the light-displacement category, where navigational safety permits. Vessels transporting personnel between the landing and any workboat would follow routes of deep water to the greatest possible extent. Shore crews would use upland road access if available.
- All personnel would be advised that there are civil and criminal penalties for harming, harassing, or killing sea turtles which are protected under the Endangered Species Act.

#### **4.2.2.2 Piping Plover and Red Knot**

The Corps has determined there would be no effect to the piping plover or the red knot. The project is located within open water and will not adversely affect potential habitat for these species. The Corps has determined the project is in compliance with the Programmatic Piping Plover Biological Opinion (P<sup>3</sup>BO). The project was coordinated with USFWS upon the noticing of the draft SEA. The USFWS provided concurrence with the Corps determination on November 4, 2021 and concluded consultation. The project will incorporate pre- and post-construction survey requirements for these overwintering species concurrently with commencement of the work.

#### **4.2.2.3 Florida Scrub Jay**

Although the project is located within the consultation area for the scrub jay and in close proximity to identified habitats, the project will not affect suitable nesting or foraging habitat. The project is located within open water and will not affect areas where scrub jays are present.

#### **4.2.2.4 Wood Stork**

The project is located within the colony buffer for the wood stork colony 612127 Lake Poinsett - Leo's - CR524. The proposed work will not affect suitable foraging habitat for the stork, nor would it have any effect on potential roosting habitats. The project is located within the open water where no storks will be present.

#### **4.2.2.5 Beach Mouse**

The project is located adjacent to Southeastern beach mouse habitat but will not directly affect the dunes where the mice are found. Buffers and precautions will be taken to ensure potential beach mouse habitat will be avoided. The work will be performed in the open water and all staging and access areas will be precluded from impacting beach mouse or dune habitats.

#### **4.2.2.6 Manatee**

The Corps determined that the proposed dredge work may affect, but is not likely to adversely affect manatees based on protective measures. Protection of manatees will follow the standard manatee construction conditions for in water work. The project was coordinated with USFWS upon noticing of the draft SEA. The USFWS concurred with the Corps determination on November 4, 2021 and concluded consultation. Recommendations from the agencies have been incorporated, as applicable and practicable, into the final project design and implementation. The proposed action is not likely to adversely affect manatees with implementation of the following standard protection measures:

- The contractor would instruct all personnel associated with construction activities about the potential presence of manatees in the area and the need to avoid collisions with them.
- If siltation barriers are used, they shall be made of material in which manatees cannot become entangled, are properly secured, and are regularly monitored to avoid entrapment. Barriers must not block entry to or exit from essential habitat.
- If a manatee were sighted within 100 yards of the project area, all appropriate precautions would be implemented by the contractor to ensure protection of these species. These precautions would include the operation of all moving equipment no closer than 50 feet of these species. If a manatee were closer than 50 feet to moving equipment, the equipment would be shut down and all dredging activities would cease to ensure protection of the animal. Dredging activities would not resume until the species has departed the project area.
- All vessels associated with the project would operate at 'no wake' speeds at all times while in shallow waters or channels where the draft of the boat provides less than three feet clearance from the bottom. Boats used to transport personnel would be shallow draft vessels, preferably of the light-displacement category, where navigational safety permits. Vessels transporting personnel between the landing and any workboat would follow routes

of deep water to the greatest possible extent. Shore crews would use upland road access if available.

- Mooring bumpers would be placed on all large vessels wherever and whenever there is a potential for manatees to be crushed between two moored vessels. The bumpers would provide a minimum stand-off distance of four feet.
- All personnel would be advised that there are civil and criminal penalties for harming, harassing, or killing manatees, which are protected under the Endangered Species Act and the Marine Mammal Protection Act.

#### **4.2.2.7 Right Whale**

Through the use of the SARBO, the Corps made the determination of may affect, not likely to adversely affect for the North Atlantic right whale. Previous dredging in the project area utilized a cutterhead dredge and transport via pipeline. The SARBO provides there is an unlikely chance for adverse impacts to mobile ESA species resulting from barge-mounted and temporary operation dredging equipment (such as a cutterhead dredge). The project has been designed with the SARBO Project Design Criteria (PDCs) and North Atlantic Right Whale (NARW) Conservation Plan and the contractor will be required to abide by all protection measures for the right whale. Additionally, the likelihood of the whales being present in the nearshore, shallow waters where the dredging is to take place is low.

### **4.3 ESSENTIAL FISH HABITAT**

#### **4.3.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

The no-action alternative would not result in any adverse effects to essential fish habitat. There would be no work in the proposed action area and no effects resulting from dredging, pumping, or operation activities.

#### **4.3.2 ALTERNATIVE 1: SAND BYPASS AT CANAVERAL HARBOR (PREFERRED ALTERNATIVE)**

An EFH Assessment is incorporated into Sections 3.3 and 4.3 and was coordinated with NMFS concurrently with the public review of this draft SEA. The proposed work is expected to temporarily impact approximately 200 acres of ocean, high-salinity surf zone EFH. The work is temporary and will have the potential to increase EFH within the borrow area through the removal of accumulated sediment. Turbidity will be monitored during construction activities. The consultation with NMFS-HCD has been completed and ensures compliance with applicable laws and regulations.

### **4.4 MIGRATORY BIRDS**

#### **4.4.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

No adverse effects to migratory birds are anticipated from the no-action alternative.

#### **4.4.2 ALTERNATIVE 1: SAND BYPASS AT CANAVERAL HARBOR (PREFERRED ALTERNATIVE)**

The project has been designed and sited to ensure protection of migratory birds. There are no adverse effects expected from the work and the District's migratory bird protection plan would be followed during construction to protect nesting birds.

### **4.5 OTHER WILDLIFE RESOURCES**

#### **4.5.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

The no-action alternative would result in no adverse impacts to other wildlife resources in the project area.

#### **4.5.2 ALTERNATIVE 1: SAND BYPASS AT CANAVERAL HARBOR (PREFERRED ALTERNATIVE)**

Protective measures would ensure no adverse impacts to wildlife throughout the project area. A temporary displacement of marine wildlife would likely occur during dredging activities, but the site would return to preconstruction conditions after completion of the dredge and placement.

### **4.6 CULTURAL, HISTORIC, AND ARCHAEOLOGICAL RESOURCES**

#### **4.6.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

Continued degradation of the North Reach beaches without a reliable and convenient sand source has the potential to adversely affect previously unidentified cultural resources through erosion.

#### **4.6.2 ALTERNATIVE 1: SAND BYPASS AT CANAVERAL HARBOR (PREFERRED ALTERNATIVE)**

As indicated in Section 3.6, multiple submerged cultural resources surveys and diver assessments have been undertaken within the APE. In order to determine if Alternative 1 will adversely affect historic properties, the Corps contracted with Panamerican Consultants, Inc. (Panamerican) to conduct a comprehensive remote sensing survey of the APE, as well as to conduct diver identification and National Register of Historic Places (NRHP) evaluation of five previously identified submerged magnetic anomalies (Targets T-6, T-7, T-8, USACE-0001, and USACE-0002) located within the APE. The diver identification of the five targets concluded that only one represents a potential historic property and is recommended for avoidance or additional investigation. Target T6 is an abandoned barge of unknown material, construction, and age (although it was recorded derelict in 1983). Target T6 is currently buried above the high tide line under several feet of overburden and is well protected from degradative forces. The submerged cultural resources survey also identified two new potential shipwrecks within the pipeline placement portion of the APE. The Corps will avoid adverse effects to these historic properties by maintaining a 150-foot buffer surrounding the two new targets. Based on avoidance of these targets, the Corps has determined that Alternative 1 poses no adverse effect to historic properties. Consultation with the Florida State Historic Preservation Officer (SHPO) and appropriate federally recognized Tribes was initiated on March 11, 2021 (Appendix B). No comments were received from consulting parties and the consultation is complete pursuant to 36 C.F.R. 800.3(c)(4).

## **4.7 COASTAL BARRIER RESOURCES**

### **4.7.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

The no-action alternative would not impact any coastal barrier resources or otherwise protected areas.

### **4.7.2 ALTERNATIVE 1: SAND BYPASS AT CANAVERAL HARBOR (PREFERRED ALTERNATIVE)**

The project lies on a coastal barrier island, however, there are no Coastal Barrier Resource System units designated in the project area.

## **4.8 WATER QUALITY**

### **4.8.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

The no-action alternative would not result in any effects to the water quality throughout the project location.

### **4.8.2 ALTERNATIVE 1: SAND BYPASS AT CANAVERAL HARBOR (PREFERRED ALTERNATIVE)**

Dredging activities would likely produce a temporary, minor, and localized adverse effect to water quality. Specifically, turbidity levels within the mixing zone would likely be above background levels during dredge operations. Visible plumes at the water surface would also be expected in the immediate vicinity of the operation. Elevated turbidity levels are expected to dissipate rapidly, returning to background levels in a short time period. In order to ensure that turbidity levels do not exceed the compliance standards, turbidity monitoring will be undertaken at the dredge site. If turbidity levels exceed compliance standards, the Corps and/or its contractor will take corrective measures and/or dredging operations will be halted until such time that compliance with turbidity standards are met.

## **4.9 AESTHETIC RESOURCES**

### **4.9.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

The no-action alternative would result in no change to the aesthetics of the sand borrow area. Aesthetics are very subjective and are based on the viewpoint of the individual describing the scene. General impacts to the aesthetics are evaluated through the lens of the natural resource and presence of equipment that otherwise would not be present.

### **4.9.2 ALTERNATIVE 1: SAND BYPASS AT CANAVERAL HARBOR (PREFERRED ALTERNATIVE)**

The aesthetics of the area due to dredging and nourishment operations would be temporarily adversely affected during construction due to the presence of construction equipment in the water and on the beach. There will only be a temporary reduction in aesthetics. The area will return to previous conditions after work has been completed.

## **4.10 RECREATION RESOURCES**

### **4.10.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

There would be no effects to recreation resources at the dredging area with the no-action alternative.

### **4.10.2 ALTERNATIVE 1: SAND BYPASS AT CANAVERAL HARBOR (PREFERRED ALTERNATIVE)**

Effects to recreation during dredging will be minimal and limited to the construction period. The open water areas where the dredging is occurring would be closed to recreation activities, limiting swimming, surfing, and fishing activity. These activities would resume after the dredging was completed. There will be a long-term benefit to recreation at the borrow area.

## **4.11 AIR QUALITY**

### **4.11.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

The no-action alternative would have no effect to air quality as no work would be performed and no emissions from equipment would occur.

### **4.11.2 ALTERNATIVE 1: SAND BYPASS AT CANAVERAL HARBOR (PREFERRED ALTERNATIVE)**

The dredging of sand would result in low-level emissions from the operation of the construction equipment. Exhaust emissions would have a temporary effect on air quality. The short-term effect of emissions by the dredge and other construction equipment associated with the project would not significantly affect air quality. No air quality permits would be required for this project. Brevard County is designated as an attainment area for Federal air quality standards under the Clean Air Act. Since the project is located within an attainment area Environmental Protection Agency's (EPA) General Conformity Rule to implement Section 176(c) of the Clean Air Act does not apply and a conformity determination is not required.

## **4.12 NOISE**

### **4.12.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

The no-action alternative would not result in any noise from the project, as there would be no construction and no equipment operating to produce noise.

### **4.12.2 ALTERNATIVE 1: SAND BYPASS AT CANAVERAL HARBOR (PREFERRED ALTERNATIVE)**

The dredging of sand would temporarily raise the noise level in the area during construction from equipment (e.g., dredges, barges, trucks). The noise levels associated with the dredging would be temporary in nature.

## **4.13 ECONOMIC AND SOCIAL EFFECTS**

### **4.13.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

No construction at the borrow area is unlikely to have a significant impact to the local economy. Without the removal of the accumulated sediment, the pressure on the jetty could require

maintenance that would negatively impact Port Canaveral operations, resulting in a potential negative economic impact on the overall area.

#### **4.13.2 ALTERNATIVE 1: SAND BYPASS AT CANAVERAL HARBOR (PREFERRED ALTERNATIVE)**

There is a potential for increased fishing habitat and potential recreational activity at the dredge borrow area once the work has been completed. Overall, the project will have a beneficial effect to the social and economic factors in the area.

### **4.14 NATIVE AMERICANS**

#### **4.14.1 NO-ACTION ALTERNATIVE (STATUS QUO)**

The no-action alternative would not result in any effects to Native American lands or resources.

#### **4.14.2 ALTERNATIVE 1: SAND BYPASS AT CANAVERAL HARBOR (PREFERRED ALTERNATIVE)**

As discussed in Section 3, there are no known Native American properties within the project area; therefore, Alternative 1 will have no effect on Native Americans. Consultation is ongoing between the Corps and Native American tribes having ancestral ties to this region, including the Seminole Tribe of Florida, the Seminole Nation of Oklahoma, the Thlopthlocco Tribal Town, the Miccosukee Tribe of Indians of Florida, and the Muscogee (Creek) Nation (Appendix B).

### **4.15 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

#### **4.15.1 IRREVERSIBLE COMMITMENT**

An irreversible commitment of resources is one in which the ability to use and/or enjoy the resource is lost forever. The use of fuel is the only irreversible commitment of resources associated with this project, as the fuel will be consumed and unable to be utilized again.

#### **4.15.2 IRRETRIEVABLE COMMITMENT**

An irretrievable commitment of resources is one in which, due to decisions to manage the resource for another purpose, opportunities to use or enjoy the resource as they presently exist are lost for a period of time. Typically, it refers to the use of renewable resources, including human effort, and to other utilization opportunities foregone in favor of the proposed action.

The project would result in temporary disruption of habitat at the bypass area. The habitat would not be permanently affected, and pre-construction conditions would reestablish within the area shortly after all operations were completed.

### **4.16 UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS**

Most of the beach sand infauna (e.g., sand fleas) will be unavoidably lost as a result of dredging activities within the bypass area. However, these losses are not expected to have a long-term, significant adverse impact on the surrounding environment since infauna outside of the borrow area will recolonize the dredged area within one to three seasons after construction. Changes in macroinfaunal community assemblages are expected to be temporary and should result in a minimal loss of productivity.



#### **4.17 INDIRECT EFFECTS**

There is relatively limited opportunity for future development in the project area. No additional development along these shorelines is anticipated to occur.

#### **4.18 CONFLICTS AND CONTROVERSY**

There are no known conflicts or controversy associated with the sand bypass project for the Brevard County Florida SPP. The State of Florida's concurrence that the sand bypass is consistent with the Coastal Zone Management Act will be obtained through the Florida Department of Environmental Protection Joint Coastal Permit.

#### **4.19 UNCERTAIN, UNIQUE, OR UNKNOWN RISKS**

There are no uncertain, unique or unknown risks associated with the sand bypass project.

#### **4.20 PRECEDENT AND PRINCIPLE FOR FUTURE ACTIONS**

The proposed activities are consistent with, and/or adaptations of, prior permitted activities conducted by the Corps. These include prior sand bypass projects in the area, beach nourishments and periodic nourishment along the Brevard County Florida SPP and other SPP projects.

#### **4.21 ENVIRONMENTAL COMMITMENTS**

The Corps commits to avoiding, minimizing, or mitigating for adverse effects during construction activities by including the following commitments in the contract specifications:

1. Protective measures for threatened and endangered species shall be enforced in accordance with the USFWS Statewide Programmatic Biological Opinion (2015), the USFWS Programmatic Piping Plover Biological Opinion (2013), South Atlantic Regional Biological Opinion (2020).
2. All water quality terms and conditions of any applicable water quality certification shall be implemented.
3. Migratory birds (adult birds, eggs and chicks) shall be protected during construction activities.
4. Essential Fish Habitat will have a temporary impact to a high-salinity ocean surf zone. Coordination with NMFS Habitat Conservation Division has been completed and ensures protection of EFH at the project site.
5. In the event that cultural resources are discovered, then protective measures shall be utilized.
6. Air emissions such as vehicular exhaust and dust shall be controlled.
7. The contracting officer would notify the contractor in writing of any observed noncompliance with Federal, State, or local laws or regulations, permits and other elements of the contractor's Environmental Protection Plan.
8. The contractor would train his personnel in all phases of environmental protection.
9. The environmental resources within the project boundaries and those affected outside the limits of permanent work would be protected during the entire period of work.

10. An oil spill prevention plan shall be required.

## **5 COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS**

### **5.1 NATIONAL ENVIRONMENTAL POLICY ACT OF 1969**

Section 1.5 depicts NEPA documents that have previously discussed and evaluated the project's sand bypass activity. This SEA was prepared to evaluate the proposed project's effect to the human environment for the continued use of the sand bypass area and ensure the project is in compliance with applicable laws and regulations. The SEA was noticed on August 26, 2021 to disclose the Federal action and offer the public an opportunity to provide comment and participate in the decision-making process. Comments have been incorporated into this document and listed in Section 7.3 below. The project is in compliance with NEPA.

### **5.2 ENDANGERED SPECIES ACT OF 1973 (16 USC §1531 *ET SEQ.*)**

Pursuant to Section 7 of the Endangered Species Act of 1973, (16 U.S.C. §1531 *et seq.*) as amended, the project has been coordinated with NMFS and SAD through the SARBO dated March 27, 2020. The Corps has made the determination of may affect, not likely to adversely for the West Indian manatee, right whale, and sea turtles. The Corps has made a determination of no effect for the southeastern beach mouse, piping plover, red knot, scrub jay, and wood stork. The applicable conditions of the SARBO issued by the NMFS and the SPBO issued by the USFWS would be followed during construction. Consultation with the appropriate resource agencies was conducted concurrent with the noticing of the draft SEA and has been concluded. The project is in compliance with this Act.

### **5.3 FISH AND WILDLIFE COORDINATION ACT OF 1958, AS AMENDED (16 USC § 661 *ET SEQ.*)**

Coordination with USFWS was conducted with the noticing of the draft SEA. The provisions of the Fish and Wildlife Coordination Act of 1958, as amended (FWCA) (48 Stat. 401; 16 U.S.C. 661 *et seq.*) are covered in the SPBO and a Coordination Act Report (CAR) is not needed. The project complies with this Act.

### **5.4 NATIONAL HISTORIC PRESERVATION ACT OF 1966 (54 USC § 300101 *ET SEQ.*)**

The project is in compliance with Section 106 of the NHPA (54 U.S.C. § 306108). As part of the requirements and consultation process contained within the NHPA implementing regulations of 36 C.F.R. Part 800, this project is also in compliance with the Archaeological and Historic Preservation Act (54 U.S.C. §§ 312501-312508) (Public Law 93-291), Archeological Resources Protection Act of 1979 (16 U.S.C. §§ 470aa-470mm) (Public Law 96-95), American Indian Religious Freedom Act (42 U.S.C. §§ 1996 and 1996a) (Public Law 95-341), Native American Graves Protection and Repatriation Act (25 U.S.C. § 3001 *et. seq.*) (Public Law 101-601), Executive Orders 11593, 13007, and 13175, the Presidential Memo of 1994 on Government to Government Relations and appropriate Florida Statutes. Consultation was initiated on March 11, 2021. No comments were received in the 30-day consultation period and the consultation is complete pursuant to 36 C.F.R. 800.3(c)(4). Consultation with SHPO and the appropriate federally recognized tribes was initiated by letter on March 11, 2021. The Corps received no

comments or objections and, per 36 C.F.R. 800.3(c)(4), the Section 106 consultation process was concluded on April 11, 2021.

### **5.5 CLEAN WATER ACT OF 1972 (33 USC § 1251 *ET SEQ.*)**

The project shall be in compliance with this Act. A Section 404(b)(1) Guidelines evaluation has been completed in a previous evaluation and has been incorporated by reference (2013 and 2017 BOEM Environmental Assessments, See Section 1.5. A Section 401 Water Quality Certification shall be obtained from the FDEP through the Joint Coastal Permitting Program. All State Water Quality Standards would be met. The project is in compliance with this Act.

### **5.6 CLEAN AIR ACT OF 1963 (42 USC § 7401 *ET SEQ.*)**

Vehicular emission and airborne dust particulates resulting from construction activities shall be controlled. No air quality permits will be required. This project is in compliance with this Act.

### **5.7 COASTAL ZONE MANAGEMENT ACT OF 1972 (16 USC § 1451 *ET SEQ.*)**

A Federal consistency determination in accordance with 15 CFR Part 930 Subpart C is included in this report as Appendix A. The Corps determined that the proposed action is consistent to the maximum extent practicable with the enforceable policies of the Florida Coastal Management Program. The Corps requested State consistency review during the coordination of the draft SEA. The Corps received a consistency determination with the Florida Coastal Management Plan on October 11, 2021. The project is in compliance with this Act.

### **5.8 FARMLAND PROTECTION POLICY ACT OF 1981 (7 USC § 4201 *ET SEQ.*)**

No prime or unique farmland would be impacted by implementation of this project. This Act is not applicable.

### **5.9 WILD AND SCENIC RIVER ACT OF 1968 (16 USC §1271 *ET SEQ.*)**

No designated Wild and Scenic river reaches would be affected by project related activities. This Act is not applicable.

### **5.10 MARINE MAMMAL PROTECTION ACT OF 1972 (16 USC § 1361 *ET SEQ.*)**

Protective measures, to include the 2011 Standard Manatee Conditions for In-Water Work, for marine mammals shall be implemented. This project was coordinated with the USFWS and NMFS. All protection measures will be incorporated into the project plans and specifications and will be implemented by the contractor during all in-water work. The work will be in full compliance with the Act.

### **5.11 ESTUARY PROTECTION ACT OF 1968 (16 USC §§ 1221-26)**

Congress designated the Indian River Lagoon as an estuary of national significance. The Indian River Lagoon is located to the south of the project site. Although the project footprint does not

encompass areas of the estuary itself, the protective measures described in Section 4 would ensure avoidance and minimization of impacts from the proposed dredging. This project is in compliance with the Act.

#### **5.12 FEDERAL WATER PROJECT RECREATION ACT OF 1965, AS AMENDED (16 USC §§ 4601-12 *ET SEQ.*)**

The principles of the Federal Water Project Recreation Act, (Public Law 89-72) as amended, have been fulfilled by complying with the recreation cost-sharing criteria as outlined in Section 2 (a), paragraph (2).

#### **5.13 SUBMERGED LANDS ACT OF 1953 (43 USC § 1301 *ET SEQ.*)**

This project would occur on submerged lands of the State of Florida. This project shall be coordinated with the State and is in full compliance with the Act.

#### **5.14 COASTAL BARRIER RESOURCES ACT AND COASTAL BARRIER IMPROVEMENT ACT (16 USC § 3501 *ET SEQ.*)**

There are no designated coastal barrier resource units in the project areas that would be affected by this project. These Acts are not applicable.

#### **5.15 RIVERS AND HARBORS ACT OF 1899, SECTION 10 (33 USC § 403 *ET SEQ.*)**

The proposed work could temporarily obstruct navigable waters of the United States. The proposed action will be subjected to a public notice and other evaluations normally conducted for activities subject to the act. The project is in full compliance with this Act.

#### **5.16 ANADROMOUS FISH CONSERVATION ACT OF 1965, AS AMENDED (16 USC §§ 757A-757G)**

Anadromous fish species will not be affected. The project will be coordinated with the NMFS and will be in compliance with this Act.

#### **5.17 MIGRATORY BIRD TREATY ACT OF 1918 (16 USC §§ 703-712) AND MIGRATORY BIRD CONSERVATION ACT OF 1929 (16 USC § 715 *ET SEQ.*)**

The Corps will include standard migratory bird protection measures, i.e. nest avoidance, in the project plans and specifications and will require the contractor to abide by those requirements. The project is in compliance with these Acts.

#### **5.18 MARINE PROTECTION, RESEARCH, AND SANCTUARIES ACT OF 1972 (16 USC § 1431 *ET SEQ.* AND 33 USC § 1401 *ET SEQ.*)**

The term "dumping" as defined in Section 3 (f) of Act 33 U.S.C. 1402 does not apply to the disposal of material for beach nourishment, upland disposal, or to the placement of material for a purpose other than offshore disposal (i.e. placement of rock material as an artificial reef or the

construction of artificial reefs as mitigation). Therefore, ocean disposal is not a component of this project and the Marine Protection, Research and Sanctuaries Act does not apply to this project.

### **5.19 MAGNUSON-STEVENSON FISHERY CONSERVATION AND MANAGEMENT ACT OF 1976 (16 USC § 1801 *ET SEQ.*)**

The Corps has determined that the project would have only a negligible adverse effect on EFH or federally managed fish species occurring along the southeast coast of Florida. EFH coordination was completed concurrent with noticing of the draft SEA. Per the September 3, 2019 and October 2, 2019 EFH Findings between NMFS' Southeast Regional Office and South Atlantic Division, U.S. Army Corps of Engineers and Jacksonville District, respectively, the EFH Assessment for the project is integrated within the SEA. The project is in compliance with these Acts.

### **5.20 UNIFORM RELOCATION ASSISTANCE AND REAL PROPERTY ACQUISITION POLICIES ACT OF 1970 (42 USC § 4601 *ET SEQ.*)**

This project will not be acquiring any real estate interests from private property owners. This Act is not applicable.

### **5.21 E.O. 11990, PROTECTION OF WETLANDS**

There would be no impacts to wetlands by project activities. This EO does not apply.

### **5.22 E.O. 11988, FLOOD PLAIN MANAGEMENT**

To comply with E.O. 11988, the policy of the Corps is to formulate projects that, to the extent possible, avoid or minimize adverse effects associated with the use of the floodplain and avoid inducing development in the floodplain unless there is no practicable alternative.

Per guidance provided in E.O. 11988, the following factors were evaluated:

1. *Determine if a proposed action is in the base floodplain (area with a one percent or greater chance of flooding in any given year).*

The project is located along the shoreline and is within the 100-year flood zone as mapped by the Federal Emergency Management Agency (FEMA).

2. *Conduct early public review, including public notice.*

Public and agency coordination (including scoping efforts and NEPA reviews) is described in Section 7.

3. *Identify and evaluate practicable alternatives to locating in the base floodplain, including alternative sites outside of the floodplain.*

There is no practicable alternative to locating the project outside of the floodplain due to the nature of the project's purpose and need, which is described in Section 1.

4. *Identify impacts of the proposed action.*

Effects of the proposed action are described in Section 4.

5. *Minimize threats to life and property and to natural and beneficial floodplain values. Restore and preserve natural and beneficial floodplain values.*

Beach renourishment and sand removal from the bypass area will provide protection to coastal infrastructure, thereby minimizing threats to life and property while restoring and preserving natural and beneficial floodplain values. More details on the project's purpose and need are included in Section 1. Details on the environmental commitments are included in Section 4.23.

6. *Reevaluate alternatives.*

Alternatives are described in Section 2. The Preferred Alternative that is selected best meets the purpose and need, which is described in Section 1.

7. *Issue findings and a public explanation.*

This NEPA document provides a FONSI and describes the Preferred Alternatives in Section 2. Public and agency coordination is described in Section 7.

8. *Implement the action.*

Construction will occur after all appropriate documentation (e.g., agreements, permitting, etc.) is completed and funds are received.

The Corps concludes that the proposed project will not result in harm to people, property, and floodplain values; will not induce development in the floodplain; and the project is in the public interest. For the reasons stated above, the project complies with this E.O.

## **5.23 E.O. 12898, ENVIRONMENTAL JUSTICE**

On February 11, 1994, the President of the U.S. issued Executive Order (E.O.) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. This E.O. mandates that each Federal agency make environmental justice (EJ) part of the agency mission and to address, as appropriate, disproportionately high and adverse human health or environmental effects of the programs and policies on minority and low-income populations. Significance thresholds that may be used to evaluate the effects of a proposed action related to EJ are not specifically outlined. However, Council on Environmental Quality (CEQ) guidance requires an evaluation of a proposed action's effect on the human environment and the Corps must comply with Executive Order 12898. The Corps has determined that a proposed action or its alternatives would result in significant effects related to EJ if the proposed action or an alternative would disproportionately adversely affect an EJ community through its effects on:

- Environmental conditions such as quality of air, water, and other environmental media; degradation of aesthetics; loss of open space; and nuisance concerns such as odor, noise, and dust;
- Human health such as exposure of EJ populations to pathogens;
- Public welfare in terms of social conditions such as reduced access to certain amenities like hospitals, safe drinking water, public transportation, etc.; and
- Public welfare in terms of economic conditions such as changes in employment, income, and the cost of housing, etc.

The Corps conducted an evaluation of EJ impacts using a two-step process: as a first step, the study area was evaluated to determine whether it contains a concentration of minority and/or low-income populations. The second step includes evaluation to determine whether the proposed action would result in a disproportionately, high adverse effect on these populations.

As defined in Executive Order 12898 and the CEQ guidance, a minority population occurs where one or both of the following conditions are met within a given geographic area:

- The American Indian, Alaskan Native, Asian, Pacific Islander, Black, or Hispanic population of the affected area exceeds 50 percent; or
- The minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

An affected geographic area is considered to consist of a low-income population (i.e., below the poverty level for purposes of this analysis) where the percentage of low-income persons:

- is at least 50 percent of the total population; or
- is meaningfully greater than the low-income population percentage in the general population or other appropriate unit of geographic analysis.

#### Step 1: Study Area's Minority and Low-Income Population Average Percentages

Using the USEPA EJAssist Tool, the project areas were identified and the average percentage for the EJ criteria are compared in **Error! Reference source not found..**

	User-Defined Project Area %	Florida State Average %
<b>Minority Population</b>	7%	45%
<b>Low Income Population</b>	37%	36%

Table 5-1. USEPA EJAssist Environmental Justice Criteria Percentages for Brevard County Florida Sand Bypass Area.

Based on the information provided by the USEPA EJAssist tool, the average minority population is approximately 7% of the total population and approximately 37% of the individuals in the project area are considered below the poverty level. Therefore, the study area which comprises Brevard County Florida Sand Bypass Area, does not constitute an EJ community because the population percentages are below 50 percent, indicating that the study area does not contain a high concentration of minority and low-income population.

Since the Brevard County Sand Bypass Area does not contain a concentration of minority and/or low-income populations such that it would result in a disproportionate, high adverse effect on these populations, Step 2 is not incorporated.

In summary, the proposed actions would not use methods or practices that discriminate on the basis of race, color, or national origin and would not have a disproportionate effect on minority or low-income communities. The project complies with the Order.



#### **5.24 E.O. 13045, PROTECTION OF CHILDREN FROM ENVIRONMENTAL HEALTH RISKS AND SAFETY RISKS**

The proposed action does not affect children disproportionately from other members of the population and would not increase any environmental health or safety risks to children. The project complies with the Order.

#### **5.25 E.O. 13089, CORAL REEF PROTECTION**

This project would not impact those species, habitats, and other natural resources associated with coral reefs, including hardbottom habitats. There are no coral reefs within the project area. The project complies with this Order.

#### **5.26 E.O. 13112, INVASIVE SPECIES**

The project's plans and specifications will include conditions to avoid the introduction and/or promotion of non-native species to the region. The Corps will require the contractor to abide by those requirements. The project complies with this Order.

#### **5.27 E.O. 13186, RESPONSIBILITIES OF FEDERAL AGENCIES TO PROTECT MIGRATORY BIRDS**

Measures to avoid the destruction of migratory birds and their eggs or hatchlings are described in Section 4 of this draft SEA and are incorporated by reference. The Corps will include standard migratory bird protection requirements in the project plans and specifications and will require the contractor to abide by those requirements. The project complies with this Order.

## 6 LIST OF PREPARERS AND REVIEWERS

### 6.1 PREPARERS

Preparer	Discipline	Role
Michael Ornella II U.S. Army Corps of Engineers	Biologist	Primary Author
Jon Simon Suarez	Archaeologist	Cultural Resources

## **7 PUBLIC INVOLVEMENT**

### **7.1 SCOPING AND DRAFT SEA**

Pursuant to the National Environmental Policy Act and Corps Regulation, the Corps issued a Notice of Availability (NOA) for the review of the draft SEA and proposed Finding of No Significant Impact (FONSI) to stakeholders.

### **7.2 AGENCY COORDINATION**

Coordination was conducted with appropriate agencies and described in this document. Agency coordination letters and documents can be found in Appendix B.

### **7.3 COMMENTS RECEIVED AND RESPONSE**

All comment letters or emails received during the public comment period on the draft SEA have been included in Appendix B.

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## **APPENDIX A - COASTAL ZONE MANAGEMENT CONSISTENCY**

## FLORIDA COASTAL ZONE MANAGEMENT PROGRAM FEDERAL CONSISTENCY EVALUATION PROCEDURES

### Brevard County Shore Protection Project – Sand Bypass at Canaveral Harbor

#### Brevard County, FL

**Enforceable Policy.** Florida State Statutes considered “enforceable policy” under the Coastal Zone Management Act ([www.dep.state.fl.us/cmp/federal/24\\_statutes.htm](http://www.dep.state.fl.us/cmp/federal/24_statutes.htm)).

**Applicability of the Coastal Zone Management Act.** The following table summarizes the process and procedures under the Coastal Zone Management Act for Federal Actions and for non-Federal Applicants\*.

Item	Non-Federal Applicant (15 CFR 930, subpart D)	Federal Action (15 CFR 930, subpart C)
Enforceable Policies	Reviewed and approved by NOAA (in FL <a href="http://www.dep.state.fl.us/cmp/federal/24_statutes.htm">www.dep.state.fl.us/cmp/federal/24_statutes.htm</a> )	Same
Effects Test	Direct, Indirect (cumulative, secondary), adverse or beneficial	Same
Review Time	6 months from state receipt of Consistency Certification (30-days for completeness notice) Can be altered by written agreement between State and applicant	60 Days, extendable (or contractible) by mutual agreement
Consistency	Must be Fully Consistent	To Maximum Extent Practicable**
Procedure Initiation	Applicant provides Consistency Certification to State	Federal Agency provides “Consistency Statement” to State
Appealable	Yes, applicant can appeal to Secretary (NOAA)	No (NOAA can “mediate”)
Activities	Listed activities with their geographic location (State can request additional listing within 30 days)	Listed or Unlisted Activities in State Program
Activities in Another State	Must have approval for interstate reviews from NOAA	Interstate review approval NOT required

Activities in Federal Waters	Yes, if activity affects state waters	Same
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\* There are separate requirements for activities on the Outer Continental Shelf (subpart E) and for “assistance to an applicant agency” (subpart F).

\*\* Must be fully consistent except for items prohibited by applicable law (generally does not count lack of funding as prohibited by law, 15 CFR 930.32).

## COASTAL ZONE CONSISTENCY STATEMENT BY STATUTE/ENFORCEABLE POLICY

***Chapter 161, F.S., Beach and Shore Preservation.*** Coastal areas are among the state’s most valuable natural, aesthetic, and economic resources; and they provide habitat for a variety of plant and animal life. The state is required to protect coastal areas from imprudent activities that could jeopardize the stability of the beach-dune system, accelerate erosion, provide inadequate protection to upland structures, endanger adjacent properties, or interfere with public beach access. Coastal areas used, or likely to be used, by sea turtles are designated for nesting, and the removal of vegetative cover that binds sand is prohibited. This statute provides policy for the regulation of construction, reconstruction, and other physical activities related to the beaches and shores of the state. Additionally, this statute requires the restoration and maintenance of critically eroding beaches.

*Response:* The proposed dredging will not violate the intent of this chapter. The proposed plans and information have been submitted to the State in compliance with this chapter.

***Chapter 163, Part II, F.S., Intergovernmental Programs: Growth Policy, County and Municipal Planning; Land Development Regulation.*** The purpose of this statute is to provide for the implementation of comprehensive planning programs to guide and control future development in the state. The comprehensive planning process encourages units of local government to preserve, promote, protect, and improve the public health, safety, comfort, good order, appearance, convenience, law enforcement and fire prevention, and general welfare; prevent the overcrowding of land and avoid undue concentration of population; facilitate the adequate and efficient provision of public facilities and services; and conserve, develop, utilize, and protect natural resources within their jurisdictions.

***Chapter 163, Part II - Intergovernmental Programs: Growth Policy; County and Municipal Planning; Land Development Regulation***

Enforceable policy includes only:

Section 163.3164 Local Government Comprehensive Planning and Land Development Regulation Act



Section 163.3177(6)(a) requiring a future land use plan element designating proposed future general distribution, location, and extent of the uses of land for residential uses, commercial uses, industry, agriculture, recreation, conservation, education, public buildings and grounds, other public facilities, and other categories of the public and private uses of land.

Section 163.3177 (10)(h), public facilities and services needed to support development shall be available concurrent with the impacts of such development in accordance with s. 163.3180. [see .3180(2)(a-c), (5)(a&c), (6), and (8); below].

Section 163.3177 (10)(l), consider land use compatibility issues in the vicinity of all airports in coordination with the Department of Transportation and adjacent to or in close proximity to all military installations in coordination with the Department of Defense.

Section 163.3177 (11)(a), innovative approaches to development which may better serve to protect environmentally sensitive areas, maintain the economic viability of agricultural and other predominantly rural land uses, and provide for the cost-efficient delivery of public facilities and services.

Section 163.3177 (11)(c), maximize the use of existing facilities and services through redevelopment, urban infill development, and other strategies for urban revitalization.

Section 163.3178(1), local government comprehensive plans restrict development activities where such activities would damage or destroy coastal resources, and that such plans protect human life and limit public expenditures in areas that are subject to destruction by natural disaster.

Section 163.3178 (2)(d-j); studies, surveys, and data; be consistent with coastal resource plans prepared and adopted pursuant to general or special law; and contain:

Section 163.3178 (d) A component which outlines principles for hazard mitigation and protection of human life against the effects of natural disaster, including population evacuation, which take into consideration the capability to safely evacuate the density of coastal population proposed in the future land use plan element in the event of an impending natural disaster. The Division of Emergency Management shall manage the update of the regional hurricane evacuation studies, ensure such studies are done in a consistent manner, and ensure that the methodology used for modeling storm surge is that used by the National Hurricane Center.

Section 163.3178 (e) A component which outlines principles for protecting existing beach and dune systems from human-induced erosion and for restoring altered beach and dune systems.

Section 163.3178 (f) A redevelopment component which outlines the principles which shall be used to eliminate inappropriate and unsafe development in the coastal areas when opportunities arise.

Section 163.3178 (g) A shoreline use component that identifies public access to beach and shoreline areas and addresses the need for water-dependent and water-related facilities, including marinas, along shoreline areas. Such component must include the strategies that will be used to preserve recreational and commercial working waterfronts as defined in Section 342.07.

Section 163.3178 (h) Designation of coastal high-hazard areas and the criteria for mitigation for a comprehensive plan amendment in a coastal high-hazard area as defined in subsection (9). The coastal high-hazard area is the area below the elevation of the category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model. Application of mitigation and the application of development and redevelopment policies, pursuant to Section 380.27(2), and any rules adopted thereunder, shall be at the discretion of local government.

(i) A component which outlines principles for providing that financial assurances are made that required public facilities will be in place to meet the demand imposed by the completed development or redevelopment. Such public facilities will be scheduled for phased completion to coincide with demands generated by the development or redevelopment.

(j) An identification of regulatory and management techniques that the local government plans to adopt or has adopted in order to mitigate the threat to human life and to control proposed development and redevelopment in order to protect the coastal environment and give consideration to cumulative impacts.

3180(2)(a-c), (a) Consistent with public health and safety, sanitary sewer, solid waste, drainage, adequate water supplies, and potable water facilities shall be in place and available to serve new development no later than the issuance by the local government of a certificate of occupancy or its functional equivalent. Prior to approval of a building permit or its functional equivalent, the local government shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the local government of a certificate of occupancy or its functional equivalent. A local government may meet the concurrency requirement for sanitary sewer through the use of onsite sewage treatment and disposal systems approved by the Department of Health to serve new development.

(b) Consistent with the public welfare, and except as otherwise provided in this section, parks and recreation facilities to serve new development shall be in place or under actual construction no later than 1 year after issuance by the local government of a certificate of occupancy or its functional equivalent. However, the acreage for such facilities shall be dedicated or be acquired by the local government prior to issuance by the local government of a certificate of occupancy or its functional equivalent, or funds in the amount of the developer's fair share shall be committed no later than the local government's approval to commence construction.

(c) Consistent with the public welfare, and except as otherwise provided in this section, transportation facilities needed to serve new development shall be in place or under actual construction within 3 years after the local government approves a building permit or its functional equivalent that results in traffic generation.

(5)(a&c),

(a) ... planning and public policy goals may come into conflict with the requirement that adequate public transportation facilities and services be available concurrent with the impacts of such development. ... in urban centers transportation cannot be effectively managed and mobility cannot be improved solely through the expansion of roadway capacity, that the expansion of roadway capacity is not always physically or financially possible, and that a range of transportation alternatives is essential to satisfy mobility needs, reduce congestion, and achieve healthy, vibrant centers.

(c) ... developments located within urban infill, urban redevelopment, urban service, or downtown revitalization areas or areas designated as urban infill and redevelopment areas under s. 163.2517, which pose only special part-time demands on the transportation system, are exempt from the concurrency requirement for transportation facilities. A special part-time demand is one that does not have more than 200 scheduled events during any calendar year and does not affect the 100 highest traffic volume hours.

(6) a de minimis impact [on a transportation facility] is consistent with this part.

(8) When assessing the transportation impacts of proposed urban redevelopment within an established existing urban service area, 110 percent of the actual transportation impact caused by the previously existing development must be reserved for the redevelopment...

163.3194(1)(a); After a comprehensive plan, or element or portion thereof, has been adopted in conformity with this act, all development undertaken by, and all actions taken in regard to development orders by, governmental agencies in regard to land covered by such plan or element shall be consistent with such plan or element as adopted.

163.3202(2)(a-h); Local land development regulations shall contain specific and detailed provisions necessary or desirable to implement the adopted comprehensive plan and shall as a minimum:

(a) Regulate the subdivision of land.

(b) Regulate the use of land and water for those land use categories included in the land use element and ensure the compatibility of adjacent uses and provide for open space.

(c) Provide for protection of potable water wellfields.

(d) Regulate areas subject to seasonal and periodic flooding and provide for drainage and stormwater management.

(e) Ensure the protection of environmentally sensitive lands designated in the comprehensive plan.

(f) Regulate signage.

(g) Provide that public facilities and services meet or exceed the standards established in the capital improvements element required by s. 163.3177 and are available when needed for the development, or that development orders and permits are conditioned on the availability of these public facilities and services necessary to serve the proposed development. Not later than 1 year

after its due date established by the state land planning agency's rule for submission of local comprehensive plans pursuant to s. 163.3167(2), a local government shall not issue a development order or permit which results in a reduction in the level of services for the affected public facilities below the level of services provided in the comprehensive plan of the local government.

(h) Ensure safe and convenient onsite traffic flow, considering needed vehicle parking.  
163.3220(2)&(3).

(2) (a) The lack of certainty in the approval of development can result in a waste of economic and land resources, discourage sound capital improvement planning and financing, escalate the cost of housing and development, and discourage commitment to comprehensive planning.

(b) Assurance to a developer that upon receipt of his or her development permit or brownfield designation he or she may proceed in accordance with existing laws and policies, subject to the conditions of a development agreement, strengthens the public planning process, encourages sound capital improvement planning and financing, assists in assuring there are adequate capital facilities for the development, encourages private participation in comprehensive planning, and reduces the economic costs of development.

(3) In conformity with, in furtherance of, and to implement the Local Government Comprehensive Planning and Land Development Regulation Act and the Florida State Comprehensive Planning Act of 1972, it is the intent of the Legislature to encourage a stronger commitment to comprehensive and capital facilities planning, ensure the provision of adequate public facilities for development, encourage the efficient use of resources, and reduce the economic cost of development.

*Response:* The proposed project will be coordinated with various Federal, State, and local agencies during the planning process. The project meets the primary goal of the State Comprehensive Plan through preservation and protection of the shorefront development and infrastructure.

***Chapters 186 and 187, F.S., State and Regional Planning.*** These chapters establish the State Comprehensive Plan which sets goals that articulate a strategic vision of the State's future. Its purpose is to define in a broad sense, goals, and policies that provide decision-makers directions for the future and provide long-range guidance for an orderly social, economic and physical growth.

*Response:* The proposed project will be coordinated with various Federal, State and local agencies during the planning process. The projects meet the primary goal of the State Comprehensive Plan through preservation and protection of the shorefront development and infrastructure through erosion control.

***Chapter 252, F.S., Emergency Management.*** This chapter creates a State emergency management agency with authority to ensure that preparations of this State will be adequate to deal with, reduce vulnerability to, and recover from such emergencies and disasters; to provide for the common defense; to protect the public peace, health and safety; and to preserve the lives and property of the people of Florida.

*Response:* The purpose of the sand bypass is to provide sand for renourishment of the beaches that would help to mitigate the harmful consequences of coastal storm events pursuant to Section 252.44 of this Chapter. The proposed work would be consistent with the guidelines outlined in this Chapter.

**Chapter 253, Florida Statute State Lands.** This chapter governs the management of State of Florida Board of Trustees of the Internal Improvement Trust Fund State Lands, including submerged State lands and resources within State lands. This includes archeological and historical resources; water resources; fish and wildlife resources; beaches and dunes; submerged grass beds and other benthic communities; swamps, marshes and other wetlands; mineral resources; unique natural features; submerged lands; spoil islands; and artificial reefs.

*Response:* The proposed project complies with State regulations pertaining to the above resources; therefore, it would comply with the intent of this chapter.

**Chapters 259, 260, and 375, Florida Statute Land Acquisition for Conservation and Recreation, Greenways and Trails, Outdoor Recreation and Conservation Lands.** These chapters authorize agencies of the State of Florida to acquire land: to protect environmentally sensitive areas for conservation; and for outdoor recreation, including greenways and trails.

*Response:* The proposed project will not have an adverse effect on State-owned environmentally sensitive or recreational lands. It does not require land acquisition for the stated purposes.

**Chapter 258, Florida Statute State Parks and Aquatic Preserves.** This chapter authorizes the State to manage State parks and preserves. Consistency with this statute would include consideration of projects that would directly or indirectly adversely impact park property, natural resources, park programs, management, or operations.

*Response:* The proposed project will comply with this chapter and will not directly or indirectly adversely impact park property, natural resources, park programs, management, or operations.

**Chapter 267, Florida Statute Historical Resources.** This chapter establishes the procedures for implementing the Florida Historic Resources Act responsibilities.

*Response:* The proposed project will be coordinated with the Florida State Historic Preservation Officer and will be in compliance prior to the initiation of work.

**Chapter 288, Florida Statute Commercial Development and Capital Improvements.** This chapter directs the State Office of Economic and Demographic Research and the Office of Program Policy Analysis and Government Accountability to evaluate existing State economic development programs (e.g., tax credits, tax refunds, sales tax exemptions, etc.) for effectiveness and value to taxpayers.

*Response:* This chapter is not applicable as the project does not involve any of the economic incentive programs listed in Chapter 288.

**Chapters 334, 335, 336, 337, 338, and 339, Florida Statute Public Transportation.** These chapters authorize the planning and development of a safe, balanced, and efficient transportation system.

*Response:* No public transportation systems would be impacted by this project.

**Chapter 379, Florida Statute Saltwater Fisheries.** This chapter directs the State to preserve, manage and protect the marine, crustacean, shell and anadromous fishery resources in State waters; to protect and enhance the marine and estuarine environment; to regulate fishermen and vessels of the state engaged in the taking of such resources within or without State waters; to issue licenses for the taking and processing products of fisheries; to secure and maintain statistical records of the catch of each such species; and, to conduct scientific, economic, and other studies and research.

*Response:* The material (sediment) proposed for dredging has been evaluated in the prior NEPA documents and would not have a substantial adverse effect on saltwater fisheries. The proposed project is consistent with the goals of this chapter.

**Chapter 379, Florida Statute Wildlife.** This chapter establishes the Florida Fish and Wildlife Conservation Commission and directs it to manage freshwater aquatic life and wild animal life and their habitat to perpetuate a diversity of species with densities and distributions which provide sustained ecological, recreational, scientific, educational, aesthetic, and economic benefits.

*Response:* The project is expected to have no significant effect on freshwater aquatic life or wild animal life. Consultation for the Endangered Species Act and the Magnuson-Stevens Fishery Conservation and Management Act is being coordinated with the USFWS and NMFS.

**Chapter 373, Florida Statute Water Resources.** This chapter provides the authority to regulate the withdrawal, diversion, storage, and consumption of water.

*Response:* This project does not involve water resources as described by this chapter.

**Chapter 376, Florida Statute Pollutant Discharge Prevention and Removal.** This chapter regulates the transfer, storage, and transportation of pollutants and the cleanup of pollutant discharges.

*Response:* The contract specifications will prohibit the Corps and/or its contractor from dumping oil, fuel, or hazardous wastes in the work area and will require that the contractor adopt safe and sanitary measures for the recycling or disposal of solid wastes. A spill prevention plan will be required. The proposed project is consistent with the intent of this chapter.

**Chapter 377, Florida Statute Energy Resources.** This chapter authorizes the regulation of all phases of exploration, drilling, and production of oil, gas, and other petroleum products.

*Response:* The proposed project does not involve the exploration, drilling or production of gas, oil or petroleum product and therefore, this chapter does not apply.

**Chapter 380, Florida Statute Land and Water Management.** This chapter establishes criteria and procedures to assure that local land development decisions consider the regional impact nature of proposed large-scale development.

*Response:* The proposed project will not have any regional impact on resources in the area. Therefore, the project is consistent with the goals of this chapter.

**Chapter 388, Florida Statute Mosquito Control.** This chapter provides for a comprehensive approach for abatement or suppression of mosquitoes and other pest arthropods within the State.

*Response:* The proposed project will not further the propagation of mosquitoes or other pest arthropods. Therefore, the project is consistent with the goals of this chapter.

**Chapter 403, Florida Statute Environmental Control.** This chapter authorizes the regulation of pollution of the air and waters of the State by the FDEP.

*Response:* An Environmental Assessment addressing the proposed project effects has been prepared and will be reviewed by the appropriate resource agencies including the FDEP. Environmental protection measures will be implemented to ensure that no lasting adverse effects on water quality, air quality, or other environmental resources will occur. Coordination with the Florida Department of Environmental Protection shall occur prior to construction. The proposed project complies with the intent of this chapter.

**Chapter 582, Florida Statute Soil and Water Conservation.** This chapter establishes policy for the conservation of the State soil and water through the Department of Agriculture. Land use policies will be evaluated in terms of their tendency to cause or contribute to soil erosion or to conserve, develop, and utilize soil and water resources both onsite or in adjoining properties affected by the project. Particular attention will be given to projects on or near agricultural lands.

*Response:* The proposed project is not located near or on agricultural lands; therefore, this chapter does not apply.

## **APPENDIX B – PERTINENT CORRESPONDENCE**





DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT  
701 SAN MARCO BOULEVARD  
JACKSONVILLE, FLORIDA 32207-8175

August 26, 2021

Planning Division  
Environmental Branch

Jay Herrington, Field Supervisor  
North Florida Ecological Services Office  
US Fish and Wildlife Service  
7915 Baymeadows Way, Suite 200  
Jacksonville, Florida 32256-7517



Florida Ecological Services Field Office

FWS Log No 21-I-1542

The Service concurs with your effect determination(s) for resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). This finding fulfills the requirements of the Act.

CHRISTOPHER  
PUTNAM

Digitally signed by CHRISTOPHER  
PUTNAM  
Date: 2021.11.04 13:41:06 -04'00'

Environmental Review Supervisor

Date

Dear Mr. Herrington:

The U.S. Army Corps of Engineers (Corps) requests to initiate informal consultation in order to address the effects of a Federal action for the purpose of the Brevard Sand Bypass project for the continuation of use of the sand source for the Brevard County Shore Protection Project (SPP) North Reach. The Corps has determined the need for an additional sand source for the Brevard County SPP North Reach renourishment project. A Supplemental Environmental Assessment (SEA) has been prepared to address the environmental impacts resulting from the dredging and transport operations at the sand bypass area.

The project is located in Brevard County, on the north side of the Port Canaveral Harbor. Figure 1 shows the project location. The site has been used previously as a sand source for the renourishment of beaches to the south of the harbor and continuously shoals due to the interruption of the longshore transport from the jetty at the south end of the project site. An updated SEA will provide continued coverage for National Environmental Policy Act (NEPA) for this project.

The Corps has completed an evaluation of the proposed work's effect(s) on any species and/or critical habitat protected under the Endangered Species Act. We believe that the direct or indirect effects of the action will have no likelihood of adverse effect, including evaluation of effects that may be beneficial, insignificant, or discountable. Based on the best available information (e.g., IPAC, SPBO, P<sup>3</sup>BO, etc.) the Corps' preliminary determination is that the project as proposed may affect but is not likely to adversely affect the following listed species and/or designated critical habitat:

Green Sea Turtle (*Chelonia mydas*)  
Hawksbill Sea Turtle (*Eretmochelys imbricata*)  
Kemp's Ridley Sea Turtle (*Lepidochelys kempii*)  
Loggerhead Sea Turtle (*Caretta caretta*)  
Leatherback Sea Turtle (*Dermochelys coriacea*)  
West Indian Manatee (*Trichechus manatus*)  
Piping Plover (*Charadrius melodus*)  
Red Knot (*Calidris canutus rufa*)  
Southeastern Beach Mouse (*Peromyscus polionotus niveiventris*)

The enclosed draft environmental assessment documents our evaluation of potential effects to the human environment, including listed species. We request your concurrence with our determination of may affect, not likely to adversely affect and use of the Biological Opinions in this matter pursuant to Section 7 of the Endangered Species Act. The Corps is committed to meetings its responsibilities under the ESA. If you have questions or need additional information, please contact Michael Ornella II at 904-232-1498 or via electronic mail at Michael.Ornella@usace.army.mil.

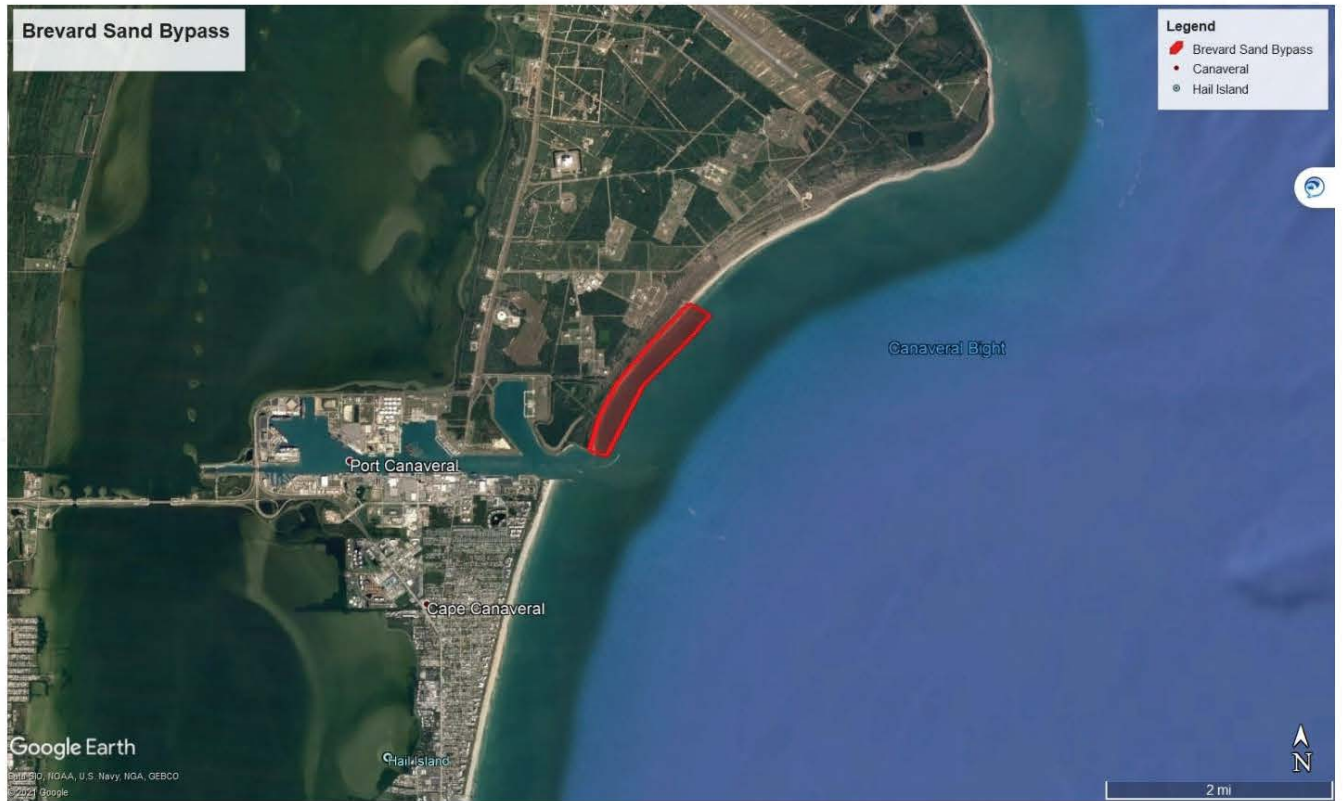
Sincerely,



Angela E. Dunn  
Chief, Environmental Branch

Enclosure(s)

Figure 1. Project Location



## Ornella, Michael A II CIV USARMY CESAJ (USA)

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**From:** Pace Wilber - NOAA Federal <pace.wilber@noaa.gov>  
**Sent:** Thursday, October 7, 2021 10:10 AM  
**To:** Ornella, Michael A II CIV USARMY CESAJ (USA)  
**Subject:** [Non-DoD Source] Re: Brevard North Reach Sand Bypass - EFH

Hi Michael.

We have reviewed DRAFT SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT, BREVARD COUNTY SHORE PROTECTION PROJECT – NORTH REACH SAND BYPASS BORROW AREA, BREVARD COUNTY, FLORIDA dated August 2021 (DSEA). The DSEA evaluates dredging of sand from the surf zone north of the inlet to Canaveral Harbor and pumping the sand south of the inlet to beaches that are part of the Brevard County Shore Protection Project (Brevard County SPP). The DSEA does not evaluate placement of the sand within the Brevard County SPP because previous NEPA documents evaluated this placement. DSEA Section 4.2.2.1 notes the dredging would not affect the nearshore reproductive habitat of loggerhead sea turtles, as the work will be required to be performed outside of sea turtle nesting season. We did not see in the DSEA a definition of this sea turtle nesting season, and we assume the USACE is using April 1 to September 30. This no-dredging period is important to NMFS because the surf zone of beaches in the project area are nursery habitat for federally managed fishery species and their prey, several of which are cited in DSEA Table 3-1. As noted in past correspondence with the Jacksonville District for other projects in and near Brevard County, minimizing disturbance to surf zone habitat, especially physical disturbances from dredging, during the time of year when the habitat is providing essential support to the fishing community is important to the NMFS. The DSEA estimates the project would affect approximately 200 acres of surf zone habitat on an intermittent basis. Because the no-dredging period used to minimize impacts to nesting loggerhead sea turtles also minimizes impacts to fishery resources, the NMFS offers no essential fish habitat (EFH) conservation recommendations for passing sand across the inlet in the manner the DSEA describes. The NMFS requests notification from the Jacksonville District if project plans change and dredging is planned to occur within the period of April 1 to September 30.

Thank you for the opportunity to provide comments on this project,  
Pace Wilber  
HCD Atlantic Branch Supervisor  
NOAA Fisheries Service  
331 Ft Johnson Road  
Charleston, SC 29412

On Thu, Aug 26, 2021 at 3:00 PM Ornella, Michael A II CIV USARMY CESAJ (USA) <[Michael.Ornella@usace.army.mil](mailto:Michael.Ornella@usace.army.mil)> wrote:

Pace,

Attached consultation for the Brevard North Reach Sand Bypass.



Let me know if it needs to be sent to someone else.

Mike

Michael Ornella II, Biologist

Environmental Branch - Coastal Section

Planning & Policy Division

U.S. Army Corps of Engineers

701 San Marco Boulevard

Jacksonville, FL 32207

Telephone: (904)232-1498

--

Pace Wilber, Ph.D.  
HCD Atlantic Branch Supervisor  
NOAA Fisheries Service  
331 Ft Johnson Road  
Charleston, SC 29412

843-460-9926 <----Office Number  
843-568-4184 <----Office Cell Number  
[Pace.Wilber@noaa.gov](mailto:Pace.Wilber@noaa.gov)



## FLORIDA DEPARTMENT of STATE

**RON DESANTIS**  
Governor

**LAUREL M. LEE**  
Secretary of State

U.S. Army Corps of Engineers  
4400 PGA Boulevard, Suite 500  
Palm Beach Gardens, FL 33410

September 24, 2021

RE: DHR Project File No.: 2021-5178-A, Received by DHR: August 25, 2021  
Application No.: Unknown  
Project: *Brevard County Shoreline Protection Project - North Reach Sand Bypass Borrow Area*  
County: Brevard

To Whom It May Concern:

The Florida State Historic Preservation Officer reviewed the referenced project for possible effects on historic properties listed, or eligible for listing, on the *National Register of Historic Places*. The review was conducted in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended, and its implementing regulations in *36 CFR Part 800: Protection of Historic Properties*.

It is the opinion of this office that the proposed project is unlikely to affect historic properties. However, the permit, if issued, should include the following special condition regarding unexpected discoveries:

- If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The applicant shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section at (850)-245-6333. Project activities shall not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, *Florida Statutes*.

If you have any questions, please contact Jennifer Tobias, Historic Sites Specialist, by email at [Jennifer.Tobias@dos.myflorida.com](mailto:Jennifer.Tobias@dos.myflorida.com).

Sincerely,

For  
Timothy A Parsons, Ph.D.  
Director, Division of Historical Resources  
& State Historic Preservation Officer

**Division of Historical Resources**  
**R.A. Gray Building • 500 South Bronough Street • Tallahassee, Florida 32399**  
**850.245.6300 • 850.245.6436 (Fax) • FLHeritage.com**

