Environmental Assessment and Finding of No Significant Impact

Anna Maria Island
Shoreline Protection Project – Borrow Area

Manatee County, Florida

US Army Corps of Engineers ®
Jacksonville District

June 2013

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FINDING OF NO SIGNIFICANT IMPACT
ANNA MARIA ISLAND BORROW AREA
MANATEE COUNTY, FLORIDA

I have reviewed the Environmental Assessment (EA) for the proposed action. This Finding incorporates by reference all discussions and conclusions contained in the EA enclosed hereto. Based on information analyzed in the EA, reflecting pertinent information obtained from agencies having jurisdiction by law and/or special expertise, I conclude that the proposed action will not significantly impact the quality of the human environment and does not require an Environmental Impact Statement (EIS). Reasons for this conclusion are, in summary:

a. The proposed action will be conducted in accordance with the Endangered Species Act, and specifically in compliance with the Statewide Programmatic Biological Opinion issued by the National Marine Fisheries Service and Biological Opinion issued by the U.S. Fish and Wildlife Service. The work will not jeopardize the continued existence of any threatened or endangered species or impact any designated critical habitat.

b. This project has been coordinated with the State of Florida, and all applicable water quality standards will be met.

c. The proposed work is being coordinated through the State of Florida and is expected to be consistent with the Florida Coastal Zone Management Program upon receipt of the DEP Permit.

d. Coordination with the Florida State Historic Preservation Officer and appropriate federally recognized tribes is ongoing. The Corps will protect all identified potential resources within the borrow area through the use of buffers. The Corps anticipates a determination that the proposed dredging will not adversely affect any properties eligible for or listed on the National Register of Historic Places.

e. There are no known sources of hazardous, toxic, or radioactive wastes in the project area. Sediments and materials for the areas to be excavated during construction have been evaluated to be sandy material, with no indication of contaminants.

f. Public benefits will be provided with a renourished beach.

g. Measures will be in place during construction to eliminate, reduce, or avoid adverse impacts below the threshold of significance to fish and wildlife resources.

In view of the above and after consideration of public and agency comments received on the project, I conclude that the proposed action for the Anna Maria Island borrow area will not result in a significant adverse effect on the human environment. This Finding incorporates by reference all discussions and conclusions contained in the EA herewith and does not require an EIS.

Alan M. Dodd
Colonel, U.S. Army
District Commander

25 Jun 2013
Date

ENVIRONMENTAL ASSESSMENT
ON MANATEE COUNTY BEACH RENOURISHMENT BORROW AREA
MANATEE COUNTY, FLORIDA

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1.1 PROJECT AUTHORITY

The Federal Anna Maria Island shore protection project for Manatee County, Florida was authorized by Public Law 98-298 dated October 27, 1965, Title II – Flood Control Act of 1965, as amended by Section 131 of the 1976 Water Resources Development Act. Resolutions approving the project under the provisions of Section 201 of Public Law 98-298 were adopted by the Senate Public Works Committee on November 20, 1975. The shore protection project for Manatee County, Florida was authorized on December 19, 1975.

The authorized shore protection project for Manatee County, Florida includes the entire 7.5 mile gulf shoreline of Anna Maria Key. The project consists of restoration of 4.2 miles of gulf shore beach to an elevation six feet above mean low water with a 50-foot berm width and a natural slope seaward as would be shaped by wave action. The project also provides for periodic nourishment of the restored beach and such adjacent shoreline as may be needed and justified for the life of the project. The project is described in Senate Document No. 93-37, 93rd Congress, 1st Session.

1.2 PROJECT LOCATION

The project is located within Manatee County, located on the west coast of Florida, south of the Tampa-St. Petersburg metropolitan area (Figure 1, Attachment 1). Manatee County is bordered by Hillsborough County to the north, Hardee and De Soto Counties to the east, Sarasota County to the south, and the Gulf of Mexico to the west. The western limit of Manatee County consists of two Gulf Coast barrier reefs.

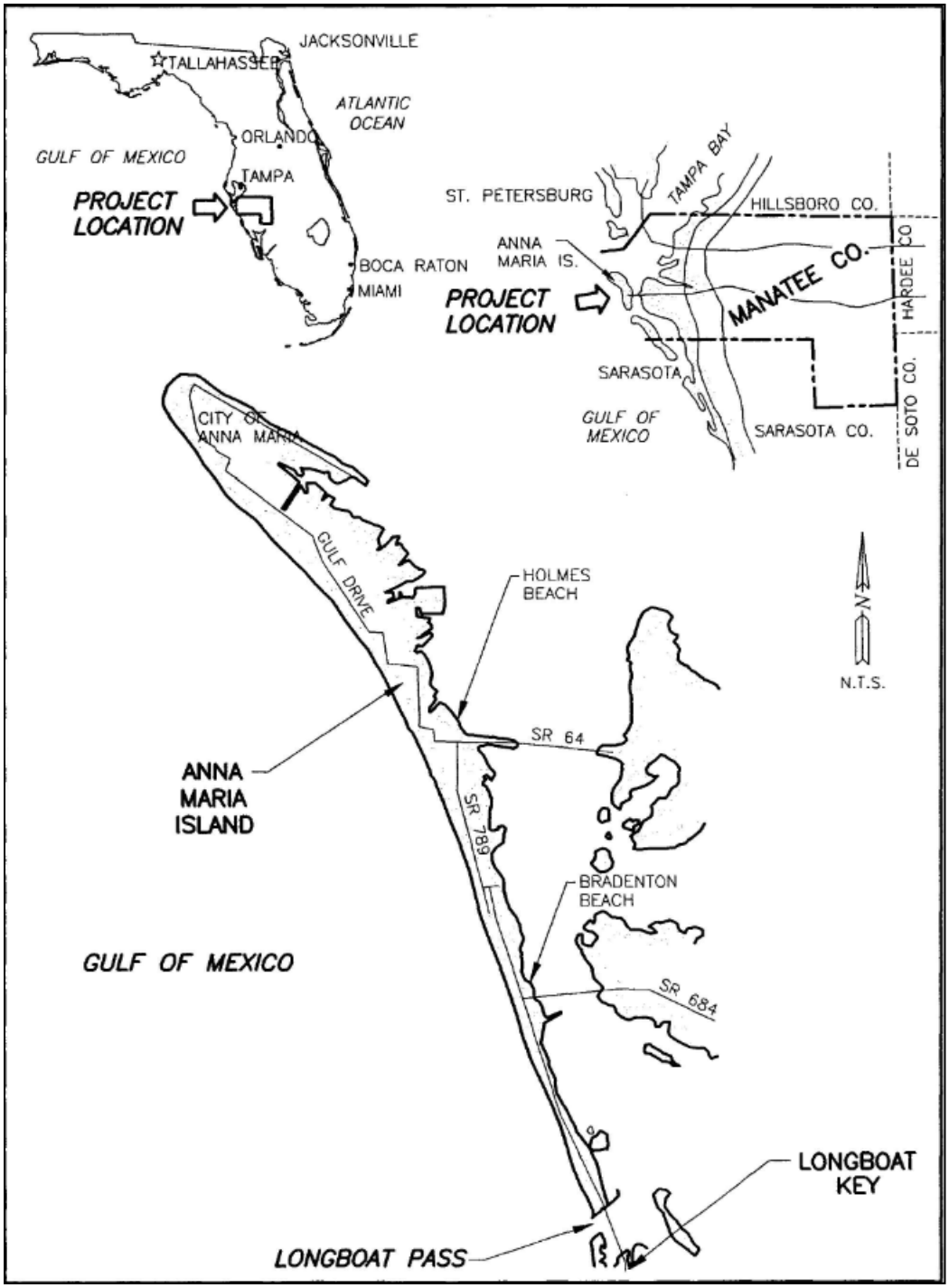


Figure 1. Project Location.

1.3 PROJECT NEED OR OPPORTUNITY

The Anna Maria Island beach needs to be renourished due to various storms, especially tropical storm Debby. In order to prevent further loss of the beach, which exposes beachfront development and infrastructure (buildings, roads, utilities, parking lots) to destructive storm

waves, renourishment is needed. The erosion would negatively affect the public directly and indirectly through damage to or loss of residences and infrastructure, loss of recreational opportunity, high costs associated with storm damage repairs, and loss of tourism and associated income to the local economy.

The 4.2 miles of shoreline have been previously nourished through federal and non federal projects. It was first nourished in 1992/93, then in 2002, and 2005, however, the previous borrow area contains an insufficient capacity of beach quality sand to complete a nourishment event. Therefore, a new borrow area is needed to provide a sand source for a nourishment event.

1.4 AGENCY GOAL OR OBJECTIVE

The U.S. Army Corps of Engineers (Corps) proposes to place approximately 1.1 million cubic yards of sand dredged from a new borrow area in Manatee county along 4.2 miles of shoreline on Anna Maria Island, including a 0.5 miles taper extending to R-36 (R-12 to R-36). The Corps has identified a new offshore borrow area not previously discussed in the October 2000 Final Limited Reevaluation Report (LRR) and Environmental Assessment ((EA) Figure 2).

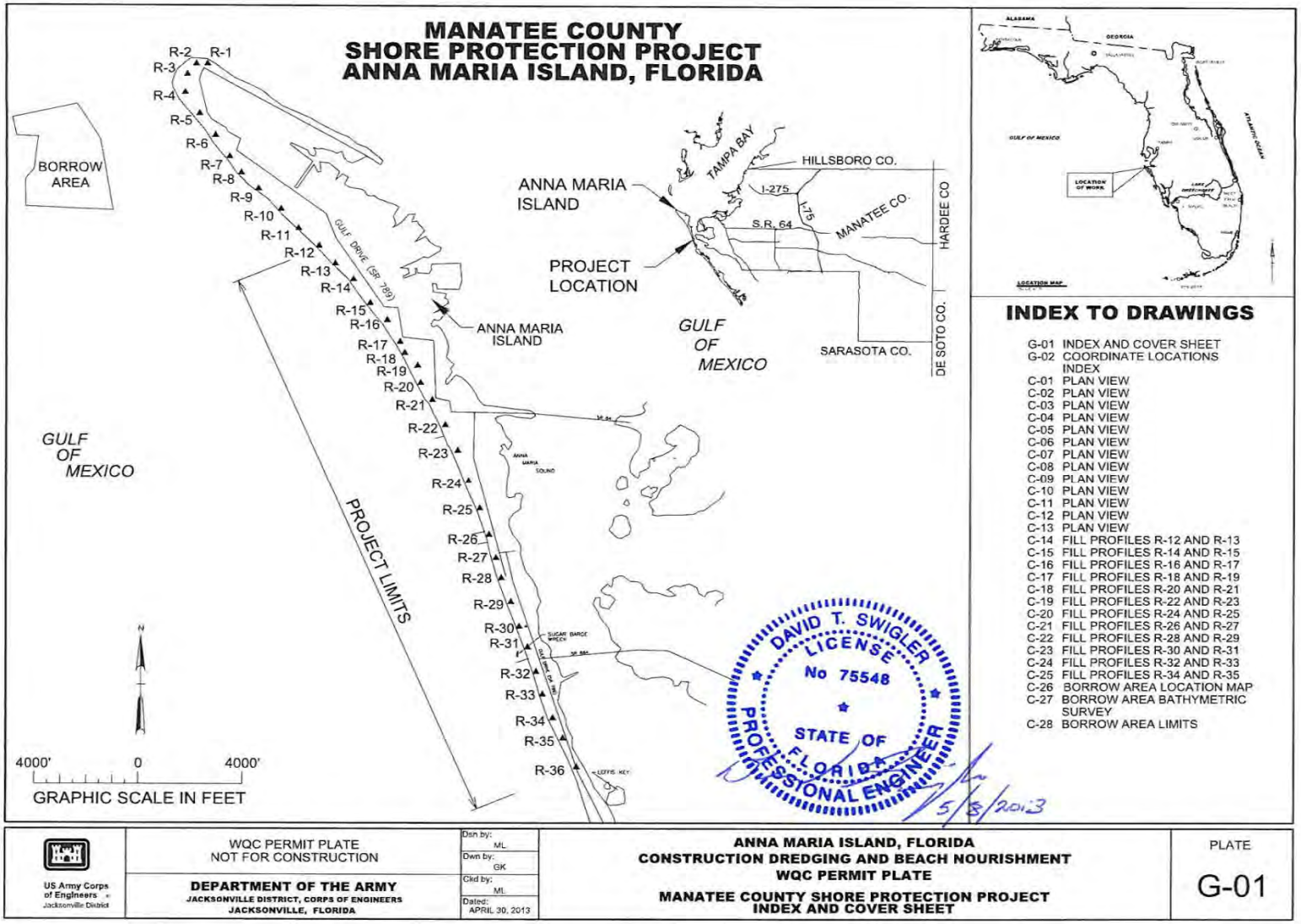


Figure 2. Borrow Area Location for Anna Maria Island Beach Renourishment

1.5 RELATED ENVIRONMENTAL DOCUMENTS

Related National Environmental Policy Act (NEPA) documents are listed below:

- Limited Reevaluation Report with Final Environmental Assessment, Manatee County, Florida, Shore Protection Project. October 2000.
- Environmental Assessment, Manatee County Shore Protection Project, Anna Maria Island. October 2000.

1.6 DECISIONS TO BE MADE

This Environmental Assessment (EA) will evaluate the environmental effects of dredging the proposed borrow area for Anna Maria Island shoreline protection, with an expected finding of No Significant Impact. The effects of sand placement along the 4.2 miles on Anna Maria Island were evaluated in the 2000 LRR/EA.

1.7 SCOPING AND ISSUES

The following issues were identified as relevant to the proposed action and appropriate for detailed evaluation:

- Impacts to federally protected species occurring or potentially occurring within the project area (i.e. sea turtles)
- Essential Fish Habitat (EFH)
- Water quality degradation, specifically turbidity levels
- Cultural resources
- Recreation

1.8 PERMITS, LICENSES, AND ENTITLEMENTS

Pursuant to Section 401 of the Clean Water Act, water quality certification from the State of Florida would be required for the proposed maintenance actions. In accordance with the Coastal Zone Management Act, a Federal Consistency Determination (CD) was prepared under previous NEPA documents for the proposed placement of dredged material. For the proposed new borrow area, the State, through issuance of the Water Quality Permit would be expected to concur with Federal CD.

In accordance with Section 7 of the Endangered Species Act (ESA), consultation is occurring through the Statewide Programmatic Biological Opinion (SPBO) and the Programmatic Piping Plover Biological Opinion (P3BO) in regards to species under the purview of U.S. Fish and Wildlife Service (USFWS). Species under the purview of National Marine Fisheries Service (NMFS) will be covered under the existing Gulf Regional Biological Opinion (GRBO). Separate coordination for Essential Fish Habitat (EFH) began May 28, 2013 with a determination letter and EFH Assessment, with a concurrence email received on June 4, 2013.

2 ALTERNATIVES

The alternatives section describes the no-action alternative and the proposed action. Additional project alternatives were described in previous NEPA documents and will not be discussed in this assessment. The beneficial and adverse environmental effects of the alternatives are presented in comparative form, providing a clear basis for choice to the decision maker and the

public. A preferred alternative was selected based on the information and analysis described in the proceeding sections.

2.1 DESCRIPTION OF ALTERNATIVES

Alternatives for this project include no beach renourishment or using a new borrow area for a sand source as depicted in Figure 2 to renourish 4.2 miles of the Anna Maria Island shoreline. Placement areas were analyzed in a previous NEPA document for Manatee County Shoreline Protection (U.S. Army Corps of Engineers [USACE] 2000).

2.1.1 Alternative 1: No Action (Status Quo)

Alternative 1, the No Action Alternative, would result in no changes to the proposed borrow area. However, this could result in potential loss of shoreline, loss of sea turtle nesting habitat, and loss of habitat for potential foraging birds due to erosion.

2.1.2 Alternative 2: Use of Borrow Area for Shoreline Protection

Alternative 2 proposes to use dredged sand from a borrow area northwest of Anna Maria Island (Figures 2 and 3) to renourish 4.2 miles of shore between Florida Department of Environmental Protection's (DEP) markers R-12 to R-36. The new borrow area is located west of the northern end of Anna Maria Island in the ebb shoal and is approximately 290 acres (Table 1 and Figure 3). The dredged material would be pumped from the borrow area to the beach using a series of submerged and floating pipelines. The placement area is shown in Figure 1, which is the same placement area described in the 2000 LRR, and needs approximately 1.1 million cubic yards of sand per nourishment event. The Corps has determined that the proposed effects at the placement area would be the same as what was discussed in the 2000 EA.

Table 1. Latitude and longitude of borrow area, points corresponding to Figure 3.

Corresponding point to Figure 3	Easting	Northing
1	408711.4	1159522.1
7	409027.1	1160983.4
8	408705.1	1160702.0
21	412215.6	1159352.7
22	411713.2	1162378.2
26	408178.6	1163307.0
27	408360.7	1162524.7
28	409220.9	1162491.3
29	410786.3	1163905.7

Figure 3. Alternative 2: Borrow Area for the Anna Maria Shoreline Protection Project

2.2 DREDGED MATERIAL DISPOSAL LOCATIONS

As identified in previous NEPA documents, the nearshore disposal and the beach fill templates are located between DEP reference monuments R-12 and R-36 (Figure 2). All activities are within Manatee County or the Gulf of Mexico, Class III Waters, not Outstanding Florida Waters.

2.3 MITIGATION

It is anticipated that the proposed action would not cause a significant impact on fish and wildlife resources requiring compensatory mitigation. The Corps has been in communication with the FWS, along with the NMFS. The project is covered under the SPBO.

2.4 PREFERRED ALTERNATIVE

The preferred alternative is Alternative 2, use of a new borrow area. The beach has been eroding due primarily to tropical storms and natural cycles creating the need to be renourished (creating a

wider beach). The previous Anna Maria Island borrow area does not contain enough beach quality sand to qualify as a borrow source, therefore a new borrow area is needed to complete the agency goal and objective.

2.5 COMPARISON OF ALTERNATIVES

Table 2 lists alternatives considered and summarizes the major features and consequences of the proposed action and alternatives. See Section 4 Environmental Effects for a more detailed discussion of impacts of alternatives.

Table 2. Summary of Direct and Indirect Impacts to the Borrow Area for Anna Maria Island

ENVIRONMENTAL FACTOR	ALTERNATIVE 1: NO ACTION (STATUS QUO)	ALTERNATIVE 2: USE OF BORROW AREA
Fish & Wildlife Resources	No fish and wildlife effects due to not using the borrow area. However, the shoreline would continue to erode, potentially resulting in loss of habitat for nesting sea turtles and migratory birds.	Minor impacts due to dredging and placement of sand onto the shoreline, such as inability of sea turtles to nest right after renourishment due to compact sand.
Threatened & Endangered Species	No shoreline replacement could result in loss of nesting habitat due to shoreline erosion.	Manatee & Sea Turtles: May affect, but not likely to adversely affect with implementation of standard protection measures.
Migratory Birds	No adverse impacts are anticipated, except potential loss of shoreline habitat.	No adverse impacts are anticipated. If deemed necessary, a migratory bird protection plan would be implemented during nesting season.
Essential Fish Habitat (EFH)	No effect on EFH.	Estuarine and marine water column with unconsolidated sediment habitat would be temporarily impacted during dredging. No hardbottom habitats are expected to be impacted.
Shoreline Stability	Erosion of the shoreline would continue.	Short-term benefit due to replacement of sand resources. Project anticipates renourishment every 10 years.
Water Quality	No effect on water quality.	Short-term localized increase in turbidity at the dredge site and nearshore area.
Navigation	No effect on navigation.	Potential temporary disruption of normal activity during the construction period.
Economics	Lack of renourishment could result in reduced beach for tourism and could impact houses close to shore.	Beach renourishment could keep tourism from beach-going at the current rate.
Cultural Resources	No effect anticipated.	No adverse effect anticipated.
Recreation	No effect on recreation.	Temporary impacts during dredging events and placement of dredged material on the beach or nearshore.
Aesthetics	No effect on aesthetics.	Temporary impacts during dredging events and placement of material on the beach or nearshore.
Noise	No effect from noise.	Temporary impacts during dredging events and placement of material on the beach or nearshore.

3 AFFECTED ENVIRONMENT

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 affect or that would be affected by the alternatives if they were implemented. This section, in conjunction with the description of the No Action alternative, forms the base line conditions for determining the environmental impacts of the proposed alternative. In some instances, the shoreline is described in conjunction with the borrow area because it will be affected by the preferred alternative. However, the affected environment has not significantly changed from the assessment that was completed in 2000.

3.1 GENERAL ENVIRONMENTAL SETTING OF THE NEW BORROW AREA

The proposed borrow area is in an ebb shoal west of the northern end of Anna Maria Island (Figure 2 for location). The borrow area is approximately 290 acres and is characterized as having a featureless sand bottom, with no expected hardbottoms, seagrass, or other significant habitat (CPE 2012). Some culturally-significant targets were identified within and near the borrow area (discussed in Section 3.8).

3.2 FISH AND WILDLIFE RESOURCES

The beach ecosystem within the project area is a high energy environment with no primary dune systems on Anna Maria Island. The beach zone is characterized by low species diversity. Common inhabitants include ghost crabs (*Ocypode quadrata*), while common benthic infauna consist of polycheates, amphipods, and isopods. The beaches are used by sea turtles for nesting, most commonly the loggerhead; the typical nesting period ranges from March through September.

Organisms typically associated with the sands in the intertidal zone include coquina clams (*Donax variabilis*), ghost shrimp (*Callianassa sp*.), mole crabs (*Emerita talpoida*), polychaetes, amphipods, and isopods. The dominant fish species at the nearshore formations include belted sand bass (*Serranus subligaruis*), slippery dick (*Halichoeres bivittatus*), puddingwife (*Halichoeres radiates*), small tooth sawfish (*Pristis pectinata),* and tomtates (*Haemulon aurolineatum*).

Sarasota Bay and Tampa Bay are within the range of the Florida sub-species of the West Indian manatee (*Trichechus manatus latirostris*) and up to 28 cetacean species, with bottlenose dolphin being most common. The project is not located in an Important Manatee Area (IMA) as designated by FWS, nor in an area designated as critical habitat for manatee. Marine life common to east-central Florida can be found within the project footprint and beach placement area. Sub-tidal oyster beds should not occur within the project channel due to depth and vessel traffic. Other macro invertebrates commonly found in soft-bottom estuarine habitat within Florida include annelids, a variety of mollusks besides oysters, arthropods, sponges and polyps (Hoffman and Olsen 1982). There are no seagrass beds or vegetated shorelines located within the borrow area or the existing settling basin.

As previously stated, the most common cetaceans is the bottlenose dolphin, (*Tursiops truncates)*. Bottlenose dolphins have robust bodies that typically reach 6 to 12 feet as adults. They feed on fish such as mullet and sheephead, along with marine invertebrates. The live up to 50+ years, and have weights between 140 kilograms and 650 kilograms. Bottlenose dolphins frequent both inshore and offshore marine waters along temperate and tropical coasts. Inshore dolphins live in

small social groups of up to 10 individuals, and are frequently sighted in Sarasota Bay at the Longboat Pass inlet. They are highly intelligent and have complex socialization and communication skills. Dolphins along the coast of Florida are protected by Federal law against harassment under the Marine Mammal Protection Act (MMPA) of 1972. (FWC, NMFS, websites Factsheet).

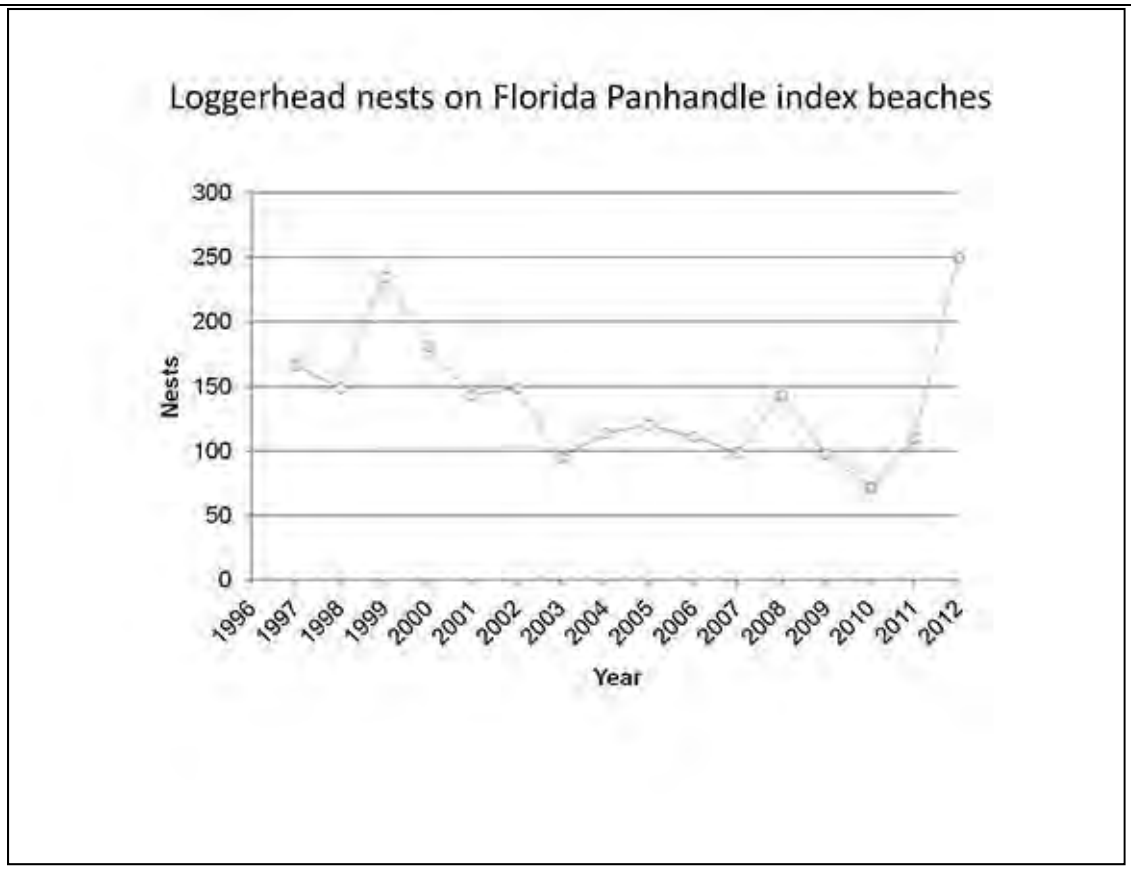
A total of 126 species of birds are associated with marine habitats in Tampa Bay and Sarasota Bay region (Audubon Society of Florida, Manatee County Chapter, 2010). According to the Florida Audubon Society and the Florida Fish and Wildlife Conservation Commission (FWC), both natural or created islands in Sarasota Bay and Tampa Bay serve as important breeding areas for migratory birds due to the suitable substrate and vegetative conditions, and to the absence of humans. With appropriate management, these areas will continue to serve as breeding grounds for a myriad of species. The following avian species are known or suspected to utilize or occur in the project area: American Oystercatcher (*Haematopus palliatus*), Black Skimmer (*Rynchops niger*), Black-crowned Night Heron (*Nycticorax nycticorax*), Black-Necked Stilt (*Himantopus mexicanus*), Brown Pelican (*Pelecanus occidentalis*), Caspian Tern (*Sterna caspia*), Cormorant (*Phalacrocorax auritus*), Glossy Ibis (*Plegadis falcinellus*), Great Blue Heron (*Ardea herodias*), Great Egret (*Casmerodius albus*), Laughing Gull (*Larus atricilla*), Little Blue Heron (*Egretta caerula*), Osprey (*Pandion haliaetus*), *Piping Plover (*Charadrius melodus*), Reddish Egret (*Egretta rufescens*), Ring-Billed Gull (*Larus delawarensis*), Roseate Spoonbill (*Ajaia ajaja*), Royal Tern (*Thalasseus maxima*), Ruddy Turnstone (*Ironware interpret*), Sandwich Tern (*Sterna sandricensis*), Snowy Egret (*Egretta thula*), Tricolored Egret (*Egretta tricolor*), White Ibis (*Eudocimus albus*), Willet (*Catoptrophorus semipalmatus*), *Wood Stork (*Mycteria Americana)* Yellow-Crowned Night Heron (*Nycticorax violaceus*). *Denotes federally protected species under the ESA.

3.3 THREATENED AND ENDANGERED SPECIES

Threatened and endangered species which may occur in the vicinity of the Anna Maria Island were identified in the 2000 Biological Assessment of the beach renourishment project and are currently piping plover and piping plover critical habitat, green turtle (*Chelonia mydas*), loggerhead turtle (*Caretta caretta*), leatherback turtle (*Dermochelys coriacea*), Kemp's ridley turtle (*Lepidochelys kempii*), blue whale (*Balaenoptera musculus*), finback whale (*Balaenoptera physalus*), humpback whale (*Megaptera novaeangliae*), sei whale (Balaenoptera borealis), sperm whale (*Physeter macrocephalus*), small tooth sawfish, and the Gulf sturgeon (*Acipenser oxyrhynchus desotoi*).

3.3.1 Sea Turtles

Of the listed turtle species found in or near the project area, green turtle, Kemp's ridley turtle, and leatherback turtle, the loggerhead sea turtle is most likely to occur in the area and be affected by the proposed project. The 2000 Anna Maria Island Shoreline Protection EA reported that there was an increase of 85% nesting success in nests per mile post 1992/93 renourishment. Between the years 2002 and 2009, Manatee County has reported the following numbers for nesting loggerheads: 290, 365, 274, 280, and 634 (FWC/FWRI Statewide Nesting Beach Survey Program Database as of 27 Feb. 2013). In all of the Florida panhandle, the Florida Fish and Wildlife Commission (FWC) has reported a general decline from 1996-2011, with a large increase in 2012 (Figure 4).



Source: FWC/FWRI Index Nesting Beach Survey Totals (1989-2012)

Figure 4. Loggerhead nests on Florida Panhandle beaches from 1996-2012.

3.3.2 West Indian Manatee

According to the FWC seagrass mapping (FWRI 2011), no seagrasses are present within the project footprint. The likelihood of manatees in the area is minimal other than as a passageway up and down the coast.

3.3.3 Small tooth sawfish

Smalltooth sawfish typically inhabit shallow waters (depths up to 20 feet) near the mouths of rivers in estuarine lagoons over sandy or muddy substrates; likewise, they may also be found in deeper waters (greater than 50 feet) along continental shelf (Carlson et al, 2006). Shallow coastal waters, such as bays and estuaries having depths less than 4 feet, provide an important nursery area for juvenile smalltooth sawfish (Carlson et al, 2006). The only breeding areas still known to exist are located in southwest Florida. Historically, Charlotte Harbor through Dry Tortugas has always harbored the largest numbers of smallthooth sawfish, along with the Ten Thousand Islands of the Everglades (Carlson et al, 2006). These areas serve as the last stronghold for the species. Maintenance and protection of habitat is an important component of the smalltooth sawfish recovery plan (NMFS 2009). Key habitat features, especially for juvenile individuals, consist of shallow, warm water with proximity to mangroves and estuarine conditions.

The Gulf of Mexico Regional Biological Opinion (GRBO), amended 19 November 2003 determined that "because there has never been a reported take of a small tooth sawfish by a hopper dredge, such take is unlikely to occur because of smalltooth sawfishes' affinity for

shallow, esturarine systems." The current GRBO, amended 9 January 2007, does not authorize any takes of the federally listed smalltooth sawfish.

3.3.4 Piping plover

Piping plover are known to winter in Florida. Wintering piping plovers prefer coastal habitats that include sand spits, islets (small islands), tidal flats, shoals (usually flood tidal deltas), and sandbars that are often associated with inlets (Harrington 2008). Sandy mud flats, ephemeral pools, and overwash areas are also considered primary foraging habitats. These substrate types have a richer infauna than the foreshore of high energy beaches and often attract large numbers of shorebirds (Cohen et al. 2008). Wintering plovers are dependent on a mosaic of habitat patches and move among these patches depending on local weather and tidal conditions (Nicholls and Baldassarre 1990a).

No designated critical habitat is within Manatee County, however, the southern tip of Egmont Key (north of Anna Maria Island) is a known colonial shorebird nesting site. In addition to migratory birds that nest on Egmont Key, the island is designated as critical habitat for the piping plover (Unit FL-21; Figure 5). This type of island is typically used by piping plover as wintering habitat. They stay at these sites and forage for food before traveling back to their nesting and breeding grounds in the north for the summer.

Figure 5. Piping plover critical habitat at Egmont Key

3.4 ESSENTIAL FISH HABITAT

EFH is defined in the MSFCMA as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." For interpreting the definition of EFH, "waters" include aquatic areas and their associated physical, chemical, and biological properties used by fish, and may include aquatic areas historically used by fish where appropriate; "substrate" includes sediment, hard bottom, structures underlying the waters, and associated biological communities; "necessary" means the habitat required to support a sustainable fishery and the managed species contribution to a healthy ecosystem; and "spawning, breeding, feeding, or growth to maturity" covers a species' full life cycle.

The Gulf of Mexico Fisheries Management Council (GMFMC, 1998) has designated non-vegetated bottom and water column zones within the project area as EFH in compliance with the MSFCMA. Managed species that commonly inhabit the project area are shown in Table 3.

Table 3. Managed species commonly occurring in the project area

Common Name	Scientific Name
Stone Crab	*Menippe mercineria*
Spanish Mackerel	*Scomberomorus maculates*
Red Drum	*Sciaenops ocellatus*
Pink Shrimp	*Penaeus duorarum*

The Gulf of Mexico in this region also provides essential forage, cover, and nursery habitats for other species that are important commercially and recreationally. These species include the blue crab (*Callinectes sapidus*), flounder (*Syacium* spp.), and mullet (*Mugil* spp.). A summary of managed species and their seasonal occurrence within the area is shown in Table 4.

Table 4. Species managed by the Gulf of Mexico Fishery Management Council

Species	Seasonal Occurrence In Tampa Bay	Habitat Affinity
Pink Shrimp *(Penaeus duorarum)*	Adults- Rare from November-June Juvenile-Highly Abundant Year Round	Soft Bottom
Stone Crab *(Menippe mercineria)*	Common Year Round	Soft Bottom
Gag *(Mycteroperca microlepis)*	Juvenile- Year Round	Hard Bottom
Scamp *(Mycteroperca phenax)*	Year Round	Hard Bottom
Red Drum *(Sciaenops ocellatus)*	Adults-Common Year Round Juvenile-Common to Abundant Year Round	Soft Bottom
Spanish Mackerel *(Scomberomorus maculates)*	Adults-Common Year Round Juveniles-Rare Year Round	Water Column
Spiny Lobster *(Panulirus argus)*	Rare Year Round	Hard Bottom
Lane Snapper *(Lutianus synagris)*	Juvenile-Year Round	Hard Bottom
Yellowtail Snapper *(Ocyurus chrysurus)*	Juvenile-Year Round	Hard Bottom
Goliath Grouper *(Epinephelus itaiara)*	Juvenile-November to January	Hard Bottom

Source: Gulf of Mexico Fisheries Management Council 1999

According to the Florida Fish and Wildlife Commission seagrass mapping from 2011, no seagrasses are present within the borrow area.

3.5 WATER QUALITY

The waters off the coast of Anna Maria Island are listed as Class III waters by the State of Florida. Class III waters are suitable for recreation and propagation by fish and wildlife. Florida state guidelines limit turbidity levels to values under 29 NTU above ambient levels outside the turbidity mixing zone during beach nourishment activities.

3.6 NAVIGATION

The majority of boating activity is concentrated in close proximity to Passage Key Inlet to the north and Longboat Pass to the south. Longboat Pass is a natural inlet which serves as the access point for recreational and commercial fishing vessels, and recreational boating and diving vessels between Big Sarasota Bay and the Gulf of Mexico.

3.7 ECONOMICS

The sand placement area provides extensive opportunities for local recreational activity, vacation and eco-tourism, and seasonal residency in addition to full-time residency. These activities generate a significant portion of the local economy.

3.8 CULTURAL RESOURCES

Cultural resources associated with the shoreline placement area were discussed in the 2000 NEPA. Portions of the proposed borrow area have been previously surveyed for the presence of cultural resources. In 2000, a southern portion of the borrow area was surveyed by C&C Technologies and report entitled; *Submerged Cultural Resource Remote Sensing Survey of two Proposed Borrow Areas Selected as Sources for Beach Renourishment Projects Anna Maria Island, Manatee County, Florida* was created (DHR File No 2000-03667). While no shipwrecks or resources were identified, potential targets existed and were indentified and buffered according for project use. Another portion of the borrow area was also survey in 2009 and report entitled; A Remote-Sensing Survey of a Proposed Borrow Area and Pipeline Corridor off Anna Maria Island, Manatee County, Florida was produced by Tidewater Atlantic, Inc (DHR file No 2009-0045). This survey included a pipe corridor for beach placement. Within the pipeline corridor the *Regina* (8MA1235) a historic ship wreck was found. To protect this resource a 400 foot buffer was placed around the wreck so that pipeline placement would not impact the known resource. Finally, upon review of NOAA navigation charts there appears to be a wreck symbol on the navigation charts in and around the borrow area. Because of the close proximity of these resources to the borrow area, an underwater cultural resource survey was determined to be required to better understand the resources within the area of potential effect.

3.9 RECREATION

The waters above the borrow areas provide some recreational value for boaters. The featureless sand floor of the borrow areas provide limited habitat for recreationally important fishes, and as a result, provide little value for recreational bottom fishing.

The material from the borrow area would be used to renourish a highly used recreational beach. Based upon the number of public beach accesses and city and county public beach parks, the entire 4.2 mile beach project is considered available to the public. Recreational opportunities within and adjacent to the fill site include beach combing, swimming, windsurfing, sunbathing, walking, jogging, and beach volleyball.

3.10 AESTHETICS

Anna Maria Island runs parallel to the Gulf Coast. The borrow area is located in the Gulf, a large expanse of water.

3.11 HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE

There are no known sources of hazardous, toxic, or radioactive wastes in the borrow area.

3.12 NOISE

Ambient noise levels along coastal Manatee County are low to moderate and are typical of recreational environments. Background noise due to breaking surf, adjacent commercial and residential areas, and traffic (boat, vehicular, airplane, etc.) appear to be moderate.

4 ENVIRONMENTAL EFFECTS

This section is the scientific and analytic basis for the comparisons of the alternatives. See Table 2 in section 2.0 Alternatives, for summary of impacts. The following includes anticipated changes to the existing environment including direct, indirect, and cumulative effects. The 2000 EA describes impacts to the shoreline placement area, and will therefore not be discussed in detail in this report.

4.1 FISH AND WILDLIFE RESOURCES

4.1.1 Alternative 1: No Action (Status Quo)

No Action would result in no changes to the new borrow area, however, the shoreline would continue to erode, potentially reducing nesting sea turtle and migratory bird habitat.

4.1.2 Alternative 2: Use of Borrow Area for Shoreline Protection

No long-term, adverse impacts to the fish communities near the dredging site or nearshore placement areas are expected. Fish are motile and will leave a disturbed area to return when pre-disturbance conditions resume.

Borrow area dredging will temporarily eliminate most of the infauna within the dredged areas. Research has shown that infauna from adjacent area will inhabit areas of degradation (Turbeville and March 1982, Nelson 1985, Bowen and Marsh 1988). The 1996 final survey after the 1992/93 renourishment showed increased species diversity at the borrow area compliance stations compared to earlier post-construction monitoring.

Disposal of sand on the beach may temporarily disrupt migratory birds, as well as sea turtle nesting. Burial of infauna directly on the beach would be permanent; however, adjacent areas of infauna should quickly recolonize the disturbed area.

4.2 THREATENED AND ENDANGERED SPECIES

Pursuant to Section 7 of the Endangered Species Act (ESA), coordination with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS) in regard to this project has taken place through the Statewide Programmatic Biological Opinion (SPBO) and the Piping Plover Programmatic Biological Opinion (P3BO) (see Appendix C). The species that fall under the jurisdiction of the FWS; minimization measures, Reasonable and Prudent Measures, and Terms and Conditions in the 2011 SPBO and the 2013 P3BO will be followed. The use of a dredge also may affect swimming sea turtles, which falls under the jurisdiction of the NMFS.

4.2.1 Sea Turtles

4.2.1.1 Alternative 1: No Action

The No Action Alternative would not affect the borrow area. However, without the placement of sand on the beach, the shoreline would potentially continue to erode, potentially reducing habitat for nesting sea turtles.

4.2.1.2 Alternative 2: Use of Borrow Area for Shoreline Protection

Swimming sea turtles may potentially be negatively affected by dredging the borrow area. Nesting sea turtles may also potentially be negatively impacted by renourishment activities, including the timing of construction activities, the potential burial of sea turtle nests, and compaction of beach sand due to the presence of heavy equipment and sand depositions.

Monitoring, relocation, and special precautionary criteria will be followed, reducing the potential for negative effects. In addition, in order to minimize this impact, the measures outlined in the State Programmatic Biological Opinion (SPBO) and the Gulf Region Biological Opinion (GARBO) would be followed.

4.2.2 Manatees

4.2.2.1 Alternative 1: No Action (Status Quo)

No impacts to manatees are expected with no dredging from the borrow area or onshore placement of the material.

4.2.2.2 Alternative 2: Use of Borrow Area for Shoreline Protection

No impacts to manatees are expected with best management practices due to dredging from the borrow area or onshore placement of the material. 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. However, during construction all Corps' standard Manatee Protection measures would be implemented.

4.2.3 Small tooth sawfish

4.2.3.1 Alternative 1: No Action (Status Quo)

The No Action Alternative is not expected to significantly impact smalltooth sawfish. Shallower estuarine waters are more suitable (contain the essential elements) for juvenile sawfish nursery habitat.

4.2.3.2 Alternative 2: Use of Borrow Area for Shoreline Protection

No smalltooth sawfish are expected within the borrow area location, however, the Corps would comply with the NMFS's Sea Turtle and Smalltooth Sawfish Construction Conditions during dredging. The borrow area to be dredged does not contain the primary constituent elements that comprise smalltooth sawfish critical habitat. Therefore, the proposed action is not likely to impact smalltooth sawfish or its critical habitat.

4.2.4 Piping Plover

4.2.4.1 Alternative 1: No Action (Status Quo)

No adverse effects are expected due to No Action. However, the shoreline could continue to erode, leaving less beach available for winter nesting.

4.2.4.2 Alternative 2: Use of Borrow Area for Shoreline Protection

Use of the borrow area would not have an effect on the piping plover. However, pumping sand onto the shoreline could temporarily affect the birds during construction. Once construction is complete, no negative effect is expected. There is no designated piping plover critical habitat in Manatee County, so there would be no adverse affect on piping plover critical habitat.

4.3 MIGRATORY BIRDS

Surveys for shorebirds and other migratory bird species would be completed prior to construction activities. Surveys would begin on April 1 or 45 days prior to construction commencement, whichever is later, and be conducted daily throughout the construction period.

4.3.1 Alternative 1: No Action (Status Quo)

No adverse impacts to migratory birds would occur due to No Action.

4.3.2 Alternative 2: Use of Borrow Area for Shoreline Protection

No adverse impacts to migratory birds are anticipated due to use of the borrow area. However, during construction all Corps' standard Migratory Bird Protection measures would be implemented.

4.4 ESSENTIAL FISH HABITAT

4.4.1 Alternative 1: No Action (Status Quo)

No impacts to EFH would occur due to the No Action Alternative.

4.4.2 Alternative 2: Use of Borrow Area for Shoreline Protection

Dredging sand from the offshore borrow area depicted in Figure 2 would result in short term effects on benthic organisms and any larval-staged organisms present in the sediment removed from the borrow area. The benthic organism population would recover in the substrate upon completion of the activity. The water column could be temporarily impacted by increased turbidity of suspended solids from the dredging of material, but that would also recover upon dredge completion.

Any hardbottoms that occur adjacent to the project area would be protected by the establishment of a buffer area between the boundary of the borrow area or pipeline corridor and hardbottom areas where no dredging would occur.

4.5 WATER QUALITY

4.5.1 Alternative 1: No Action (Status Quo)

The No Action Alternative would not have an impact on water quality.

4.5.2 Alternative 2: Use of Borrow Area for Shoreline Protection

Dredging operations would produce temporary minor changes in water quality at the dredge and discharge sites. Turbidity levels in the areas of dredging would be elevated above normal during dredging within the mixing zone. Visible plumes at the water surface are expected in the immediate vicinity of the dredging operation. Elevated turbidity levels are expected to dissipate rapidly, returning to background levels in a short period of time. Several precautionary measures would be taken to decrease any turbidity effects, such as use of low silt/clay content sand sources, monitoring turbidity levels at both the dredge and discharge sites during construction, and if turbidity levels exceed state standards during construction, suspendion of all dredging activities would cease until state levels were met. Temporary minor elevations in turbidity levels will be experienced from the return water from the disposal site.

4.6 NAVIGATION

4.6.1 Alternative 1: No Action (Status Quo)

No impact to navigation would occur with the No Action Alternative.

4.6.2 Alternative 2: Use of Borrow Area for Shoreline Protection

Temporary impacts to navigation during construction would occur due to use of the dredge and pipeline.

4.7 ECONOMICS

4.7.1 Alternative 1: No Action (Status Quo)

The No Action Alternative could eventually result in less tourism to Anna Maria Island due to continued erosion of the shoreline.

4.7.2 Alternative 2: Use of Borrow Area for Shoreline Protection

The use of the borrow area to create a more stable shoreline could result in continued tourism as well as increased storm damage reduction.

4.8 CULTURAL RESOURCES

4.8.1 Alternative 1: No Action (Status Quo)

Sand from the borrow is necessary to continue to protect historic resources located along shoreline. Continued shoreline erosion will place historic resources eligible for the National Register in jeopardy. While no impacts to cultural resources would occur due to the action No Action within the borrow area, secondary effects to the no action allows for continued erosion.

4.8.2 Alternative 2: Use of Borrow Area for Shoreline Protection

In preparation of their environmental study, Manatee County contracted Costal Planning and Engineering, Inc. (CP&E) to conduct necessary studies. Working in conjunction with CP&E, Tidewater Atlantic Research, Inc (TAR) conducted an underwater archaeological survey of the proposed borrow area. They in turn produced report entitled; *A Remote Sensing Survey of a Proposed Borrow Area off Anna Maria Island, Manatee County*. The data from this report was utilized for the Corps analysis of the borrow area and our consideration of effects associated with Alternative 2. Consultation with the Florida State Historic preservation Officer and appropriately federally recognized tribes is ongoing for compliance with the National Historic Preservation Act.

Within the proposed borrow area, TAR identified four clustered areas of targets (Buffers 9-12). These areas have been recommended for buffering with a distance of 200 feet based on the centroid of the cluster of targets. However, upon review of the report, the Corps could not support the conclusions and recommendations. For this planned dredging event, the Corps does not wish to further investigate the potential significant anomalies, targets, or features and will avoid potential impacts to such resources. To protect each of these areas, the Corps will establish a minimum buffer around all potential significant anomalies, targets, and features ranging from 200-600 feet depending upon the nature of the resources. Targets will be buffered from the center of each target, Buffer 9 is includes 15 targets all targets will be buffered at 250 feet (SSS22, SSS42, SSS33, SSS44SSS 041, SSS 043 66-3-nm-2.8g-128f, 68-1-dp-307.8g-87f, 70-2-mc-44.7g-391f, 69-1-pm-1.3g-319f, 71-3-nm-218.6g-140f, T201-2-dp-7.8g-183f, T201-3-dp-106.9g-145f, 004T-1-dp-80.1g-99f, 006T-1-dp-4.1g-178f,). Buffer 10 includes 9 targets also buffered at 250 feet (SSS21, SSS30, SSS 020, 65-3-pm1,5g-73f, SSS 040, 66-5-mc-20.2g-41.4f, 68-2-nm-48.4g-272f, 67-1-mc-1180.7g-206f, T202-2-mc-1488.1g-258f,). Buffer 11 includes 9 targets - four of which will be buffered at 200 feet (SSS17, SSS19, SSS27, SSS39), while five will be buffered at 250 feet (SSS22, 62-4-dp-16.9g-378, 64-3-nm-92.2g-321f, 63-2-mc-1104.3g-188, T203-1-mc-8.6g-405f,). Buffer 12 includes a single target (61-2-mc-1051.7g-153f) which will be buffered at 250 feet. In addition there were three subbottom features that will be buffered at 600 feet but all three fall outside of the borrow area. Through the use of buffering at the

designed distance, the Corps does not anticipate any adverse effects with the use of the borrow area for the purpose of this project. Buffer locations will be included in the plans and specifications.

4.9 RECREATION

4.9.1 Alternative 1: No Action (Status Quo)

No impacts would occur to recreation due to No Action. Long term impacts of not renourishing the beach could include potential reduced size of the beach.

4.9.2 Alternative 2: Use of Borrow Area for Shoreline Protection

Use of the borrow area will temporarily impact boaters. Placing the borrow area sand on the beach could result in maintaining beach conditions at their current state for limited periods of time.

4.10 AESTHETICS

4.10.1 Alternative 1: No Action (Status Quo)

No impacts would result due to the No Action Alternative.

4.10.2 Alternative 2: Use of Borrow Area for Shoreline Protection

Construction activities within the borrow area would temporarily impact the aesthetics of the project area.

4.11 HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE

4.11.1 Alternative 1: No Action (Status Quo)

There are no known sources of hazardous, toxic, or radioactive wastes in the project area.

4.11.2 Alternative 2: Use of Borrow Area for Shoreline Protection

There are no known sources of hazardous, toxic, or radioactive wastes in the project area. Sediments and materials for the areas to be excavated during construction have been evaluated to be sandy material, with no indication of contaminants. However, the site would be remediated in the event contaminants were unexpectedly found during construction of the advanced maintenance features.

4.12 NOISE

4.12.1 Alternative 1: No Action (Status Quo)

No increased noise would result from the No Action Alternative.

4.12.2 Alternative 2: Use of Borrow Area for Shoreline Protection

Construction activity associated with dredging would result in a short term increase in noise over the existing background level.

4.13 PUBLIC SAFETY

4.13.1 **Alternative 1: No Action (Status Quo)**

The No Action Alternative would not directly impact public safety due to the borrow area, however, anticipated erosion of the shoreline could increase the potential for negative effects to public safety due to storm damage.

4.13.2 Alternative 2: Use of Borrow Area for Shoreline Protection

As a public safety measure, beach and water related recreation in the immediate vicinity of the dredge and discharge pipe will be prohibited during project construction. Recreational access to these areas will return upon completion of construction.

4.14 CUMULATIVE IMPACTS

Cumulative effects are defined in 40 CFR 1508.7 as those effects that result from:

> *...the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or nonfederal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.*

Cumulative environmental effects for the proposed project were assessed in accordance with guidance provided by the President's Council on Environmental Quality (CEQ).

Table 5 summarizes the impact of such cumulative actions by identifying the past, present, and reasonably foreseeable future condition of the various resources which are directly or indirectly impacted by the proposed action and its alternatives. Also illustrated is the future condition with any reasonable alternatives (or range of alternatives).

Table 5. Summary of Cumulative Impacts

Resources/Issues	Past Actions & Their Effects	Current Use of Borrow Area for Shoreline Protection	Other Present and Reasonably Foreseeable Future Actions & Their Effects
Fish & Wildlife Resources	Stabilization of the shore due to erosion. Hardbottoms were found in a previous borrow area site and compensatory mitigation was implemented.	Minimal impact on migratory birds with protective measures. Benthic organisms would be impacted during dredging events. Other wildlife temporarily displaced during beach placement.	Minimal impact on migratory birds with protective measures. Benthic organisms would be impacted during dredging events. Other wildlife temporarily displaced during beach placement.
Threatened & Endangered Species	No known effects to T&E species due to other localized projects.	Minimal effect with use of standard protection measures. Shoreline protection could increase habitat suitability for nesting sea turtles in the long term, short term effects could lead to inability to nest due to sand compaction.	Minimal effect with use of standard protection measures. Shoreline protection could increase habitat suitability for nesting sea turtles in the long term, short term effects could lead to inability to nest due to sand compaction.
Essential Fish Habitat	Hardbottoms were mitigated for in previous years (2000) for shoreline protection.	No known hardbottoms exist in the borrow area. Benthic organisms temporarily displaced due to dredging of channel and settling basin, but area would recolonize after disturbance.	No substantial effect on Federally managed fish species. Benthic organisms temporarily displaced due to dredging, but would recolonize area after disturbance.
Water Quality	Temporary increase in turbidity with past dredging.	Temporary increase in turbidity with dredging.	Temporary increase in turbidity during dredging.
Cultural Resources	No adverse effect.	No adverse effect	Continued shoreline erosion will place historic resources eligible for the National Register in jeopardy.
Economics	Increased shoreline allowed for continual shoreline development and use of recreational beaches.	Anna Maria Island would continue to provide an economic stimulus to the region.	Anna Maria Island would continue to provide an economic stimulus to the region.

4.15 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

4.15.1 Irreversible

An irreversible commitment of resources is one in which the ability to use and/or enjoy the resource is lost forever. The use of sand from the borrow area would essentially irreversibly deplete the suitable sand reserves within the dredged area. Sufficient sand should be left for use by recolonization of benthic organisms, however, enough sand may not be replenished fast enough to be of value to future renourishment projects. Common irreversible resources include fuel, equipment, and supplies.

4.15.2 Irretrievable

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. Benthic organisms and common vegetation types within the project area would be temporarily lost due to construction but are expected to recover. Dredging would temporarily disrupt navigation and recreational activities.

4.16 UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS

There would be an unavoidable temporary increase in turbidity levels limited to the waters adjacent to the various construction activities. As previously stated, benthic organisms and common vegetation types within the project area would be temporarily lost due to construction but are expected to recover.

4.17 LOCAL SHORT-TERM USES AND MAINTENANCE/ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The proposed maintenance work is typically of short duration. Adversely affected benthos would be expected to recover in less than a year, possibly longer. However, some benthic species may not achieve full recovery since dredging and sand placement occurs on a biennial basis. Most fish species and other motile organisms like crabs should be able to avoid the dredging equipment. Since the project area is limited in size, the long-term productivity of fish and other motile species should not be significantly affected. Placement of dredged material within the upland disposal site is also typically of short duration but could temporarily adversely impact wildlife. As this site is only periodically used, the wildlife would re-colonize the interior of the property and habituate the site between dredging events.

4.18 INDIRECT EFFECTS

Shore protection efforts by the Corps do not generally encourage shore front development, however, some replacement development might be encouraged by continual shore protection efforts.

4.19 COMPATIBILITY WITH FEDERAL, STATE, AND LOCAL OBJECTIVES

This project has support and is compatible with federal, state, and most local objectives.

4.20 CONFLICTS AND CONTROVERSY

There are no known areas of conflicts and controversy over the proposed advanced maintenance features at this time.

4.21 UNCERTAIN, UNIQUE, OR UNKNOWN RISKS

Precautions will be taken in the event that any unknown risks arise during project design or construction. The pipeline corridor is not currently designed, however, if any hardbottoms are encountered, the standard buffer protection measures would be taken. Additional work may be needed to evaluate potential impacts to Cultural Resources for the borrow area. Because additional work is needed there may be "unknown" risks associated with expanding the settling basin outside of its current footprint.

4.22 PRECEDENT AND PRINCIPLE FOR FUTURE ACTIONS

Anna Maria Island is expected to be renourished approximately every 10 years.

4.23 ENVIRONMENTAL COMMITMENTS

The U.S. Army Corps of Engineers and contractors commit to avoiding, minimizing or mitigating for adverse effects during construction activities by including the following commitments in the contract specifications:

1. Standard protective measures for manatees shall be required.

2. Sea turtle protection measures stated in the Terms and Conditions of the FWS SPBO and GARBO will be followed to minimize/avoid take of sea turtles.

3. The District's migratory bird protection policy shall be implemented.

4. The work shall be performed in compliance with State water quality standards.

5. Air emissions such as vehicular exhaust and dust shall be controlled.

6. 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. The contractor would, after receipt of such notice, inform the contracting officer of proposed corrective action and take such action as may be approved. If the contractor fails to comply promptly, the contracting officer would issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions would be granted or costs or damages allowed to the contractor for any such suspension.

7. The contractor would train his personnel in all phases of environmental protection. The training would include methods of detecting and avoiding pollution, familiarization with pollution standards, both statutory and contractual, and installation and care of facilities to insure adequate and continuous environmental pollution control. Quality control and supervisory personnel would be thoroughly trained in the proper use of monitoring devices and abatement equipment, and would be thoroughly knowledgeable of Federal, State, and local laws,

regulations, and permits as listed in the Environmental Protection Plan submitted by the contractor.

8. The environmental resources within the project boundaries and those affected outside the limits of permanent work under this contract would be protected during the entire period of this contract. The contractor would confine his activities to areas defined by the drawings and specifications.

9. As stated in the standard contract specifications, the disposal of hazardous or solid wastes would be in compliance with Federal, State, and local laws. A spill prevention plan would also be required.

10. Terms and Conditions within the P3BO will be followed to ensure minimized effects will take place in regards to the piping plover.

4.24 COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS

4.24.1 National Environmental Policy Act of 1969

Environmental information on the project has been compiled and this EA has been prepared. The project is in compliance with the National Environmental Policy Act.

4.24.2 Endangered Species Act of 1973

USFWS consultation was initiated through a consolidated letter concerning emergency shore protection and navigation projects that are covered under the SPBO on May 20, 2013. This project was coordinated under the Endangered Species Act and is therefore, in full compliance with the Act. Species under the jurisdiction of NMFS are covered under the Gulf Regional Biological Opinion (1998).

4.24.3 Fish and Wildlife Coordination Act of 1958

This project has been coordinated with the FWS. A Coordination Act Report is not required for the proposed work. This project is in full compliance with the Act.

4.24.4 National Historic Preservation Act of 1966 (Inter Alia)

Consultation with the Florida State Historic Preservation Officer (SHPO) is ongoing in accordance with the National Historic Preservation Act (NHPA) of 1966, as amended, and as part of the requirements and consultation processes contained within the NHPA implementing regulations of 36 CFR 800. This project is also in compliance, through ongoing consultation, with the Archeological Resources Protection Act (96-95), American Indian Religious Freedom Act (PL 33 95-341), Executive Orders (E.O) 11593, 13007, & 13175 and the Presidential Memo of 1994 on Government to Government Relations. Consultation is ongoing, however, with the use of buffering potential targets, the Corps anticipates that the project will have no adverse effect on historic properties included in or eligible for inclusion in the National Register of Historic places. Compliance with each of these Federal laws is ongoing.

4.24.5 Clean Water Act of 1972

The project shall be in compliance with this Act. A Section 401(b) evaluation is included as Appendix B of this document. The FDEP WQC associated will be obtained prior to construction. All State water quality standards will be met.

4.24.6 Clean Air Act of 1972

No air quality permits are required for this project.

4.24.7 Coastal Zone Management Act of 1972

In accordance with the Coastal Zone Management Act, a Federal Consistency Determination (CD) was prepared under previous NEPA documents for the proposed nearshore placement. The State is expected to concur through the approval of the Water Quality Permit with the Federal CD that this activity is consistent with the Florida Coastal Management Program.

4.24.8 Farmland Protection Policy Act of 1981

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

4.24.9 Wild and Scenic River Act of 1968

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

4.24.10 Marine Mammal Protection Act of 1972

Protective measures for marine mammals such as manatees and dolphins shall be implemented. This project has been coordinated with the USFWS and NMFS. The work is in compliance with the Act.

4.24.11 Estuary Protection Act of 1968

No designated estuary will be affected by project activities. This Act is not applicable.

4.24.12 Federal Water Project Recreation Act

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. Another area of compliance includes the public beach access requirement on which the renourishment project hinges (Section 1, b).

4.24.13 Submerged Lands Act of 1953

The project will occur on submerged lands of the State of Florida. The project has been coordinated with the State and is in compliance with the Act.

4.24.14 Coastal Barrier Resources Act and Coastal Barrier Improvement Act of 1990

There are no designated coastal barrier resources in the project area that will be affected by this project. These Acts are not applicable.

4.24.15 Rivers and Harbors Act of 1899

The proposed work will not obstruct navigable waters of the United States. The project is in full compliance.

4.24.16 Anadromous Fish Conservation Act

Anadromous fish species will not be affected. The project has been coordinated with NMFS and is in compliance with the act.

4.24.17 Migratory Bird Treaty Act and Migratory Bird Conservation Act

No migratory birds will be affected by project activities. The Corps' standard MBPP will be used to minimize potential impacts to migratory birds. The project is in compliance with these Acts.

4.24.18 Marine Protection, Research and Sanctuaries Act

The term "dumping" as defined in the Act (3[33 U.S.C. 1402](f)) does not apply to the disposal of material for beach nourishment or to the placement of material for a purpose other than disposal (i.e. placement of rock material as an artificial reef or the construction of artificial reefs as mitigation). Therefore, the Marine Protection, Research and Sanctuaries Act does not apply to this project. The disposal activities addressed in this EA have been evaluated under Section 404 of the Clean Water Act.

4.24.19 Magnuson-Stevens Fishery Conservation and Management Act

Coordination with NFMS on EFH began May 28, 2013. Based on the Corps' analysis, the project would not likely affect EFH. The project is in compliance with the Act.

4.24.20 Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970

The purpose of PL 91-646 is to ensure that owners of real property to be acquired for Federal and federally assisted projects are treated fairly and consistently and that persons displaced as a direct result of such acquisition will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. The proposed project does not involve real property acquisition or displacement of property owners or tenants. This Act is not applicable.

4.24.21 Executive Order 11990, Protection of Wetlands

No wetlands will be affected by project activities. The proposed project is in compliance with the goals of this Executive Order (E.O.).

4.24.22 E.O. 11988, Flood Plain Management

The proposed project will have no adverse impacts to flood plain management and is in compliance with the goals of this E.O.

4.24.23 E.O. 12898, Environmental Justice

The proposed action will not result in adverse human health or substantial environmental effects. The work will not impact "subsistence consumption of fish and wildlife." The proposed project is in compliance with the goals of this E.O.

4.24.24 E.O. 13045, Protection of Children

Executive Order 13045, requires each Federal agency to "identify and assess environmental risks and safety risks [that] may disproportionately affect children" and ensure that its "policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks." This project has no environmental or safety risks that may disproportionately affect children and is in compliance.

4.24.25 E.O. 13089, Coral Reef Protection

This project will not impact those species, habitats, and other natural resources associated with coral reefs. The proposed project is in compliance with the goals of this E.O.

4.24.26 E.O. 13112, Invasive Species

This project will not introduce any invasive species.

4.24.27 E.O. 13186, Migratory Birds

The proposed project will not cause the destruction of migratory birds and their eggs or hatchlings. The proposed project is in compliance with the goals of this E.O.

5 LIST OF PREPARERS

5.1 PREPARERS

Table 6. List of Preparers

Preparer	Discipline	Role
Stacie Auvenshine	Biologist	Principal Author, NEPA Compliance
Pat Griffin	Biologist	Principal Author, Fish & Wildlife Coordination
Dan Hughes	Archeologist	Cultural & Historic Resources
Paul Karch	Environmental Engineer	Water Quality

5.2 REVIEWERS

This EA was reviewed by the supervisory chain of the Environmental Branch and Planning Division, Project Management, and the Office of Counsel of the U.S. Army Corps of Engineers, Jacksonville District.

6 PUBLIC INVOLVEMENT

6.1 SCOPING AND DRAFT EA

Due to the emergency nature of the shoreline protection project, the FONSI associated with this EA will be circulated once it is signed.

6.2 AGENCY COORDINATION

Coordination was conducted with the SHPO, FWS, and NMFS as described in this report. Agency coordination letters are located in Appendix C.

6.3 LIST OF RECIPIENTS

A copy of the EA and FONSI were made available upon completion on the internet at the following address under Manatee County:
http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx#Manatee

7 REFERENCES

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Appendix A. Coastal Zone Management Act Federal Consistency Determination for Anna Maria Island Borrow Area

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COASTAL ZONE MANAGEMENT ACT AND FLORIDA COASTAL MANAGEMENT PROGRAM FEDERAL CONSISTENCY DETERMINATION FOR ANNA MARIA ISLAND BORROW AREA

Enforceable Policy. Florida State Statues considered "enforceable policy" under the Coastal Zone Management Act (www.dep.state.fl.us/cmp/federal/24_statutes.htm).

Applicability of the Coastal Zone Management Act.

The following summarizes the process and procedures under the Coastal Zone Management Act for Federal Actions and for non-Federal Applicants[1].

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 www.dep.state.fl.us/cmp/federal/24_statutes.htm)	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[2]
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

[1] There are separate requirements for activities on the Outer Continental Shelf (subpart E) and for "assistance to an applicant agency" (subpart F).

[2] 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).

Chapter 161, Beach and Shore Preservation. The intent of the coastal construction permit program established by this chapter is to regulate construction projects located seaward of the line of mean high water and which might have an effect on natural shoreline processes.

Response: The proposed plans and information have been voluntarily submitted to the State in compliance with this Chapter.

Chapters 163 (part II), 186 and 187, County, Municipal, State, and Regional Planning. These chapters establish the Local Comprehensive Plans, the Strategic Regional Policy Plans, and the State Comprehensive Plan (SCP). The SCP 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 orderly social, economic and physical growth.

Response: The proposed project has been coordinated with various Federal, State, and local agencies during the planning process. The project meets the primary goal of the SCP through preservation and protection of the shorefront development and infrastructure.

Chapter 252, Disaster Preparation, Response and Mitigation. This chapter creates a state emergency management agency, with the authority 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 proposed project involves the dredging in an offshore borrow area in order to renourish the beach for protection of coastal properties and shoreline. Therefore, this project is consistent with the efforts of the Division of Emergency Management.

Chapter 253, State Lands. This chapter governs the management of 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. The work complies with the intent of this chapter.

Chapters 253, 259, 260, and 375, Land Acquisition. This chapter authorizes the state to acquire land to protect environmentally sensitive areas.

Response: Since the affected property already is in public ownership, this chapter does not apply.

Chapter 258, 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 dredging will not occur on state parks or aquatic preserves. Natural resources will be protected to the extent practicable through use of best management practices and implementation/monitoring guidelines that are found within the State Programmatic Biological Opinion.

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

Response: Buffers will be established from targets to avoid any effects to historic and cultural resources. The project is consistent with this Florida Statue.

Chapter 288, Economic Development and Tourism. This chapter directs the state to provide guidance and promotion of beneficial development through encouraging economic diversification and promoting tourism.

Response: The dredging (and placement on the shoreline) encourages commercial and recreational use that in turn provides economic benefits to the area. This would be compatible with tourism for this area and therefore, is consistent with the goals of this chapter.

Chapters 334 and 339, Transportation. This chapter authorizes the planning and development of a safe, balanced, and efficient transportation system.

Response: This beach renourishment project does not involve changes to transportation.

Chapter 370, Saltwater Living Resources. 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 dredging would not have a substantial adverse impact on saltwater living resources. Benthic organisms may be adversely affected by the work, however, a quick recovery within the borrow area is expected. Therefore, substantial impacts to the aquatic ecosystem are not anticipated. Based on the overall impacts of the project, the project is consistent with the goals of this chapter.

Chapter 372, Living Land and Freshwater Resources. This chapter establishes the 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 would not have a substantial adverse impact on living land and freshwater resources. Use of the placement areas could temporarily adversely impact wildlife, but these areas are expected to be re-colonized and improved between renourishments.

Chapter 373, Water Resources. The waters in the state of Florida are managed and protected to conserve and preserve water resources, water quality, and environmental quality. This statute addresses sustainable water management; the conservation of surface and ground waters for full beneficial use; the preservation of natural resources, fish, and wildlife; protecting public land; and promoting the health and general welfare of Floridians. The state manages and conserves water and related natural resources by determining whether activities will unreasonably consume water; degrade water quality; or adversely affect environmental values such as protected species habitat, recreational pursuits, and marine productivity.

Specifically, under Part IV of Chapter 373, the Department of Environmental Protection, water management districts, and delegated local governments review and take agency action on wetland resource, environmental resource, and stormwater permit applications, which address the construction, alteration, operation, maintenance, abandonment, and removal of any stormwater management system, dam, impoundment, reservoir, or appurtenant work or works, including dredging, filling and construction activities in, on, and over wetlands and other surface waters. This chapter regulates the withdrawal, diversion, management and storage of surface waters, water supply, and permitting of consumption use of water.

Response: This project will temporarily increase the turbidity of water during the dredging operations. Environmental permits would be obtained prior to construction, which would keep turbidity levels within the state standards.

Chapter 376, Pollutant Spill Prevention and Control. This chapter regulates the transfer, storage, and transportation of pollutants and the cleanup of pollutant discharges.

Response: The contract specifications will prohibit the 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 disposal of solid wastes. A spill prevention plan will be required.

Chapter 377, Oil and Gas Exploration and Production. This chapter authorizes the regulation of all phases of exploration, drilling, and production of oil, gas, and other petroleum products.

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

Chapter 380, Environmental 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. This chapter also deals with the Area of Critical State Concern program and the Coastal Infrastructure Policy.

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

Chapters 381 (selected subsections on on-site sewage treatment and disposal systems) and 388 (Mosquito/Arthropod Control). Chapter 388 provides for a comprehensive approach for abatement or suppression of mosquitoes and other pest arthropods within the state.

Response: The project shall not further the propagation of mosquitoes or other pest arthropods.

Chapter 403, Environmental Control. This chapter authorizes the regulation of pollution of the air and waters of the state by the Florida Department of Environmental Protection.

Response: An Environmental Assessment and Finding of No Significant Impact has been prepared and will be made available to the public and resource agencies including DEP. Environmental protection measures will be implemented to ensure that no lasting adverse effects on water quality or other environmental resources will occur. The project complies with the intent of this chapter.

Chapter 582, 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: Agricultural lands do not occur in the vicinity of the project; therefore this chapter does not apply.

Appendix B – Section 404(b) Evaluation
For Anna Maria Island Borrow Area

I. PROJECT DESCRIPTION

a. Location. The project is located within Manatee County, located on the west coast of Florida, south of the Tampa-St. Petersburg metropolitan area. Manatee County is bordered by Hillsborough County to the north, Hardee and De Soto Counties to the east, Sarasota County to the south, and the Gulf of Mexico to the west. The western limit of Manatee County consists of two Gulf Coast barrier reefs.

b. General Description. The U.S. Army Corps of Engineers (Corps) proposes to place approximately 1.1 million cubic yards of sand dredged from an offshore borrow area in Manatee county along 4.2 miles of shoreline on Anna Maria Island, including a 0.5 miles taper extending to R-36 (R-12 to R-36) (Figure 1). The Corps has expanded the offshore borrow area from the October 2000 Final Limited Reevaluation Report (LRR) and Environmental Assessment ((EA) Figure 2). The proposed borrow area is located west of the northern end of Anna Maria Island in the ebb shoal. The dredged material would be pumped from the borrow areas to the beach using a series of submerged and floating pipelines. A sidescan survey was completed on the proposed borrow area in November and December of 2012 and did not reveal any hardbottom resources or other benthic habitat of concern (Attachment 2). An adjacent borrow area with similar topographic features was permitted for use for the Longboat Key beach nourishment, which also showed no hardbottom resources (Water Quality Permit # 300119001, Issued: Sept 13, 2010 and Expires: Sept 13, 2020). The preferred alternative of the project is the dredging of sand from the offshore area depicted in Figure 2. The placement area is shown in Figure 3 (attached), which is the same placement as the 2000 LRR with the environmental effects described in the existing EA from 2000.xico to the west.

c. Authority and Purpose. See section 1.1 of the associated project EA.

d. General Description of Dredged Material

(1) General Characteristics of Material:

The characteristics of the dredge material shall meet the values in Table 1.

Table 1- Sediment Compliance Specifications

Sediment Parameter	Parameter Definition	Compliance Value
Maximum Silt Content	passing #230 sieve	5 percent
Maximum Fine Gravel Content	retained on #4 sieve	5 percent
Maximum Large Shell Content	retained on ¾ inch sieve	0.5 percent
Munsell Color Value	similar or lighter	6 value
Mean Grain Size Range		0.20 to 0.45 mm
Carbonate Content		50 percent

(2) Quantity of Material: It is estimated that 1.1 million cubic yards of material will be removed and placed on the shoreline.

(3) Source of Material: Material will be from an offshore borrow area (Figure 2 in the EA).

e. Description of the Proposed Discharge Site(s)

(1) Location. Dredged material would be placed along Anna Maria Island beach as described in the 2000 LRR/EA.

(2) Size. The beach placement site is approximately 4.2 miles between R-13 and R-36.

(3) Type of Site. Beach placement.

(4) Type(s) of Habitat. Beach placement would be sandy slopes with a vegetated berm.

(5) Timing and Duration of Discharge. The exact timing of dredging operations is not known, however, it is expected to take place in November.

f. Description of Disposal Method. It is anticipated that the material would be transported by ocean going hydraulic dredge, pumped onto the beach and graded using construction equipment to achieve the desired construction profile.

II. Factual Determinations

a. Physical Substrate Determinations

(1) Substrate Elevation and Slope: The designed berm crest elevation for the beach nourishment is +4.0 feet, NAVD with a constructed offshore slope of 1V:14H. The construction footprint of the proposed fill area was estimated at approximately 171 acres. The footprint of the fill after equilibration was estimated at approximately 489 acres.
(2) Sediment Type. The material to be disposed on the beach will be quartz and/or carbonate sand from an upland sand source that meets the requirements of the sand specification.
(3) Dredged Material Movement: Material will settle and remain within boundaries of upland site or be moved to downdrift beaches by wave action.
(4) Physical Effects on Benthos: Some benthic organisms that are not mobile may be may be covered by the beach material. Recolonization soon after project completion is expected to replace those organisms that do not survive project construction. It is anticipated that no long-term adverse impacts will occur.

(5) Other Effects: Not applicable.

(6) Actions Taken to Minimize Impacts: BMPs and other benthic protection measures have been coordinated with the resource agencies to minimize impacts

b. Water Circulation. Fluctuation and Salinity Determinations

(1) Water column: During beach disposal operations, turbidity will increase temporarily in the water column adjacent to the project. The increased turbidity will be short-term; therefore beach placement will have no long-term or significant impacts, if any, on salinity, water chemistry, clarity, color, odor, taste, dissolved gas levels, nutrients or eutrophication

(2) Current Patterns and Circulation: Net movement of water is from the south to the north. The project will have no significant effect on existing current patterns, current flow, velocity, stratification, or the hydrologic regime in the area.

(3) Normal Water Level Fluctuations: Mean tidal range in the project area is 2.0 feet.

(4) Salinity Gradients: Salinity is that of oceanic water. Dredged material placement will not affect normal tide fluctuations or salinity.

(5) Actions That Will Be Taken to Minimize Impacts: BMPs and other benthic protection measures have been coordinated with the resource agencies to minimize impacts.

c. Suspended Particulate/Turbidity Determinations

(1) Expected Changes in Suspended Particulates and Turbidity Levels in Vicinity of Disposal Site: There may be a temporary increase in turbidity levels in the project area along the disposal site during discharge. Turbidity will be short-term and localized and no significant adverse impacts are expected. State water quality standards for turbidity outside an allowable mixing zone would not be exceeded.

(2) Effects (degree and duration) on Chemical and Physical Properties of the Water Column: The sea floor, at this location, is characterized by a sandy beach and inshore seabed. There would be little, if any adverse effects to chemical and physical properties of the water as a result of placing clean beach compatible sand on the beach.

(a) Light Penetration: Some decrease in light penetration may occur in the immediate vicinity of the disposal area. This effect will be temporary, limited to

the immediate area of construction, and will have no adverse impact on the environment.

(b) Dissolved Oxygen: Dissolved oxygen levels will not be altered by this project due to the high energy wave environment and associated adequate reaeriation rates.

(c) Toxic Metals and Organics: No toxic metals or organics are expected to be released by the project.

(d) Pathogens: No pathogens are expected to be released by the project.

(e) Aesthetics: The aesthetic quality of the water in the immediate area of the project will be reduced during construction due to increased turbidity. This will be a short-term and localized condition. The placement of clean beach compatible sand on an erosive beach will likely improve the aesthetic quality of the immediate area. Material placed in the nearshore would likely provide improved beach width downdrft.

(f) Others as Appropriate: None.

(3) Effects on Biota

(a) Primary Production, Photosynthesis: Primary productivity is not a recognized, significant phenomenon in the surf zone, where a temporarily increased level of suspended particulates will occur. There will be no effect on the nearshore productivity as a result of the proposed disposal area. There will be effects on biota when the borrow area is dredged, however, the area is expected to quickly recolonize due to similarity of surrounding areas.

(b) Suspension/Filter Feeders: An increase in turbidity could adversely impact burrowing invertebrate filter feeders within and adjacent to the immediate construction area. It is not expected that a short-term, temporary increase in turbidity will have any long-term negative impact on these highly fecund organisms.

(c) Sight Feeders: No significant impacts on these organisms are expected as the majority of sight feeders are highly motile and can move outside the project area.

(4) Actions taken to Minimize Impacts: BMPs and other benthic protection measures have been coordinated with the resource agencies to minimize impacts.

d. Contaminant Determinations: The material that will be disposed will not introduce, relocate, or increase contaminants at the area. The material would be clean sand

meeting the sand specification and compatible with the existing beach or sandy material with some silt in the nearshore or upland.

e. Aquatic Ecosystem and Organism Determinations: The material that will be placed on the beach is similar enough to the existing substrate so that no impacts are expected. The materials meet the exclusion criteria, therefore, no additional chemical-biological interactive testing will be required.

(1) Effects on Plankton: No adverse impacts on autotrophic or heterotrophic organisms are anticipated.

(2) Effects on Benthos: The material will bury some benthic organisms. Benthic recolonization is expected to occur within a year after construction activities cease. No adverse long-term impacts to non-motile or motile benthic invertebrates are anticipated.

(3) Effects on Nekton: No adverse impacts to nektonic species are anticipated.

(4) Effects on Aquatic Food Web: No adverse long-term impact to any trophic group in the food web is anticipated.

(5) Effects on Special Aquatic Sites: There are no hardground or coral reef communities located in the immediate nearshore area that would be impacted by disposal activities. Section 4 of the EA offers a more detailed discussion on impacts.

(6) Threatened and Endangered Species: Appropriate measures to avoid, minimize, and mitigate for impacts to listed species have been coordinated with NMFS and FWS.

(7) Other Wildlife: No adverse impacts to small foraging mammals, reptiles, or wading birds, or wildlife in general are expected.

(8) Actions to Minimize Impacts: BMPs along with terms and conditions associated with ESA Biological Opinions will be followed.

f. Proposed Disposal Site Determinations

(1) Mixing Zone Determination: Clean sand, compatible with the existing beach, would be placed on the beach. This will not cause unacceptable changes in the mixing zone water quality requirements as specified by the State of Florida's Water Quality Certification permit procedures. No adverse impacts related to depth, current velocity, direction and variability, degree of turbulence, stratification, or ambient concentrations of constituents are expected from implementation of the project.

(2) Determination of Compliance with Applicable Water Quality Standards: Because of the inert nature of the material to be to be disposed, Class III water quality standards will not be violated.

(3) Potential Effects on Human Use Characteristic

(a) Municipal and Private Water Supply: No municipal or private water supplies will be impacted by the implementation of the project.

(b) Recreational and Commercial Fisheries: Fishing in the immediate construction area will be prohibited during construction. Otherwise, recreational and commercial fisheries will not be impacted by the implementation of the project.

(c) Water Related Recreation: Beach/water related recreation in the immediate vicinity of construction will be prohibited during construction activities. This will be a short-term impact.

(d) Aesthetics: The existing environmental setting will not be adversely impacted. Construction activities will cause a temporary increase in noise and air pollution caused by equipment as well as some temporary increase in turbidity. These impacts are not expected to adversely affect the aesthetic resources over the long term and once construction ends, conditions will return to pre-project levels.

(e) Parks, National and Historical Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Preserves: No such designated sites are located within the project area.

g. Determination of Cumulative Effects on the Aquatic Ecosystem: There will be no cumulative impacts that result in a major impairment in water quality of the existing aquatic ecosystem resulting from the placement of material at the project site.

h. Determination of Secondary Effects on the Aquatic Ecosystem: There will be no secondary impacts on the aquatic ecosystem as a result of the dredging.

III. Findings of Compliance or Non-Compliance with the Restrictions on Discharge

a. Adaptation of the Section 404(b)(l) Guidelines to this Evaluation: No significant adaptations of the guidelines were made relative to this evaluation.

b. Evaluation of Availability of Practicable Alternatives to the Proposed Discharge Site Which Would Have Less Adverse Impact on the Aquatic Ecosystem: No practicable alternative exists which meets the study objectives that does not involve

discharge of fill into waters of the United States. Further, no less environmentally damaging practical alternatives to the proposed actions exist. To test the suitability upland sand sources the borrow areas proposed by the contractor will be used for this project. In addition, the impacts of using other sources on cultural resources, protected species, and other environmental factors would likely be equal to or greater than the impacts of the proposed action. The no action alternative would allow the present condition of the beach to continue eroding compared to the preferred alternative.

c. Compliance with Applicable State Water Quality Standards: After consideration of disposal site dilution and dispersion, the discharge of dredged materials will not cause or contribute to, violations of any applicable State water quality standards for Class III waters.

d. Compliance with Applicable Toxic Effluent Standard or Prohibition: Under Section 307 Of the Clean Water Act: The discharge operation will not violate the Toxic Effluent Standards of Section 307 of the Clean Water Act.

e. Compliance with Endangered Species Act of 1973: The disposal of dredged material will not jeopardize the continued existence of any species listed as threatened or endangered or result in the likelihood of destruction or adverse modification of any critical habitat as specified by the Endangered Species Act of 1973, as amended. Standard conditions for monitoring and relocating turtle nests would be employed.

f. Compliance with Specified Protection Measures for Marine Sanctuaries Designated by the Marine Protection, Research, and Sanctuaries Act of 1972: No marine sanctuaries are located within the project area.

g. Evaluation of Extent of Degradation of the Waters of the United States: The placement of dredged material will not result in significant adverse effects on human health and welfare, including municipal and private water supplies, recreational and commercial fishing, plankton, fish, shellfish, wildlife, and special aquatic sites. The life stages of aquatic species and other wildlife will not be adversely affected. Significant adverse effects on aquatic ecosystem diversity, productivity and stability, and recreational, aesthetic, and economic values will not occur.

h. Appropriate and Practicable Steps Taken to Minimize Potential Adverse Impacts of the Discharge on the Aquatic Ecosystem: Appropriate steps have been taken to minimize the adverse environmental impact of the proposed action. The material proposed as beach has low silt content, therefore, turbidity due to silt will be low when discharging. Turbidity will be monitored so that if levels exceed State water quality standards of 29 NTU's above background, the contractor will be required to cease work until conditions return to normal. In the vicinity of reef and other hard grounds, measures would be taken to minimize sediment deposition on sensitive reef organisms.

i. On the basis of the guidelines, the proposed dredging and disposal sites are specified as complying with the requirements of these guidelines.

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APPENDIX C.
CORRESPONCE FOR ANNA MARIA ISLAND BORROW AREA

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P.O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO
ATTENTION OF

Planning and Policy Division
Environmental Branch

28 MAY 2013

Mr. Mark Sramek
National Marine Fisheries Service PRD
263 13th Ave South
St. Petersburg, FL 33701

Dear Mr. Sramek:

Enclosed for your 30 day review and comment is the Essential Fish Habitat (EFH) assessment as required by the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) for the Anna Maria Island shore protection project.

Due to shoreline damages from tropical storm Debby, the U.S. Army Corps of Engineers (Corps) proposes to place approximately 1.1 million cubic yards of sand dredged from an offshore borrow area in Manatee county along 4.2 miles (R-12 to R-36) of shoreline on Anna Maria Island, including 0.5 miles of taper extending to R-36 (Figure 1). The Corps has expanded the offshore borrow area from the October 2000 Final Limited Reevaluation Report (LRR) and Environmental Assessment ((EA) Figure 2). The proposed borrow area is located west of the northern end of Anna Maria Island in the ebb shoal. A sidescan survey was completed on the proposed borrow area in November and December of 2012 and did not reveal any hardbottom resources or other benthic habitat of concern (Attachment 2). An adjacent borrow area with similar topographic features was permitted for use for the Longboat Key beach nourishment, which also showed no hardbottom resources (Water Quality Permit # 300119001, Issued: Sept 13, 2010 and Expires: Sept 13, 2020). The preferred alternative of the project is the dredging of sand from the offshore area depicted in Figure 1. The placement area is shown in Figure 3 (attached), which is the same placement as the 2000 LRR with the environmental effects described in the existing EA from 2000.

After reviewing available data, the Corps has determined that the project would not have a significant adverse impact to EFH or federally managed fisheries within the project area. Based on this information, we request that you concur with this finding.

If you have any questions, please contact Stacie Auvenshine at (904) 232-3694 or by email at stacie.j.auvenshine@usace.army.mil.

Sincerely,

Eric P. Summa
Chief, Environmental Branch

Enclosure

From: Auvenshine, Stacie SAJ
To: "Mark Sramek - NOAA Federal"
Subject: RE: Anna Maria Island Manatee County, Florida EFH Coordination (UNCLASSIFIED)
Date: Thursday, June 20, 2013 2:27:00 PM

Classification: UNCLASSIFIED
Caveats: NONE

Hi Mark,
Thank you for responding so quickly on the Essential Fish Habitat Assessment for Anna Maria Island. It was especially helpful to receive a quick response due to the accelerated schedule of post-Tropical Storm Debby relief. We appreciate your concurrence on minimal adverse effects occurring due to the borrow and sand placement areas along 4.2 miles of shoreline on Anna Maria Island.

Stacie Auvenshine

-----Original Message-----
From: Mark Sramek - NOAA Federal [mailto:mark.sramek@noaa.gov]
Sent: Tuesday, June 04, 2013 1:14 PM
To: Auvenshine, Stacie SAJ
Cc: Griffin, Patrick M SAJ; Summa, Eric P SAJ
Subject: Re: Anna Maria Island Manatee County, Florida EFH Coordination (UNCLASSIFIED)

NOAA's National Marine Fisheries Service, Southeast Region, Habitat Conservation Division, has reviewed the subject U. S. Army Corps of Engineers (USACE), Jacksonville District, Planning and Policy Division, Environmental Branch's essential fish habitat (EFH) assessment dated May 28, 2013, regarding the the USACE's proposed sand borrow area dredging and placement of sand along 4.2 miles of shoreline on Anna Maria Island, in Manatee County, Florida. Sand placement would be used to repair shoreline damages as a result of Tropical Storm Debby which occurred during 2012. From our review of the information in the EFH assessment, results of the 2012 borrow area sidescan survey, and description of the sand placement areas, we anticipate any adverse effects that might occur on marine and anadromous fishery resources would be minimal and, therefore, do not object to authorization of this activity by the USACE.

Thank you for your efforts to coordinate this project under the EFH provisions of the Magnuson-Stevens Fishery Conservation and Management Act.

Mark Sramek
727-824-5311

On Tue, May 28, 2013 at 4:50 PM, Auvenshine, Stacie SAJ <Stacie.J.Auvenshine@usace.army.mil> wrote:

> Classification: UNCLASSIFIED
> Caveats: NONE
>
> Hi Mark,
> I am working on the Anna Maria Island shore protection project. Attached for your 30 day review and comment is the EFH assessment this. I have attached the official letter and will put a hard copy in the mail tomorrow.
>
> Please let me know if you have any questions or would like to discuss anything, I am available by phone or email. I have been working with Kat McConnell and will likely set up a phone call with you this week to "meet" by phone and perhaps give you a quick overview of the project.
>
> Thanks!

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P.O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO
ATTENTION OF

20 MAY 2013

Planning and Policy Division
Environmental Branch

Mr. Larry Williams
State Supervisor
U.S. Fish and Wildlife Service
1339 20th Street
Vero Beach, Florida 32960-3559

Dear Mr. Williams:

I am writing you concerning the upcoming activities under the Flood Control and Coastal Emergencies Act (FCCE) and other emergency appropriations. Since some of these activities fall within the jurisdiction of the Jacksonville Field Office, a copy of this letter is being sent to that office. These activities are to address erosion of shoreline and shoaling of navigation channels associated with Hurricane Sandy and Tropical Storm Debby. The purpose of this letter is (1) to update you on the status of these projects since our 30-day notification letter of February 26, 2013, pursuant to the Statewide Programmatic Biological Opinion (SPBO), (2) to include activities under the emergency supplemental appropriation, and (3) to provide your office notification of activities subject to the pending Programmatic Piping Plover Biological Opinion (P3BO). See attached table for a summary status of these activities.

The attached spreadsheet shows the current status of the FCCE and emergency appropriation projects. I have also attached location maps for these proposed efforts. These items are updated periodically. The participation of Fish and Wildlife Service staff (Jeff Howe and Peter Plage) in the bi-weekly interagency webinar and their interest in these efforts is very much appreciated.

In addition to those activities indicated in our 30-day notification letter, the following shore protection projects should be added: Manatee County (may have been overlooked in the 30-day notification letter) and the Long Key segment in Pinellas County. The following navigation dredging projects should be added: St. Lucie Inlet (or amend the existing Biological Opinion of 2011), Ponce de Leon Inlet (near shore placement), St. Augustine Inlet, Jupiter Inlet, Bakers Haulover Inlet, and, potentially, Ft. Pierce Inlet. Enclosed are updated information sheets concerning the new and updated items. Except as otherwise indicated on the enclosed spreadsheet, please add these items to our 30-day notification letter (Some items have a separate Biological Opinion and would not be under the SPBO).

With respect to the pending P3BO, I have enclosed information sheets concerning those items involving beach or near shore placement. Note that the following shore protection projects would be considered Optimal Piping Plover habitat as defined in the proposed P3BO (public lands within one mile of an inlet): the Gasparilla segment in Lee County, the Ocean Ridge segment in Palm Beach County, and the Jupiter-Carlin segment in Palm Beach County. Also, the following navigation dredging projects would be in Optimal Piping Plover habitat: Jupiter Inlet, St. Lucie Inlet (including Critical Habitat), and St. Augustine Inlet (if material is placed on Anastasia State Park). There is Optimal Piping Plover Habitat (including Critical Habitat) at Ponce de Leon Inlet, but the dredged material will not be placed on the beach. The remaining items listed in the previous paragraph and in the enclosures to this letter, would not be in Optimal Piping Plover Habitat and are not likely to adversely affect Piping Plovers.

In the attached spreadsheet, I have included the anticipated award dates for construction of these activities. Note that these are emergency appropriations intended to repair storm damage and to minimize further risk to the shoreline and navigation channels. Due to time and other constraints, monitoring for Piping Plover will be limited to the duration of the construction contract. In addition, it will not be practicable to limit construction to the 49-day window (May 16 to July 4). Also it will not be practicable, in most cases, to limit placement of material to the near shore.

If you have any questions, please contact Kenneth Dugger at 904-232-1686 or contact me at 904-232-1665.

Sincerely,

Eric P. Summa
Chief, Environmental Branch

Enclosures

Copies Furnished:

Geoffrey Wikel, Bureau of Ocean Energy Management, 381 Elden Street, MS 4042, Herndon, Virginia 20170

Dawn Jennings, Acting Field Supervisor, U.S. Fish and Wildlife Service, 7915 Baymeadows Way, Suite 200, Jacksonville, Florida 32256-7517

ESA Consultation Summary

Activity	Dredging/Borrow	Placement	ESA Consultation
Pinellas County Treasure Is (N Treas Is, Sunset Bch)	Egmont Shoal	R127-R128; R138-R141	P3BO, SPBO, GRBO
Pinellas County Long Key	Egmont Shoal	R144-R148; R160-R165	P3BO, SPBO, GRBO
Lee County- Captiva	Borrow area VI-E plus re-handling area	R85-R109	7 Nov 2012 BO, SPBO, GRBO
Lee County - Gasparilla	Borrow Area 2, Ebb Shoal at Boca Grande	R11-R24	P3BO (OPPH), SPBO, GRBO
Manatee County	Expanded Off Shore Borrow Area	R12-R33	P3BO, SPBO, GRBO
Broward County-Seg II	Upland Sand Source, truck haul	R26-R53, above mean high water	P3BO, SPBO
Brevard County- North	Canaveral Shoal II or Canaveral Shoal I	R1-R53 plus near shore re-handling area and disposal area	P3BO, SPBO, SARBO
Brevard County-South Reach	Canaveral Shoal II or Canaveral Shoal I	R119-R137.5 plus near shore re-handling area	P3BO, SPBO, SARBO
Palm Beach-Jupiter/Carlin	Off-Shore	R13-R19	P3BO (OPPH), SPBO, SARBO
Palm Beach-Delray	Off-Shore	R175-R188	2012 EA, SPBO, SARBO
Palm Beach- North Boca Raton	New Off-Shore	R202-R212	P3BO, SPBO, SARBO
Palm Beach- Ocean Ridge	North and South off-shore borrow sites	R152-R159	P3BO (OPPH), SPBO, SARBO
Ft Pierce Inlet (includes ODMDS placement)	Channel and sediment basin	Suitable material on beach, near shore, ODMDS, or upland	P3BO, SPBO, SARBO
St Lucie Inlet	Channel and impoundment basin	Beach Placement: R59-R75 north to south, Hobe Sound	Nov 2011 BO, P3BO (OPPH), SPBO, SARBO
St Augustine Inlet	Channel	immediately south of inlet on beach berm	P3BO, SPBO, SARBO
Ponce de Leon Inlet	north and south federal channels	Near shore only	P3BO, SPBO, SARBO
IWW-Jacksonville to Miami, Bakers Haulover	Channel	Beach Placement to South, Bal Harbour	P3BO, SPBO, SARBO
IWW-Jacksonville to Miami, Jupiter Inlet		beach south of inlet (R13-R19)	25 May 2007 BO or P3BO (OPPH), SPBO, SARBO

P3BO=Programmatic Piping Plover BO; OPPH=Optimal Piping Plover Habitat; SPBO=Statewide Programmatic BO, GRBO=Gulf Regional BO, SARBO=South Atlantic Regional BO

United States Department of the Interior

U. S. FISH AND WILDLIFE SERVICE

7915 BAYMEADOWS WAY, SUITE 200
JACKSONVILLE, FLORIDA 32256-7517

IN REPLY REFER TO:
FWS Log No. 41910-2013-F-0148

July 02, 2013

Colonel Alan M. Dodd
District Commander
U.S. Army Corps of Engineers
Post Office Box 4970
Jacksonville, Florida 32232-0019

Dear Colonel Dodd:

This document transmits the U.S. Fish and Wildlife Service's (Service's) decision as to the application of the August 22, 2011, Statewide Programmatic Biological Opinion (SPBO) (Service 2011) and the May 22, 2013, Programmatic Piping Plover Biological Opinion (P^3BO) (Service 2013), to proposed Flood Control and Coastal Emergency (FCCE) sand placement and navigation dredging projects. The U.S. Army Corps of Engineers (Corps) determined in letters to the Service (two dated April 4, one of April 5, and one of May 20, 2013) that various proposed projects located in North Florida Ecological Services Field Office (NFESFO) area of authority "may affect" the threatened loggerhead sea turtle (*Caretta caretta*), endangered leatherback sea turtle (*Dermochelys coriacea*), endangered green sea turtle (*Chelonia mydas*), endangered hawksbill sea turtle (*Eretmochelys imbricata*), and endangered Kemp's ridley sea turtle (*Lepidochelys kempii*); "may affect, but are not likely to adversely affect" the endangered West Indian manatee (*Trichechus manatus*); and would have "no effect" on listed beach mice. The letters of April 4 and 5, 2013, determined that the projects "may affect, but are not likely to adversely affect" the threatened piping plover (*Charadrius melodus*). The letter of May 20, 2013, provided determinations as to whether individual proposed FCCE projects were located in optimal piping plover habitat as defined in the P^3BO. Those projects outside of optimal habitat where determined as "may affect, but are not likely to adversely affect" the piping plover. Only the St. Augustine Inlet project was determined to take place in optimal piping plover habitat, resulting in a "may affect" determination. The May, 20, 2013, letter did not address beach mice, but attached project summaries cited that the endangered Anastasia Island beach mouse (*Peromyscus polionotus phasma*) is present in the vicinity of the St. Augustine Inlet project and that the threatened southeastern beach mouse (*Peromyscus polionotus niveiventris*) is present in the vicinity of the Ponce de Leon Inlet project. Since the May 20, 2013, letter, meetings, phone calls, and emails have provided further details of the projects and Corps commitments to address listed species concerns. This letter is provided in accordance with section 7 of the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 *et seq.*), Fish and Wildlife Coordination Act of 1958, as amended (FWCA) (48 Stat. 401; 16 U.S.C. 661 *et seq.*), and the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 701 et seq.).

Please note that the Service and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) share federal jurisdiction for sea turtles under the Act. The Service has responsibility for sea turtles on nesting beaches and the NMFS has jurisdiction for sea turtles in the marine environment. Our analysis will only address activities that may impact nesting sea turtles, their nests and eggs, and hatchlings as they emerge from the nest and crawl to the sea. The Corps

should consult with the NMFS concerning potential impacts to foraging and swimming sea turtles, and all other marine species under their jurisdiction within the action area. For further information on Act compliance with the NMFS, please contact Ms. Cathy Tortorici, Chief of the Interagency Cooperation Branch, by e-mail at cathy.tortorici@noaa.gov or by phone at 727-209-5953.

PROJECT DESCRIPTION

The Corps proposes to conduct seven FCCE beach nourishment or navigation dredging projects in Brevard, St. Johns, Volusia, Pinellas and Manatee counties, Florida (Table 1). Using a cutterhead, hopper, or clamshell dredge, the authorized volume of beach compatible material will be dredged from an authorized borrow area or navigation channel, placed in authorized fill templates, and graded to the authorized profile using bulldozers. Non-beach compatible material may be placed in nearshore waters or in an offshore dredge material disposal site.

The proposed projects will take place during day and nighttime hours with a proposed construction time frame varying from 3 to 7 months (Table 1). All staging areas and beach access corridors will be sited to avoid impacts to upland habitat to the extent possible. If impacts are incurred, all impacted areas and vegetation will be restored to preconstruction condition and elevation.

The action area is defined as all areas to be affected directly or indirectly by the action and not merely the immediate area involved in the action. The Service identifies the action area to include the staging areas, pipeline corridors, beach access corridors, offshore borrow areas, sand placement fill templates, downdrift areas, and navigation channel dredge templates associated with the proposed FCCE projects. The intent of the proposed FCCE projects is to address shoreline erosion and navigation channel shoaling due to damage incurred from Tropical Storm Debby or Hurricane Sandy.

APPLICATION OF THE SPBO AND P3BO

The Service has determined that the SPBO is appropriate to apply to the proposed FCCE projects. Previously, the Service and Corps predicted emergency events resulting in project effects such as in these FCCE projects to occur at a frequency of no more than once every 10 years (as reflected in the amount or extent of anticipated take for sea turtles included in the SPBO). Given that the proposed FCCE projects are scheduled to occur sooner than the 10-year frequency, in a letter dated May 2, 2013, the Service analyzed these effects under the Act, provided additional conditions, and modified the take for emergency projects under the SPBO to occur once in 7 years, for this one-time event.

The Corps has agreed to follow and implement the minimization measures, Reasonable and Prudent Measures (R&PMs), and Terms and Conditions (T&Cs) in the SPBO and those included in the May 2, 2013, letter, as they relate to nesting sea turtles. However, the Corps has requested exceptions relating to lighting surveys from T&C A11 in the SPBO and T&C 3 in the May 2, 2013, letter due to timing and funding constraints. The Corps has proposed that alternative lighting surveys be conducted just prior to construction and immediately after construction, allowing for evaluation of both "pre-construction" and "post-construction" lighting hazards. This requested exception is authorized by the Service provided that the Corps expedites all lighting survey reports, and their transmission to the Service and to the Florida Fish and Wildlife Conservation Commission (FWC). The pre-construction survey can be summarized as a brief report; however, the post construction survey report must include: methodology of the survey; a map showing the position of the lights visible from the beach; a description of each light source visible from the beach; recommendations for remediation; and any actions taken. Within a week after the post construction survey a meeting

should be scheduled to discuss results. The meeting should occur, at latest, within one month of the post construction survey (earlier if during the sea turtle nesting season). This will enable all parties to take appropriate measures to minimize lighting impacts.

Regarding the beach mice, the St. Augustine Inlet project is anticipated to impact 4,200 linear feet of beach adjacent to dunes systems and other vegetation supporting the Anastasia Island beach mouse. For this reason we conclude that the project has potential to affect the beach mouse. Provided that the project adheres to the SPBO's R&PMs and T&Cs regarding beach mice, take provisions of the SPBO would apply. For the Ponce de Leon Inlet project, habitat near the inlet is known to support the southeastern beach mouse. Currently proposed dredging and nearshore disposal alternatives that would avoid work in this habitat should not impact the southeastern beach mouse.

Provided that the Standard Manatee Conditions for In-Water Work (FWC 2011) and minimization measures outlined in the SPBO will be implemented to avoid potential impacts to manatees, the Service concurs with the Corps determination that the FCCE projects "may affect, but are not likely to adversely affect' the manatee.

The Service has also determined that the provisions of the P^3BO are appropriate to apply to these FCCE projects. The conservation measures in the P^3BO are applicable for projects located in both non-optimal and optimal piping plover habitat. In addition, the R&PMs, and T&Cs as outlined in the P^3BO are applicable to those projects located in optimal piping plover habitat (Table 1). The Corps has agreed to follow and implement the conservation measures, R&PMs and T&Cs, that apply to the proposed projects. However, the Corps has requested an exception to T&C 8 of the P^3BO relating to piping plover monitoring. Due to time and funding restraints, the Corps has determined that it cannot conduct monitoring for 1 year prior to construction and 2 years post-construction, respectively and that surveys will be limited to the term of construction (i.e., when the construction contractor is working on the beach, generally starting soon after the "notice to proceed" and ending when the contractor finishes placing sand or finishes conducting other shore protection activities on or near the beach). The requested exception is authorized by the Service and we concur with the effect determinations regarding the piping plover provided in the Corps letter of May 20, 2013.

Please note that the SPBO and P^3BO dictate that the Corps and the Service will meet annually during the fourth week of August to review proposed activities, assess new data, identify information needs, and scope measures to address those needs (including but not limited to evaluations and monitoring specific to the SPBO and P^3BO, reviewing results, formulating or minimizing actions that minimize take of listed species, and monitoring effectiveness of those actions). Also note that the Corps is required to submit a report by July 31 of the year immediately following construction, including information as described in T&Cs A22 or B19 in the SPBO, and T&C 9 in the P^3BO.

FISH AND WILDLIFE RESOURCES

This section is provided in accordance with the FWCA to address other fish and wildlife resources in the project area. All sand placement projects within the nesting season could impact nesting birds protected under the MBTA. In order to comply with the MBTA, the Corps shall follow the FWC's standard shorebird protection guidelines to protect against impacts to nesting shorebirds during implementation of these projects (Nesting season is from February 15-August 31 on the Gulf Coast and from April 1-August 31 on the Atlantic Coast).

The FCCE projects involve fill templates previously constructed; hence, hardbottom and seagrass issues have likely been addressed and appropriately mitigated. The Corps should continue to consult with the NMFS to assess all potential effects to hardbottom habitat and submerged aquatic vegetation within the dredging and sand placement templates, and shoreline downdrift areas.

REINITIATION NOTICE

This concludes formal consultation on the actions outlined in the request. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if:

1. The amount or extent of incidental take outlined in the SPBO, P^3BO, or the May 2, 2013, letter is exceeded. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation;
2. New information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion;
3. The agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or,
4. A new species is listed or critical habitat designated that may be affected by the action.

Thank you for your cooperation in the effort to conserve fish and wildlife resources. Should you have additional questions or require clarification regarding this letter, please contact Peter Plage at 904-731-3085.

Sincerely,

Dawn Jennings
Acting Field Supervisor

cc: electronic only

Corps, Jacksonville, Florida (Ken Dugger)
DEP, Tallahassee, Florida (Lanie Edwards)
FWC, Tallahassee, Florida (Robbin Trindell)
NMFS, St. Petersburg, Florida (Cathy Tortorici)
Service, Vero Beach, (Jeff Howe)
Service, Panama City, Florida (Patty Kelly)
Service, St. Petersburg, Florida (Anne Marie Lauritsen)

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P.O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO
ATTENTION OF

19 JUL 2006

Planning Division
Environmental Branch

Robert Bendus, SHPO
Division of Historical Resources
State Historic Preservation Officer
500 South Bronough Street
Tallahassee, Florida 32399-0250

Dear Mr. Bendus:

The U.S. Army Corps of Engineers (Corps), Jacksonville District is studying the effects associated with a shoreline restoration protection related to Hurricane Debby. The project will utilize approximately 1.3 million cubic yards of sand from the new borrow area and place between R-12 to R-36 on Anna Maria Island in Manatee County, Florida (Figure 1, Enclosure). Located in Manatee County, the project placement areas have been restored in the past as part of a federally approved project and previously consulted on. Recently with the passing of Hurricane Debby funding has been established to restore areas to the original project design template.

Prior to the storm event, Manatee County was in the process of developing a new borrow area for future restoration events along the project area. In preparation of their environmental study, Manatee County contracted Costal Planning and Engineering, Inc. (CP&E) to conduct necessary studies. Working in conjunction with CP&E, Tidewater Atlantic Research, Inc (TAR) conducted an underwater archaeological survey of the proposed borrow area. Attached is the draft report submitted to the Corps by Manatee County and CP&E to facilitate cultural resource requirements associated with this project. As part of this effort any comments on this draft report can be made to the Corps and will be passed on to Manatee County and their contractor.

Within the proposed borrow area; TAR identified four clustered areas of targets and six additional buffer areas (Note buffer areas 3, 4, &5 have been combined by TAR). These areas have been recommended for buffering with a distance of 200 feet based on the centroid of the cluster of targets. However, upon review of the report the Corps cannot support the conclusions and recommendations for this report. The Corps instead will buffer areas within the borrow area from the center of each target to ensure adequate resource protection. The buffers will vary depending on the targets and are listed in Table 1 (Enclosure). The Corps will expand Buffer Area 11 to include reported sonar targets. Outside the project area, the Corps will maintain buffer areas proposed by TAR as areas where no spudding or anchoring will be permitted. In addition, the Corps is proposing to buffer three subbottom features that were identified in the vicinity of the project area. Two are reported in the current draft report while one was reported in an earlier draft of the report. Areas where the Corps will deviate from the TARs recommendations are listed in Table 1.

In addition to the current survey, portions of the proposed borrow area have been previously surveyed for the presence of cultural resources. In 2000, a southern portion of the borrow area was surveyed by C&C Technologies and report entitled; *Submerged Cultural Resource Remote Sensing Survey of two Proposed Borrow Areas Selected as Sources for Beach Renourishment Projects Anna Maria Island, Manatee County, Florida* was created (DHR File No 2000-03667). While no shipwrecks or resources were identified, potential targets existed and were indentified and buffered according for project use. Another portion of the borrow area was also survey in 2009 and report entitled; *A Remote-Sensing Survey of a Proposed Borrow Area and Pipeline Corridor off Anna Maria Island, Manatee County, Florida* was produced by Tidewater Atlantic, Inc (DHR file No 2009-0045). This survey included a pipeline corridor for beach placement. Within the pipeline corridor the *Regina* (8MA1235) a historic ship wreck was found. To protect this resource a 400 foot buffer was placed around the wreck so that pipeline placement would not impact the known resource.

The Corps has determined that proposed restoration project associated with Manatee County Shore Protection Project borrow area poses no adverse effects to historic properties as the dredging and restoration activities are designed to avoid all nearby resources and no significant resources are located in either the placement area or borrow location. Previously consulted on buffers will remain in effect and new buffers established by the Corps based on TARs report will be incorporated into the project design. I request your comments on the determination of no effect. If there are any questions, please contact Mr. Dan Hughes at 904-232-3028 or e-mail at daniel.b.hughes@usace.army.mil.

Sincerely,

for Eric P. Summa
Chief, Environmental Branch

Enclosure

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P.O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO
ATTENTION OF

19 JUL 2013

Planning Division
Environmental Branch

Dr. Paul Backhouse, THPO
Seminole Tribe of Florida
Tribe Historic Preservation Office
30290 Josie Billie Highway
PMP 1004
Clewiston, FL 33440

Dear Mr. Paul Backhouse:

The U.S. Army Corps of Engineers (Corps), Jacksonville District is studying the effects associated with a shoreline restoration protection related to Hurricane Debby. The project will utilize approximately 1.3 million cubic yards of sand from the new borrow area and place between R-12 to R-36 on Anna Maria Island in Manatee County, Florida (Figure 1, Enclosure). Located in Manatee County, the project placement areas have been restored in the past as part of a federally approved project and previously consulted on. Recently with the passing of Hurricane Debby funding has been established to restore areas to the original project design template.

Prior to the storm event, Manatee County was in the process of developing a new borrow area for future restoration events along the project area. In preparation of their environmental study, Manatee County contracted Costal Planning and Engineering, Inc. (CP&E) to conduct necessary studies. Working in conjunction with CP&E, Tidewater Atlantic Research, Inc (TAR) conducted an underwater archaeological survey of the proposed borrow area. Attached is the draft report submitted to the Corps by Manatee County and CP&E to facilitate cultural resource requirements associated with this project. As part of this effort any comments on this draft report can be made to the Corps and will be passed on to Manatee County and their contractor.

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The Corps has determined that proposed restoration project associated with Manatee County Shore Protection Project borrow area poses no adverse effects to historic properties as the dredging and restoration activities are designed to avoid all nearby resources and no significant resources are located in either the placement area or borrow location. Previously consulted on buffers will remain in effect and new buffers established by the Corps based on TARs report will be incorporated into the project design. I request your comments on the determination of no effect. If there are any questions, please contact Mr. Dan Hughes at 904-232-3028 or e-mail at daniel.b.hughes@usace.army.mil.

Sincerely,

Eric P. Summa
Chief, Environmental Branch

Enclosure

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P.O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO
ATTENTION OF

19 [illegible] 2013

Planning Division
Environmental Branch

Mr. Fred Dayhoff, Tribal Representative
NAGPRA, Section 106
Miccosukee Tribe of Indians of Florida
Post Office Box 440021
Tamiami Station
Miami, Florida 33144

Dear Mr. Dayhoff:

The U.S. Army Corps of Engineers (Corps), Jacksonville District is studying the effects associated with a shoreline restoration protection related to Hurricane Debby. The project will utilize approximately 1.3 million cubic yards of sand from the new borrow area and place between R-12 to R-36 on Anna Maria Island in Manatee County, Florida (Figure 1, Enclosure). Located in Manatee County, the project placement areas have been restored in the past as part of a federally approved project and previously consulted on. Recently with the passing of Hurricane Debby funding has been established to restore areas to the original project design template.

Prior to the storm event, Manatee County was in the process of developing a new borrow area for future restoration events along the project area. In preparation of their environmental study, Manatee County contracted Costal Planning and Engineering, Inc. (CP&E) to conduct necessary studies. Working in conjunction with CP&E, Tidewater Atlantic Research, Inc (TAR) conducted an underwater archaeological survey of the proposed borrow area. Attached is the draft report submitted to the Corps by Manatee County and CP&E to facilitate cultural resource requirements associated with this project. As part of this effort any comments on this draft report can be made to the Corps and will be passed on to Manatee County and their contractor.

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Sincerely,

Eric P. Summa
Chief, Environmental Branch

Enclosure

FLORIDA DEPARTMENT of STATE

RICK SCOTT
Governor

KEN DETZNER
Secretary of State

Mr. Eric Summa
Department of the Army
Jacksonville District Corps of Engineers
Jacksonville, Florida 32232-0019

July 9, 2013

Re: DHR Project File No.: 2013-02516 / Received by DHR: June 21, 2013
1A-32 Permit No.: 1213.017
Revised Draft: *A Remote Sensing Survey of a Proposed Borrow Area off Anna Maria Island, Manatee County, Florida*

Dear Mr. Summa:

Our office received and reviewed the above referenced survey report in accordance with Section 106 of the *National Historic Preservation Act of 1966* (Public Law 89-665), as amended in 1992, and *36 C.F.R., Part 800: Protection of Historic Properties*, and Chapter 267 of the *Florida Statutes*, for possible adverse impact to cultural resources (any prehistoric or historic district, site, building, structure, or object) listed, or eligible for listing, in the National Register of Historic Places (NRHP).

In November and December 2012, Tidewater Atlantic Research, Inc. (TAR) conducted an underwater remote sensing survey of a potential borrow areas near Anna Maria Island on behalf of Coastal Planning & Engineering, Inc. TAR identified one hundred ninety-seven (197) magnetic anomalies and seventy-two (72) side-scan sonar targets within the project area during the investigation.

Based on our review of the revised draft report, there are a number of data discrepancies regarding the numbers of magnetometer and side-scan sonar anomalies when comparing the report summary, the buffer descriptions, and the tables in the appendices. Additionally, there are seventy-nine side-scan sonar images provided in Appendix E, but the report and tables do not address all of these. This version of the report also fails to mention all the subbottom features that the Corps has recommended for avoidance. Furthermore, a completed Florida Master Site File survey log sheet will need to be included with the corrected final report in order for the document to be complete and sufficient in accordance with Chapter 1A-46, *Florida Administrative Code*.

We note that the recommendations of the Corps differ from those of TAR in that they will require larger buffer areas for Buffers 9 – 12, which fall within the proposed borrow area, as well as buffers around three subbottom profiler features that were not recommended for avoidance by TAR. The Corps also recommends avoidance of targets identified in previous remote sensing surveys in the area. The Corps has determined that, contingent upon avoidance of the magnetic anomalies, side-scan sonar targets, and subbottom features, and their respective buffers, the proposed restoration project associated with the Manatee County Shore Protection Project borrow area will have no adverse effect on historic properties. Our office concurs with the determinations of the Corps. We request that TAR forward a revised final report to our office when available.

For any questions concerning our comments, please contact Rudy Westerman, Historic Preservationist, by electronic mail at Rudy.Westerman@DOS.MyFlorida.com, or by phone at 850.245.6333. We appreciate your continued interest in protecting Florida's historic properties.

Sincerely,

Timothy A. Parsons, DSHPO for

Robert F. Bendus, Director
Division of Historical Resources
and State Historic Preservation Officer

Pc: Julie Byrd, Interoffice MS #8B

APPENDIX D.
SIDESCAN SURVEY FOR ANNA MARIA ISLAND BORROW AREA

Manatee County 2012 Borrow Area Sidescan Survey

Coastal Planning and Engineering, Inc. (CPE) conducted a sidescan survey of a proposed borrow area offshore of Anna Maria Island, Florida. Sidescan data is required to verify the location and extent of unconsolidated sediment and to map ocean bottom features such as benthic habitats, exposed pipelines, cables, underwater wrecks, potential cultural resources, etc. The sidescan survey was conducted to identify features that may affect borrow area delineation, introduce hazards to dredging, or adversely impact the environment. The survey was conducted in two phases. The first phase was conducted November 11-16, 2012 while the second phase was conducted December 4-5, 2012.

Equipment and Methods

The field investigation included the collection of sidescan sonar data across the entire proposed borrow area at 30 meter line spacing and was collected under the responsible charge of a Florida licensed Professional Geologist (PG) and a Registered Professional Archeologist (RPA). The geophysical equipment used during the field investigation, as well as the collection and processing methodologies, are described below.

Navigation System

The navigation and positioning system deployed for this survey was a Trimble real-time kinematic (RTK) global positioning system (GPS) with dual frequency receivers. RTK GPS relies on a base station and transmitter placed on a survey point with a known elevation and horizontal position. The base station for the survey was set on top of the South Martinique condo building in the City of Anna Maria, Florida. This location provides the clear horizon needed to minimize phase-measurement effects caused by multi-pathing. The base station position for the RTK GPS system was surveyed and established prior to survey operations. Horizontal and vertical positioning checks were conducted at Florida Department of Environmental Protection (FDEP) second order monuments before and after the survey within the project area to confirm network and survey accuracy as required by 5J-17 F.A.C. The base station transmits carrier phase and Doppler shift corrections via radio link to a receiver onboard the survey vessel. The receiver on the survey vessel can then apply the carrier phase and Doppler shift corrections to the position of the vessel as measured by GPS satellites.

All navigation and survey control for the geophysical surveys and positioning for vibracores was conducted under the direction of a Florida licensed Professional Surveyor and Mapper (PSM). The vertical accuracy of control data meets the FDEP Bureau of Beaches and Coastal Systems (BBCS) Technical Standards established in Part II.A of the *BBCS Monitoring Standards for Beach Erosion Control Projects* and minimum technical standards of Chapter 61G17-6, F.A.C., which references the requirements set forth in the United States Army Corps of Engineers manual EM 1110-2-1003. In order to achieve the required accuracy the topographic and hydrographic surveys were controlled using 2nd order FDEP "A" monuments. RTK GPS data was collected at 1 Hz or faster to minimize position interpolation when assigning the position to the various geophysical data.

Hypack Inc.'s Hypack 2012 ® Data Collection and Processing Program

The sidescan sonar data collection system was interfaced with an onboard computer, and the data was integrated in real time using Hypack Inc.'s Hypack 2012® software. Hypack 2012® is a state-of-the-art navigation and hydrographic surveying system. The location of the towfish tow-point on the vessel in relation to the RTK GPS was measured, recorded and entered into the Hypack 2012® survey program. The length of cable deployed between the tow-point and towfish was also measured and entered into Hypack 2012®. Hypack 2012® then takes these values and monitors the actual position of the towfish in real time. Online screen graphic displays include the pre-plotted survey lines, the updated boat track across the survey area, adjustable left/right indicator, as well as other positioning information such as boat speed, quality of fix measured by Position Dilution of Precision (PDOP), and line bearing. The digital data is merged with positioning data (RTK GPS), video displayed and recorded to the acquisition computers hard disk for post processing and/or replay.

Sidescan Sonar System

This investigation was conducted using an EdgeTech 4200-HFL sidescan sonar system (Figure 1). This system uses full-spectrum chirp technology to deliver wide-band, high-energy pulses coupled with high resolution and good signal to noise ratio echo data. The sonar package included a portable configuration with a laptop computer running EdgeTech's Discover® acquisition software and a 300/600 kHz dual frequency towfish running in high definition mode. Dual frequency provides a more complete sidescan return that aids interpolation at the outer portions of the swath, which in turn provides a more complete data set.

Figure 1. EdgeTech 4200-HFL sidescan sonar system.

During the investigations, the sidescan was towed from the survey vessel at a position and depth that limited exposure to sources of interference and provided the best possible record quality. The survey was conducted in such a manner to achieve total bottom coverage within the survey area. The line spacing was set up so that we obtained at least 100% overlap (*i.e.* all areas of the seafloor were covered at least twice). The digital sidescan data was merged with positioning data (RTK GPS via Hypack 2012®). Position data appeared in the video display and was logged to disk for post processing and/or replay. The acoustic data was recorded digitally.

Post-collection processing of the sidescan sonar data was completed using Chesapeake Technology, Inc's SonarWiz.MAP software. This software allows the user to apply specific gains and settings in order to produce enhanced sidescan imagery that can be interpreted and digitized for specific benthic habitat features and debris throughout the survey area. The first step in processing was to import the data into the software and bottom track the data. Bottom tracking is achieved using an automated bottom tracking routine and in some cases manual bottom tracking. This step provides the data with an accurate baseline representation of the seafloor and eliminates the water column from the data.

After bottom tracking, the data was processed to reduce noise effects (commonly due to the vessel, sea state, or other anthropogenic impacts) and enhance the seafloor definition. In most cases automatic time-varying gain (TVG) is sufficient to provide the best imagery. Time-varying gain divides the data into parallel swaths and equalizes backscatter of each swath to create a normalized image highlighting contrast change throughout the image, which creates a better mosaic and allows the processer to pick out areas with similar acoustic properties. In areas with high levels of noise in the data it was necessary to apply automatic gain control (AGC) which normalizes the data by strengthening quiet regions/soft returns while simultaneously reducing/eliminating overly strong returns by obtaining a local average at a given point. Once the data was sufficiently processed a mosaic was produced in the form of a geotiff along with an interpretation of bottom features such as potential benthic habitat and manmade debris in the form of a shapefile.

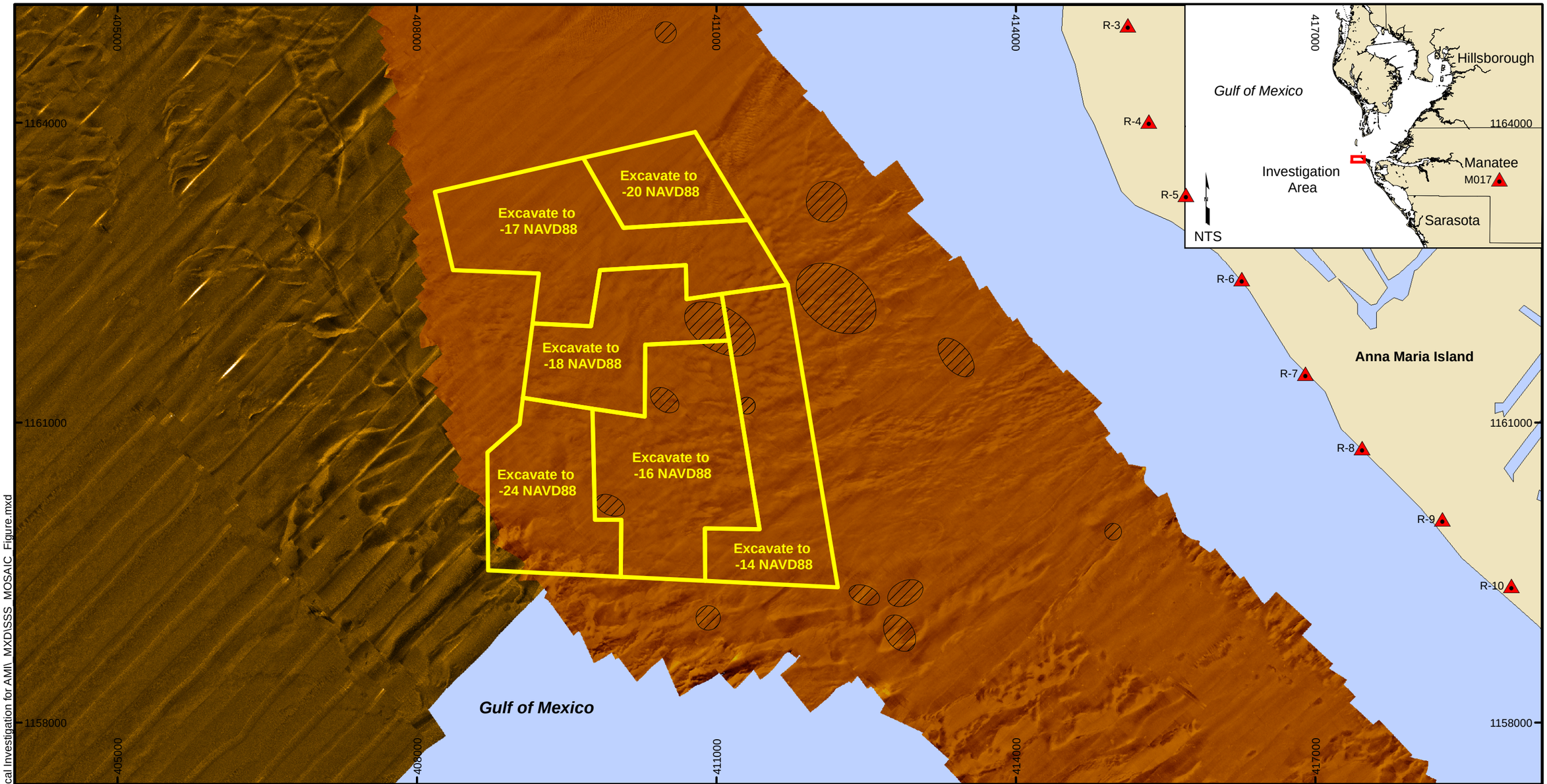
Bottom features were digitized on a line-by-line basis to allow for comparison of features along adjacent lines. The digitized features were imported into ArcGIS 10.1, along with the final mosaic for further analysis. Once they were imported into the GIS platform, final composite digitized features were created based on the line by line analysis performed in the sidescan processing platform.

Results

A detailed review and interpretation of the collected and processed data indicated that there were no hardbottom resources (or other benthic habitat of concern) located within the entire survey area, including the proposed borrow area. While some modern debris and some potential culturally-significant targets (which were subsequently buffered for protection) were identified within the survey area, there were no identified targets of environmental concern.

Attached is a figure depicting the extents of the sidescan survey completed in December 2012 with respect to the borrow area limits. Also, shown in the figure are the extents of the sidescan

survey conducted in October 2010 as part of the Longboat Key borrow area investigation. Analysis of the October 2010 sidescan surveys confirmed that there were no hard bottom resources identified in the immediate vicinity of the southwest corner of the borrow area that extends beyond the December 2012 survey.



Notes:

1. Coordinates are in feet based on the Florida State Plane Coordinate System, West Zone, North American Datum of 1983 (NAD 83).
2. Sidescan surveys were performed by Coastal Planning & Enigneering, Inc. on October 2010 and December 2012.

Legend:

- FDEP Monuments
- 2013 AMI Borrow Area
- 2013 Final Cultural Resource Buffers
- December 2012 Sidescan Survey
- October 2010 Sidescan Survey

N

0 500 1,000 Feet

1 inch = 1,000 feet

TITLE:

Sidescan Sonar Mosaic
Anna Maria Island
Manatee County, Florida

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A CB&I COMPANY
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Date: 05/03/13	By: KM	Comm No. : 147174.02	**Figure No.:**

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