JULY 2015

FINAL SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

MAINTENANCE DREDGING
ST. AUGUSTINE INLET AND ADJACENT INTRACOASTAL WATERWAY
ST. JOHNS COUNTY, FLORIDA

Includes beach and nearshore placement north of the inlet

U.S. Army Corps
of Engineers
JACKSONVILLE
DISTRICT

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO
ATTENTION OF

FINDING OF NO SIGNIFICANT IMPACT
NORTH BEACH AND NEARSHORE PLACEMENT
MAINTENANCE DREDGING
ST. AUGUSTINE INLET AND ADJACENT INTRACOASTAL WATERWAY
ST. JOHNS COUNTY, FLORIDA

I have reviewed the Environmental Assessment (EA) for the proposed north beach and nearshore placement of material from the maintenance dredging of the federally authorized St. Augustine Inlet and adjacent Intracoastal Waterway in St. Johns County, FL. Dredged material would be placed either on the South Ponte Vedra or Vilano beach placement areas or in the South Ponte Vedra or Vilano nearshore placement areas. Other placement areas, which are found south of the inlet, have been previously evaluated and are covered by an existing EA. 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. Reasons for this conclusion are in summary:

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

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

c. The proposed work has been determined by the State of Florida to be consistent with the Florida Coastal Management Program.

d. Coordination with the Florida State Historic Preservation Officer and appropriate federally recognized tribes is ongoing. It has been determined that the proposed Vilano beach and nearshore placement options would not adversely affect any properties eligible for or listed on the National Register of Historic Places. Use of the South Ponte Vedra for nearshore placement will require additional consultation for potential impacts to cultural resources. No adverse affects would result from shoreline placement.

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

f. Public benefits will be provided from reduced shoreline erosion.

In consideration of the information summarized, I find that the proposed Federal Navigation Projects, north beach and nearshore placement of material from the maintenance dredging of St. Augustine Inlet and adjacent Intracoastal Waterway, will not significantly affect the human environment and does not require an Environmental Impact Statement. A copy of this document will be made available to the public at the following website:

http://www.saj.usace.army.mil/Divisions/Planning/Branches/Environmental/DocsNotices_OnLine_StJohnsCo.htm.

A M Dodd

ALAN M. DODD.
Colonel, Corps of Engineers
Commanding

9 July 15

Date

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ON
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1 PROJECT PURPOSE AND NEED

1.1 PROJECT DESCRIPTION.

The U.S. Army Corps of Engineers (Corps), Jacksonville District, is proposing to conduct periodic maintenance dredging of St. Augustine Inlet and the adjacent Intracoastal Waterway (IWW) in St. Johns County, FL. This would include IWW Cuts SJ-28 to SJ-30, a portion of the Inlet flood shoal, and a portion of the inlet entrance channel along Porpoise Point (see Figure 1, Project Map). Beach compatible dredged material would be placed along the shoreline within Anastasia State Park (ASP) and St. Augustine Beach between Florida Department of Environmental Protection (DEP) monuments R-132 to R-152 and along South Ponte Vedra (SPV) and Vilano Beach (VB) between R-84 to R-110 and R-110 to R-117. Non-beach compatible material would be placed in a near-shore placement area between DEP monuments R-141 to R-146 south of the inlet or R-84 to R-110 (SPV) and R-110 to R-117 (VB) north of the inlet. The IWW channel would be maintained to its authorized dimensions of 125-feet wide by 12-feet deep plus 2-feet of allowable over-depth at mean lower low water (MLLW). The inlet entrance channel is authorized to be maintained at a “best fit” alignment within the confines of a 600-foot-wide area, between the north and south jetties. The entrance channel bottom width is to be maintained at 200 feet wide by -16 feet deep MLLW (plus 2 ft of allowable over depth for a total project depth of -18 ft MLLW), along with 50 feet wide settling basins along the north and south sides of the channel. The accumulation of sediment, commonly referred to as shoaling, has restricted the width of the project channels and reduced their depths.

1.2 PROJECT NEED OR OPPORTUNITY.

The relatively high rate of shoaling within the IWW and St. Augustine Inlet necessitates frequent maintenance dredging. Last dredged in 2013, the most recent examination survey documented a total in situ shoaling volume of approximately 200,000 cubic yards (cy) within the authorized channels. Minimum depths recorded from the project channels are -2.1 ft causing navigation problems for commercial and recreational vessels. Vessels are currently being forced outside the authorized channels in search of deeper water, waiting for high tides, or prop dredging

Figure 1. Project Area Map – Existing (south) and Proposed (north) Placement Areas.

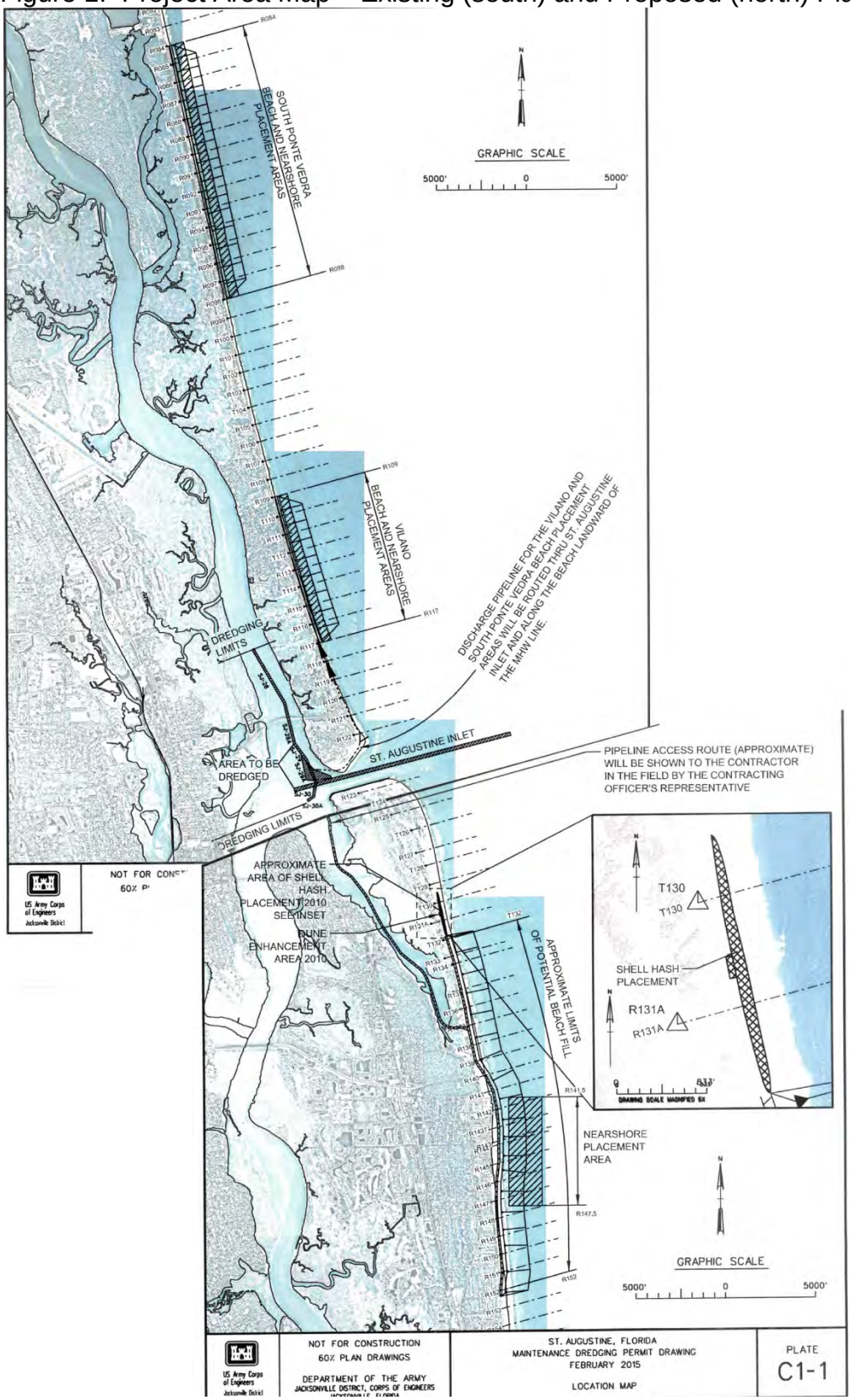
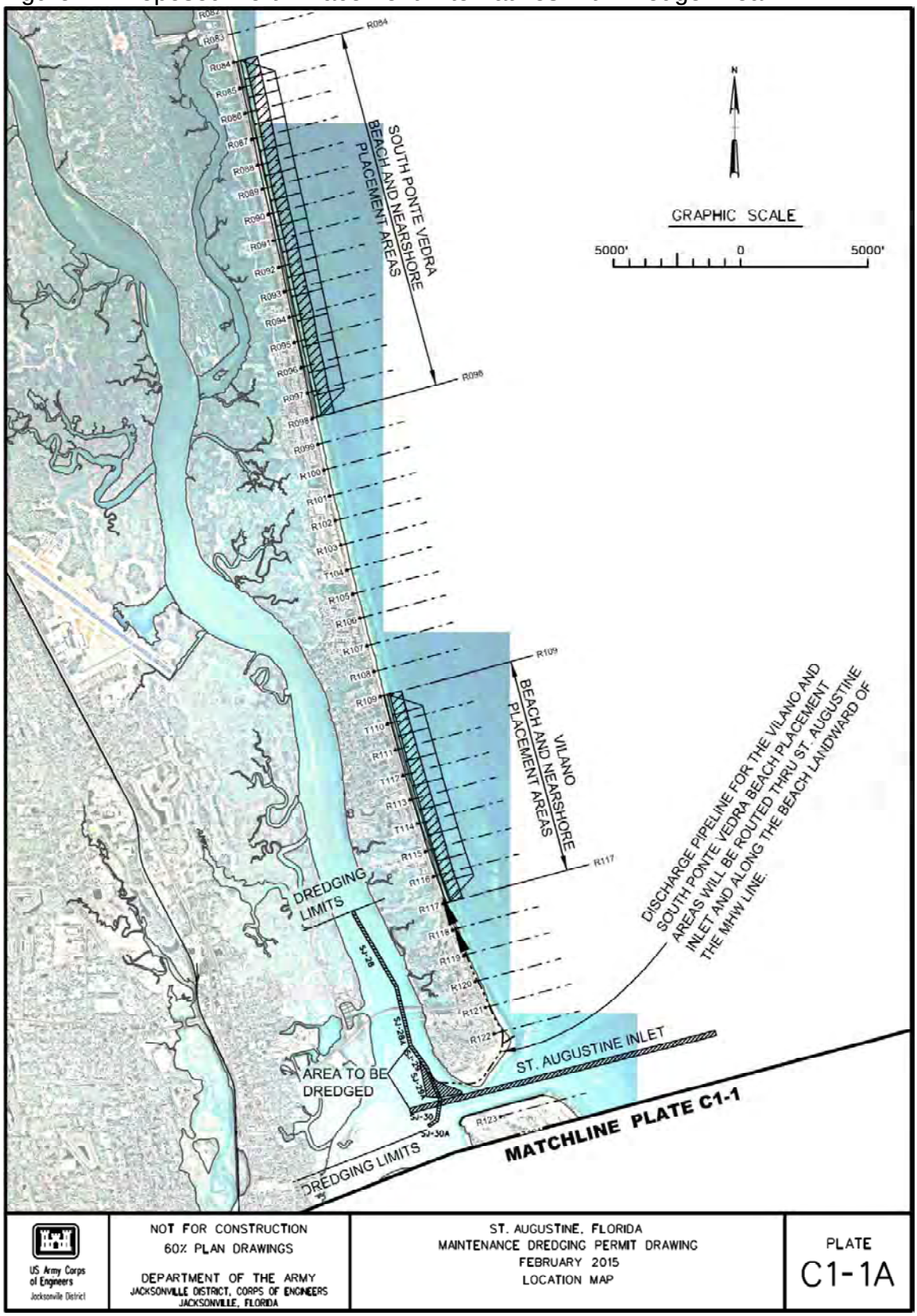


Figure 2. Proposed North Placement Alternatives with Dredge Area.



through the channels. Removal of the shoal material would maintain the navigable capacity of the project channels. In addition, the sediments accreting in the project channels are effectively being removed from the near-shore sediment transport system. So, placing this material on the adjacent critically eroded beaches would restore (or mimic through regional sediment management - RSM) the natural transport process.

A Florida Department of Environmental Protection, Division of Water Resource Management report (June 2014) on *Critically Eroded Beaches in Florida* (DEP 2014), identified 11.5 miles of critically eroded shoreline in St. Johns County. The proposed SPV and VB placement areas (Figure 1) compose 3.4 miles of the 11.5 mile DEP designated critically eroded areas. In addition, the St. Augustine Inlet Management Plan (IMP; DEP 2014) was revised based on an updated sediment budget (USACE 2012) which found that a maximum of 278,000 cubic yards (CY) per year could be dredged from the inlet system which would naturally replenish itself without adverse erosion on the adjacent beaches. The revised IMP recommends to: 1) Continue to transfer sediment to the adjacent beaches with a placement ratio of approximately one-third of material placement to the north and two-thirds of material placement to the south; and 2) Inlet sand transfer material shall be placed in designated critically eroded areas to the north or south of the inlet between R84 and R152.

1.3 PROJECT AUTHORITY.

1.3.1 AUTHORIZATION.

The Atlantic Intracoastal Waterway between Jacksonville, Florida and Miami, Florida was initially authorized by the River and Harbor Act of 1927 and has been modified by numerous Acts of Congress of which the current project is principally set forth in the River and Harbor Act of 1945. The St. Augustine Inlet was authorized by the River and Harbor Act of 1950.

1.4 RELATED ENVIRONMENTAL DOCUMENTS.

Related NEPA, design, and planning documents for the IWW and St. Augustine Inlet, St. Johns County include the following:

- Critically Eroded Beaches in Florida, Updated June 2014. Florida Department of Environmental Protection. Tallahassee, FL. 2014.

- St. Augustine Inlet Management Implementation Plan. Florida Department of Environmental Protection. Tallahassee, FL. 2014.

- Regional Sediment Budget for St. Augustine Inlet and St. Johns County, FL, 1998/1999-2010. U.S. Army Corps of Engineers (CESAJ/ERDC/CHL). Jacksonville, FL. 2012.

- Environmental Assessment, Maintenance Dredging St. Augustine Inlet and Adjacent Intracoastal Waterway. U.S. Army Corps of Engineers. Jacksonville, FL. 2011.

- Environmental Assessment, Maintenance Dredging St. Augustine Harbor and Adjacent Segments of the Intracoastal Waterway. U.S. Army Corps of Engineers. Jacksonville, FL. 1998.

- Environmental Assessment, St. Johns County Shore Protection Project. U.S. Army Corps of Engineers. Jacksonville, FL. 1998.

- St. Augustine Inlet Management Study Implementation Plan Certificate of Adoption. Florida Department of Environmental Protection. Tallahassee, FL. 1998.

- St. Augustine Inlet Management Plan. St. Johns County, Florida. Taylor Engineering, Inc. Jacksonville, FL. 1997.

- Long-Range Dredged Material Management Plan for the Intracoastal Waterway, St. Johns County, Florida. Taylor Engineering, Inc. Jacksonville, Florida.1989.

- Final Environmental Impact Statement. Beach Erosion Control Study. St. Johns County, Florida. U.S. Army Corps of Engineers. Jacksonville, FL. 1979.

1.5 DECISIONS TO BE MADE.

Subsequent to the completion of the 2011 EA and the signing of the Finding of No Significant Impact (FONSI), the IMP was revised as discussed in section 1.2 above. The revisions focused on the quantity of material which could be dredged from the man-made inlet on an annual basis and also the ratio of the dredged material to be placed north and south of the inlet. However, the analysis and information within the 2011 EA regarding the effects of dredging and south beach and nearshore placement are still pertinent and that document is here-by incorporated by reference into this analysis. Therefore, this Supplemental Environmental Assessment (SEA) will only evaluate the placement of dredged material from St. Augustine Inlet and the IWW north of the inlet and incorporate any other relevant new information.

1.6 SCOPING AND ISSUES.

1.6.1 RELEVANT ISSUES.

The following issues were identified as relevant to the proposed action and appropriate for further evaluation: threatened and endangered species including sea turtles and their Critical Habitat (CH), West Indian manatee, piping plover, red knot, Anastasia island beach mouse (AIBM), smalltooth sawfish, and North Atlantic right whale; water quality; essential fish habitat; wildlife resources; air quality; cultural resources; aesthetics; recreation; socio economics; shoreline stabilization; noise; navigation; and coastal barrier resources.

1.6.2 ISSUES ELIMINATED FROM FURTHER ANALYSIS.

The proposed action is expected to have little or no impact on soils, housing, or population dynamics. The effects of dredging and beach and nearshore placement south of the inlet are discussed in detail in the 2011 EA which is hereby incorporated by reference into this analysis. Therefore, those actions are not discussed further in this SEA.

1.7 ENVIRONMENTAL COORDINATION

1.7.1 WATER QUALITY CERTIFICATION

This project would be performed in compliance with State of Florida water quality standards. Minor modification 0251706-006-JN of Joint Coastal Permit (JCP) 0251706-001-JC was issued on 21 April 2015 constituting the State's concurrence that VB nearshore placement is consistent with the enforceable policies of the Florida Coastal Management Program. It is anticipated that an application for a major modification to this JCP will be submitted to DEP for additional north placement options in compliance with the recommendations of the revised IMP. A Federal Consistency Determination is included in Appendix B of this document and was submitted to the State for their additional concurrence.

1.7.2 ENDANGERED SPECIES ACT- SECTION 7 COORDINATION

In accordance with Section 7 of the Endangered Species Act, the proposed work will be coordinated with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). The 13 March 2015 Statewide Programmatic Biological Opinion (SPBO) issued by the USFWS and the 25 September 1997 South Atlantic Regional Biological Opinion (SARBO) issued by the NMFS would be applied to the proposed project.

2 ALTERNATIVES

The alternatives section is perhaps the most important component of this EA. It describes the no-action alternative, the proposed action, and other reasonable alternatives that were evaluated. The beneficial and adverse environmental effects of the alternatives are presented in comparative form, providing a clear basis for choice to the decisionmaker and the public. A preferred alternative was selected based on the information and analysis presented in the sections on the Affected Environment and Probable Impacts.

2.1 DESCRIPTION OF ALTERNATIVES.

2.1.1 NO-ACTION ALTERNATIVE

No north beach or nearshore placement of dredged material would occur. The adjacent critically eroded beaches north of the inlet would not receive inlet dredged sediments. However, dredging and south placement as discussed in the 2011 EA (Corps, 2011) would still occur.

2.1.2 DREDGED MATERIAL PLACEMENT OPTIONS

2.1.2.1 NORTH BEACH PLACEMENT

Beach placement — placing on the beach dredged material compatible with the native beach sands — is an approach to dredged material management that the State of Florida encourages. In fact, the DEP BBCS Strategic Beach Management Plan for the Northeast Atlantic Coast Region and the St. Augustine IMP recommend the placement of beach quality dredged material from the maintenance of the project channels on the adjacent beaches. The Corps also includes this approach as an essential part of dredged material management for channel reaches which, based on historic data, are likely to contain beach quality sediments. These conditions are most typically encountered immediately adjacent to tidal inlets where waterway shoals are formed primarily by sand driven through the inlet by waves and tides. The material historically dredged here has been beach quality in compliance with the Florida State sand rule and the beaches adjacent to St. Augustine Inlet are designated by DEP as critically eroded. Thus dredged material from the project channels has been routinely placed on the beach adjacent to the inlet. Therefore, beach placement is the primary strategy of dredged material management for the project channels. Per the updated IMP, 1/3 of the dredged material would be placed north of the inlet on the beach in SPV between R-84 to R-110 or VB between R-110 to R-117 as O&M funding allows.

2.1.2.2 NORTH NEARSHORE PLACEMENT

Material that does not qualify for beach placement would be placed in the nearshore between the -6’ and -12’ MLLW contour adjacent to the beach placement areas in SPV between R-84 to R-110 or VB between R-110 to R-117 (Figures 1 and 2). Pursuant to subsection 62B-41.005(15), Florida Administrative Code (the “Florida State sand rule”), sandy sediment derived from the maintenance of coastal navigation channels shall be

deemed suitable for beach placement with up to 10 percent fine material passing the #230 sieve. If this material contains between 10 percent and 20 percent fine material passing the #230 sieve by weight, and it meets all other sediment and water quality standards, it shall be considered suitable for placement in the nearshore portion of the beach. Therefore, this placement alternative could be used if the dredged material were deemed incompatible for beach placement but in compliance with the sand rule for nearshore placement.

2.2 PREFERRED ALTERNATIVE

Due to distance from the dredge area, the VB nearshore placement is the least cost disposal alternative and could alleviate some of the critical erosion as the material is transported via wave action to the beach. Per Section 145 of WRDA of 1976, placement of beach quality dredged material on the beach can occur when the costs are greater than the least cost disposal plan provided 100% of the additional costs are contributed by the State or other non-Federal sponsor.

2.3 ALTERNATIVES ELIMINATED FROM FURTHER EVALUATION

2.3.2 OCEAN DISPOSAL

Ocean disposal of dredged material is not a realistic option for the project channels. Ocean disposal requires the transport of dredged material from the dredging site to an authorized offshore disposal area. In the case of St. Johns County, this operational requirement poses a very costly and difficult task for the following reasons. First, the material must be loaded into hopper barges capable of transiting the relatively shallow depths of the IWW. This consideration places severe limits on hopper capacity. Regulatory restrictions on hopper overflow during filling further limit hopper capacity. These barges must proceed to St. Augustine Inlet for passage to the ocean. Once reaching St. Augustine Inlet the material must then be transferred to deep draft seagoing, Coast Guard approved barges for transport to the authorized disposal area resulting in increased “double handling” costs. A review of offshore disposal areas currently authorized by the U.S. Environmental Protection Agency (EPA) to receive dredged material identified an approved offshore placement site approximately 4 miles east of the St. Johns River Inlet in northern Duval County (approximately 30 miles north of St. Augustine Inlet). Therefore, the costs associated with this type of operation and the likely increase in future regulatory restrictions on the use of ocean dumping, together make reliance on this method of material disposition inappropriate for the long-term maintenance of the project channels.

2.3.3 OPEN WATER DISPOSAL

This particular method of material disposition was perhaps the most widely used approach prior to the evolution of today’s environmental regulatory programs addressing wetlands protection. Discussions with representatives of the relevant regulatory agencies have confirmed that this approach carries unacceptable environmental impacts in terms of the degradation or destruction of wetlands. In addition, the creation or expansion of open water islands represents a one-time

opportunity for material placement and does not lend itself to active material management practices which require upland access for equipment and personnel. As a result, the use of open water disposal was not considered an acceptable dredged material management strategy for the project channels.

2.3.4 UPLAND PLACEMENT

Placement of dredged material in an upland dredged material management area (DMMA) is typically preferred for projects where the material has historically been incompatible with beach or nearshore placement. That is not the case for the dredged material from the project channels which has historically been beach quality. In addition, there are no DMMAs available in the project area. Therefore, since the project channels are man-made, sand drifting in the littoral drift process is trapped by the project channels, and the adjacent shorelines have been designated critically eroded by DEP, upland placement was not considered an acceptable dredged material management strategy for this project.

2.4 COMPARISON OF ALTERNATIVES

Table 1 lists alternatives considered and summarizes the major features and consequences of the proposed action and alternatives. See section 4.0 Environmental Effects for a more detailed discussion of impacts of alternatives.

Table 1: Summary of Direct and Indirect Impacts

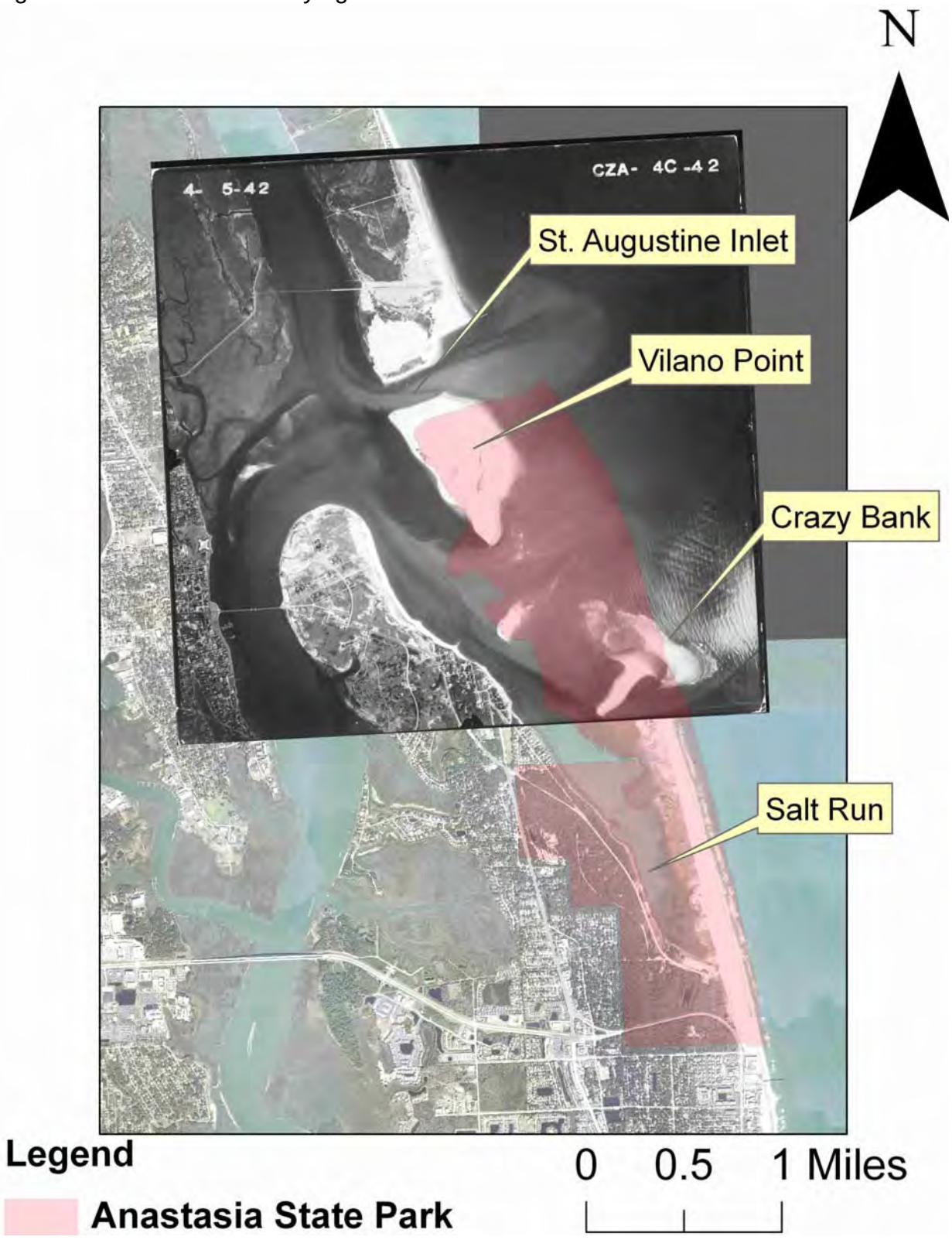
ALTERNATIVE ENVIRONMENTAL FACTOR	No Action Status Quo (Continued placement to the south as covered in the previous EA)	North Beach Placement	North Nearshore Placement
NORTH ATLANTIC RIGHT WHALE	May affect, but not likely to adversely affect, with implementation of standard protection measures.	May affect, but not likely to adversely affect, with implementation of standard protection measures.	May affect, but not likely to adversely affect, with implementation of standard protection measures.
SEA TURTLES	May affect, but not likely to adversely affect. Loss of nesting habitat from lack of north placement to adjacent critically eroded beaches.	May affect, but not likely to adversely affect. Placement could occur during the nesting season requiring nest relocation.	May affect, but not likely to adversely affect.
WEST INIDIAN MANATEE	May affect, but not likely to adversely affect, with implementation of standard protection measures.	May affect, but not likely to adversely affect, with implementation of standard protection measures.	May affect, but not likely to adversely affect, with implementation of standard protection measures.

ALTERNATIVE ENVIRONMENTAL FACTOR	No Action Status Quo (Continued placement to the south as covered in the previous EA)	North Beach Placement	North Nearshore Placement
SMALLTOOTH SAWFISH	May affect, but not likely to adversely affect, with implementation of protection measures.	May affect, but not likely to adversely affect, with implementation of protection measures.	May affect, but not likely to adversely affect, with implementation of protection measures.
PIPING PLOVER	May affect, but not likely to adversely affect, with implementation of protection measures.	May affect, but not likely to adversely affect, with implementation of protection measures.	No effect.
RED KNOT	May affect, but not likely to adversely affect, with implementation of protection measures.	May affect, but not likely to adversely affect, with implementation of protection measures.	No effect.
ANASTASIA ISLAND BEACH MOUSE	May affect, but not likely to adversely affect, with implementation of protection measures.	May affect, but not likely to adversely affect, with implementation of protection measures.	May affect, but not likely to adversely affect, with implementation of protection measures.
WATER QUALITY	Short-term localized increase in turbidity at the dredging and south placement areas.	Short-term localized increase in turbidity at the north beach areas.	Short-term localized increase in turbidity at the north nearshore areas.
ESSENTIAL FISH HABITAT	Estuarine and Marine water column with unconsolidated sediment and ocean high salinity surf zone habitats would be impacted during dredging and placement activities.	Estuarine and Marine water column with unconsolidated sediment and ocean high salinity surf zone habitats would be impacted during placement activities.	Estuarine and Marine water column with unconsolidated sediment habitat would be impacted during placement.

ALTERNATIVE ENVIRONMENTAL FACTOR	No Action Status Quo (Continued placement to the south as covered in the previous EA)	North Beach Placement	North Nearshore Placement
FISH AND WILDLIFE RESOURCES	Minor impact during dredging and beach placement. Nesting, foraging, and resting shorebirds could be impacted during construction. Potential habitat loss due to erosion from lack of north placement.	Minor impact during beach placement. Nesting, foraging, and resting shorebirds could be impacted during construction.	Minor impact during nearshore placement. Foraging fish and birds could be temporarily impacted during construction.
AIR QUALITY	Minor and short-term impacts caused by equipment.	Minor and short-term impacts caused by equipment.	Minor and short-term impacts caused by dredge.
CULTURAL RESOURCES	No adverse effect to known historic properties.	No adverse effect to known historic properties with buffer zones.	No adverse effect to known historic properties with buffer zones. Additional survey for SPV required.
RECREATION	Short-term disruption of recreation.	Short-term disruption of recreation on the beach.	Short-term disruption of recreation within the nearshore.
AESTHETICS	Minor short-term adverse impact due to construction activities.	Minor short-term adverse impact due to construction activities.	Minor short-term adverse impact due to construction activities.
NOISE	Minor and temporary adverse effect.	Minor and temporary adverse effect.	Minor and temporary adverse effect.
SOCIO ECONOMICS	Unabated north erosion could cause economic impact.	Major long-term benefit to local economies.	Major long-term benefit to local economies.
SHORELINE STABILIZATION	Adverse impact from lack of north placement.	Major benefit from north placement.	Minor benefit from north placement.

ALTERNATIVE ENVIRONMENTAL FACTOR	No Action Status Quo (Continued placement to the south as covered in the previous EA)	North Beach Placement	North Nearshore Placement
NAVIGATION	Temporary disruption during dredging and placement from presence of equipment.	Temporary disruption during placement from presence of equipment.	Temporary disruption during placement from presence of equipment.

Figure 3. 1942 Aerial Overlaying 2008 Aerial.



3 AFFECTED ENVIRONMENT

The Affected Environment section succinctly describes the existing environmental resources of the areas that would be affected if any of the alternatives were implemented. This section describes only those environmental resources that are relevant to the decision to be made. It does not describe the entire existing environment, but only those environmental resources that would 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 action and reasonable alternatives.

3.1 GENERAL ENVIRONMENTAL SETTING

St. Augustine Inlet lies 1.5 miles east of the city of St. Augustine on the northeast coast of Florida (refer to Figure 1). The inlet and the IWW are man-made, maintained navigation channels serving both commercial and recreational vessels. Originally a natural inlet located south of its current location, the inlet channel was relocated to improve navigational safety in 1940 by land cutting through Vilano Point (Figure 3). By 1952, the previously detached inlet shoals called Crazy Bank (Figure 3) were beginning to attach to the shoreline south of the new inlet thereby closing off the old inlet channel through Salt Run (Figure 3). This created what was later to become ASP (Figure 3). In addition, efforts to stabilize the new inlet between 1941 and 1957 included a northern timber pile and rock sand-trap groin approximately 1,880 feet in length and a 3,695 foot rock south jetty. Finally, the IWW channel was dredged west of the inlet in 1951. Much of the shorelines of the project channels are developed. However, salt marsh and mangrove tidal wetlands, oyster bars, estuarine lagoons, and upland maritime forest habitat exists throughout the project area. ASP is located immediately south of the inlet and east of the IWW. “ASP includes more than 1,600 acres featuring four miles of pristine beach, a tidal salt marsh, and a maritime and upland hammock. There is also an archaeological site where coquina rock was mined to create the nearby Castillo de San Marcos fortress, which is a National Monument.” (http://www.floridastateparks.org/anastasia/default.cfm) In addition, the northern component of the Guana Tolomato Matanzas National Estuarine Research Reserve (GTMNERR) occurs in the SPV area. The GTMNERR is geographically separated into a northern and southern component, separated by the City of St. Augustine. The northern component (referred to locally as Guana) is associated with the Tolomato and Guana River estuaries and the southern component is associated with the Matanzas River.

3.1.2 NORTH BEACH PLACEMENT AREA

Dredged material from the project channels would be placed on the beach north of the inlet in SPV between R-84 to R-110 or VB between R-110 to R-117. The beach is comprised primarily of coarse sand and shell. Large escarpments caused by wave erosion can occur. Only scattered sections of dune exist and the shoreline is almost entirely developed. Finally, the shoreline is hardened with many homeowner installed

coastal armoring structures including rock revetment and vinyl, wood and steel seawalls. The exact placement area will depend on conditions at the time of the dredging event and the quantity of shoal material to be dredged. However, the Corps will attempt to meet the IMP 1/3 north recommendation.

3.1.3 NORTH NEARSHORE PLACEMENT AREA

The nearshore placement areas are located approximately between 1-8 miles north of St. Augustine Inlet between the -6' and -12' MLLW contour adjacent to the beach placement areas in SPV between R-84 to R-110 or VB between R-110 to R-117. The area is sandy bottom habitat with no known hard bottom or outcrops. The exact placement area will depend on conditions at the time of the dredging event and the quantity of shoal material to be dredged. However, the Corps will attempt to meet the IMP 1/3 north recommendation.

3.2 GEOLOGY

3.2.2 NORTH BEACH PLACEMENT AREA

The dune system immediately landward of the beach placement areas is degraded and eroded and some structures were constructed on the primary dune itself. Unconsolidated sandy marine sediments are found along the entire length of the beach placement area. Approximately 20% of the shoreline has been hardened with coastal armoring structures.

3.2.3 NORTH NEARSHORE PLACEMENT AREA

The nearshore placement area geology consists of approximately 10-20' of sandy marine sediments covering the Anastasia geologic formation. "The Anastasia Formation is composed of Pleistocene (see time scale) interbedded sands and coquinoid limestones. The most recognized form of the Anastasia is an orangish brown coquina consisting of whole and fragmented mollusk shells in a matrix of sand, cemented by calcite. Coquina has been used as a building stone in Florida for over 400 years." http://www.floridadep.com/geology/geologictopics/rocks/anastasia.htm

3.3 THREATENED AND ENDANGERED SPECIES

Threatened and Endangered species that may occur in the project area, and that may be affected by the proposed work, can be found in Table 2.

Table 2. Status of Listed Species that May Occur Within the Project Area.

Species	***State Listing****	***Federal Listing****
Green Sea Turtle	LE	LE
Loggerhead Sea Turtle	LT	LT
Leatherback Sea Turtle	LE	LE
Kemp's Ridley Sea Turtle	LE	LE
West Indian Manatee	LE	LE
Smalltooth Sawfish	LE	LE
Piping Plover	LT	LT

Species	*State Listing**	*Federal Listing**
Anastasia Island Beach Mouse	LE	LE
North Atlantic Right Whale	LE	LE

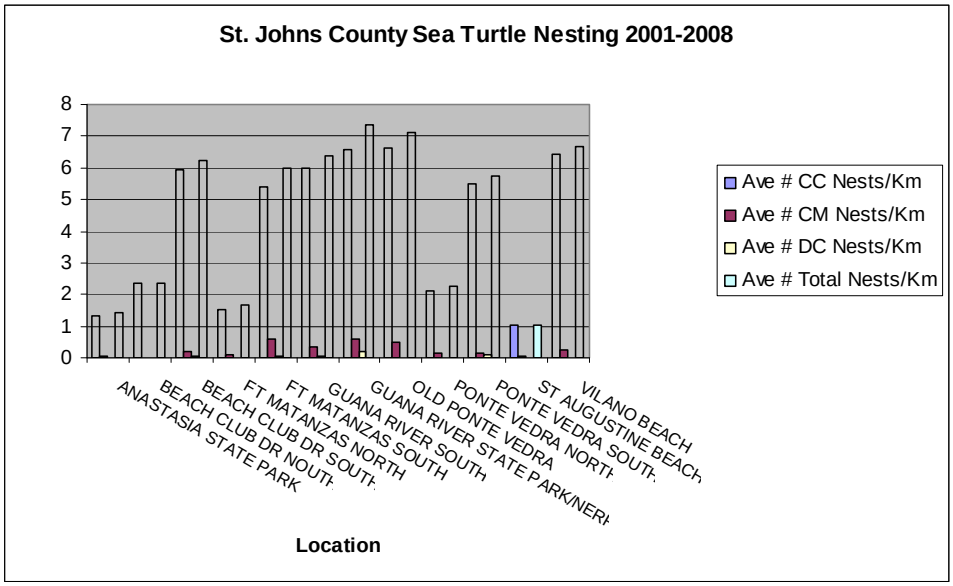
* LE=Endangered and LT=Threatened

3.3.2 SEA TURTLES

3.3.2.1 LOCAL ABUNDANCE

The coastal waters of St. Johns County provide developmental habitat for immature loggerhead (*Caretta caretta*) and green sea turtles (*Chelonia mydas*). In addition, area beaches support nesting populations of green, loggerhead, and leatherback (*Dermochelys coriacea*) sea turtles. Finally, although Kemp's ridley (*Lepidochelys kempii*) sea turtles are known to occur in the vicinity of the project area, nesting has not been documented. There are twelve Statewide Nesting Beach Survey (SNBS) monitoring zones permitted by the Florida Fish and Wildlife Conservation Commission (FWC) in St. Johns County. "FWC coordinates the collection of nesting data through a network of permit holders consisting of Federal, State, and local park personnel; other government agency personnel; members of conservation organizations, university researchers; and private citizens. Florida staff members coordinate data collection, provide training, and compile annual survey data for publications and data recession." (http://www.floridamarine.org/features/view_article.asp?id=2377) An analysis of FWC SNBS data for St. Johns county indicated that between 2001-2008 monitoring zones Ponte Vedra South and Vilano Beach ranked seventh and third respectively in the county on a nest per kilometer basis for all species combined (See Figure 4). The beach placement areas account for approximately 7.2km of the approximately 12.2km combined monitoring zones Ponte Vedra South and Vilano Beach which run from approximately 2700 South Ponte Vedra Boulevard south to the inlet.

Figure 4. Sea Turtle Nesting in St. Johns County by Beach Monitoring Zone



3.3.2.2 CRITICAL HABITAT

On 10 July 2014 both the USFWS (50 CFR Part 17) and the NMFS (50 CFR Part 226) published final rules in Federal Register Volume 79, Number 132, parts III and IV respectively designating critical habitat for the Northwest Atlantic Ocean Loggerhead Sea Turtle Distinct Population Segment (DPS). The NMFS and USFWS have determined that the worldwide population of loggerhead sea turtles is composed of nine DPSs. A DPS is the smallest division of a taxonomic species permitted to be protected under the ESA.

The critical habitat unit within the action area is NMFS Unit LOGG-N-14 which is designated as nearshore reproductive habitat from the MHW line seaward 1.6 km. This unit runs from the southern boundary of Kathryn Abbey Hanna Park in Duval County to Matanzas Inlet in St. Johns County and overlaps both SPV and VB placement areas (Figure 5). Nearshore reproductive habitat is a portion of the nearshore waters adjacent to the nesting beach that is used by hatchlings to egress to the open-water environment as well as by nesting females to transit between the beach and open water during the nesting season.

3.3.3 WEST INDIAN MANATEE

Manatees can be found in the inshore waters of the project channels and in the coastal waters of the Atlantic Ocean primarily during migration. The proposed work does not overlap any designated critical habitat for this species. Between 1976 and 2013 there have been 100 documented manatee mortalities in St. Johns County. The probable cause of death for 15 (15%) of these mortalities was watercraft (http://research.myfwc.com/manatees/search_summary.asp).

3.3.4 SMALLTOOTH SAWFISH

The endangered smalltooth sawfish (*Pristis pectinata*) may occur in the vicinity of the project. However, densities of this species in these waters are most likely very low. There are two St. Johns County sightings of this large shark-like ray recorded in the Smalltooth Sawfish sightings database (Carvalho, personal communication, 21 April 2009). The first sighting was of a 240 cm juvenile in 1950 with no specific location information other than St. Augustine. The second sighting was in October 2000 of a 61 cm juvenile sawfish in the IWW near St. Augustine. The proposed work does not overlap any proposed critical habitat for this species.

3.3.5 PIPING PLOVER

This shorebird species does not breed in Florida, but spends the winter along the southern Atlantic, Gulf Coast, and Caribbean beaches and barrier islands, where they are classified as threatened throughout their wintering range. Non-breeding piping plovers (*Charadrius melodus*) were recently documented on the beach at Porpoise Point inside the inlet, one on 24 August and one 30 August 2010 (Borboen, personal communication, 2 September 2010). In addition, "piping plovers can be found anywhere on the beaches of the park (ASP), including the beaches on the west side of Salt Run." (DePue, personal communication, 1 April 2009). The primary constituent

elements for piping plover wintering habitat are those habitat components that are essential for the primary biological needs of foraging, sheltering and roosting (USFWS 2010). The primary constituent elements include intertidal beaches and flats (between annual low tide and annual high tide) and associated dune systems and flats above the annual high tide (USFWS 2010). Optimal wintering habitat does occur within the beach placement areas.

3.3.6 RUFA RED KNOT

This shorebird species does not breed in Florida, but stops off to rest and feed during its spring (northbound) and fall (southbound) migrations and will sometimes over-winter in Florida primarily on the Gulf coast. It was classified as threatened throughout its range by the USFWS on 11 December 2014 (Federal Register Vol. 79, No. 238). The rufa red knot is a migratory shorebird that breeds in the Canadian Arctic, winters in parts of the United States, the Caribbean, and South America, and primarily uses wellknown spring and fall stopover areas on the Atlantic coast of the United States. In Florida, red knots use salt marshes, brackish lagoons, tidal mudflats, and mangrove areas (Niles *et al*. 2008). In some localized areas, red knots will use artificial habitats that mimic natural conditions, such as nourished beaches, dredged spoil sites, elevated road causeways, or impoundments. From South Carolina to Florida, red knots are found in significantly higher numbers at inlets than at other coastal sites (Harrington 2008). During their Florida stopovers, they feed primarily on amphipod crustaceans (*Emerita*), bivalves (*Donax*) and horseshoe crap eggs and larvae. Although probably rare on the SPV and VB placement areas, there is one documented sighting of 2 red knots on the beach at SPV on 19 October 2009 (http://ebird.org/ebird/view/checklist?subID=S5492773).

3.3.7 ANASTASIA ISLAND BEACH MOUSE

Historically, the endangered Anastasia Island beach mouse (AIBM)(*Peromyscus polionotus phasma*) was located in the coastal dunes from the Duval/St. Johns County line southward to Matanzas Inlet. However, much of the habitat within the range of the AIBM has been converted to condominiums and housing developments. "The AIBM has maintained a stable population at ASP. ASP continues to provide 3.5 miles of suitable habitat to support AIBM." (USFWS 2007) In addition, AIBM are present at Fort Matanzas National Monument (FMNM) at the south end of Anastasia Island. "AIBM have been located between ASP and FMNM on both private lands as well as several St. Johns County Parks (10 miles)." (USFWS 2007). Finally, "In 1992 to 1993, the Service funded the reintroduction of AIBM to GTMNERR in St. Johns County where historical habitat for the subspecies existed (USFWS 1993). During follow-up trapping conducted in February 1993, beach mice occupied the entire 4.2-mile length of the park; 34 were captured and it was estimated that the population totaled 220. Quarterly trapping has been conducted since the reintroduction and mice have not been captured since September 2006." (USFWS 2015).

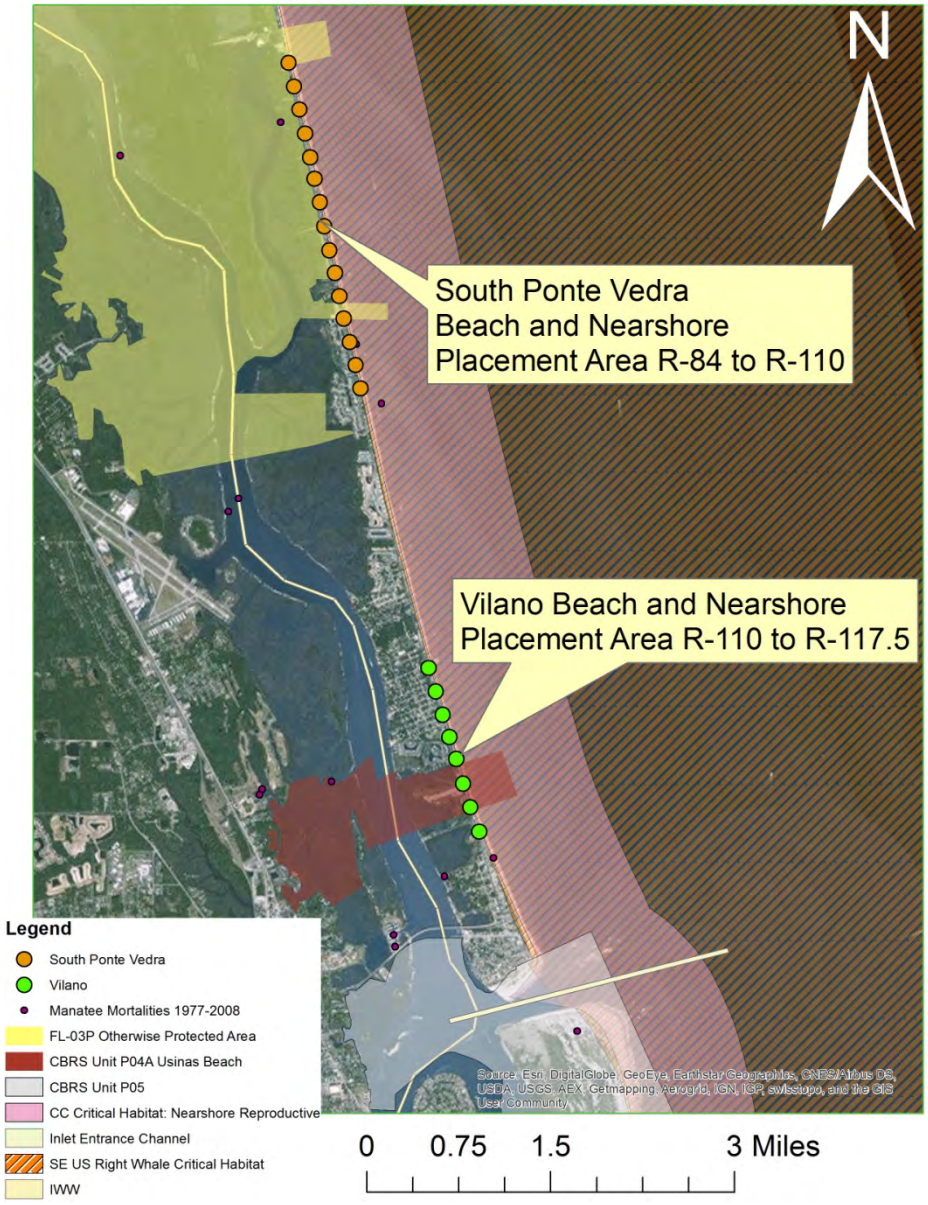
Beach mice occupy both frontal (primary and secondary) and scrub dunes on a permanent basis and studies have found no detectable differences between scrub and

frontal dunes in beach mouse body mass, home range size, dispersal, reproduction, survival, food quality, and burrow site availability (Swilling et al. 1998; Swilling 2000; Sneckenberger 2001).

3.3.8 NORTH ATLANTIC RIGHT WHALE

The placement areas occur within critical habitat designated for the North Atlantic right whale (*Eubalaena glacialis*). Right whales are known to concentrate off the northeast coast of Florida during November through April. NMFS has established the Southeast Seasonal Management Area between 15 November to 15 April since the southeast Atlantic Coast serves as calving and nursery grounds for this endangered species. The critical habitat runs from the shoreline out 5 nautical miles (Figure 5).

Figure 5. Project Area Resource Map.



3.4 WATER QUALITY

3.4.1 WATER USE CLASSIFICATION

Portions of the waters within the proposed placement areas have been designated by the State of Florida as Class III - Recreation, Propagation, and Maintenance of a Healthy, Well-Balanced Population of Fish and Wildlife (popularly referred to as fishable/swimmable). In addition, most of the SPV nearshore placement area is designated by the State of Florida as an Outstanding Florida Water (OFW; Guana River Marsh Aquatic Preserve). OFWs are waters designated worthy of special protection because of their natural attributes.

3.5 ESSENTIAL FISH HABITAT

Pursuant to the Magnuson-Stevens Fishery Conservation and Management Act of 1996, waters and substrate within the project area have been identified as Essential Fish Habitat (EFH) by the South Atlantic Fishery Management Council (1998). EFH is defined as those waters and substrate necessary for fish to spawn, breed, feed, or grow to maturity. Marine/offshore EFH within the boundaries of the beach and nearshore placement areas consists of water column with an unconsolidated substrate and ocean high salinity surf zones. Species managed by the NMFS that are common within the placement areas can be found in Table 3, and possible prey species in Table 4.

Table 3. Federally Managed Species of Shellfish and Finfish that are Common within the Project Area.

Species	**Life Stage**	**Substrate Preference***	
		Unconsolidated Sediment	**Ocean High Salinity Surf Zones**
Brown shrimp *Farfantepenaeus aztecus*	A, J, L	A, J, L	
White Shrimp *Litopenaeus setiferus*	A, J	A, J	
Hard clams	A, J	A, J	
Menhaden *Brevoortia* sp.	A	A	A
American Shad *Alosa sapidissima*	A, J, L	A, J, L	
White grunt *Haemulon plumieri*	A, J	A, J	
Sheepshead *Archosargus probatocephalus*	A, J	A, J	
Flounder *Paralichthys sp.*	A, J	A, J	A
Crevalle Jack *Caranx hippos*	A, J, L	A, J, L	
Gray Snapper *Lutjanus griseus*	A, J, L	A, J, L	
Goliath Grouper *Epinephelus itajara*	J	J	

Table 4. Common Prey Species that May Occur within the Project Area.

Species	Life Stage	Substrate Preference*	
		Unconsolidated Sediment	Ocean High Salinity Surf Zones
Whitings *Menticirrhus sp.*	A, J	J	A, J
Bay anchovy *Anchoa mitchilli*	A, J, L	A, J, L	A
Sheepshead minnow *Cyprinodon variegatus*	A, J	A, J	
Atlantic menhaden *Brevoortia tyrannus*	A	A	A
Quahog *Mercenaria mercenaria*	A, J	A, J	
Grass shrimp *Palaemonetes pugio*	A, J	A, J	
Striped mullet *Mugil cephalus*	A, J	A, J	A, J
Spot *Leiostomus xanthurus*	A	A	
Atlantic croaker *Micropogonias undulates*	A, J	A, J	A
Silversides *Menidia menidia*	A, J, L	A, J, L	A

Source: South Atlantic Fishery Management Council 1998; Florida Museum of Natural History-Ichthyology website 2008.

*Substrate preference, unconsolidated sediment and ocean high-salinity surf zones habitats occur in or near the project area. A=adult; J=juvenile; L=larvae

3.6 FISH AND WILDLIFE RESOURCES

Biota common to northeast Florida can be found within the placement areas. The bottlenose dolphin is common throughout the coastal waters of St. Johns County. Migratory birds, including shorebirds and raptors, are common. Colonial nesting species such as wading birds and terns have been observed on the beach within the GTMNERR. Common mammals include cotton rats, marsh rabbits, and bobcats. Gopher tortoise occupy the dunes and snakes are common too. The sandy intertidal beach placement areas and sandy substrate of the nearshore placement areas are typically dominated by polychaetes, amphipods and bivalves and these organisms serve as an important food source for shorebirds, fish, and crustaceans. Plant life common on the beach are sea oats *(Uniola paniculata)*, railroad vine *(Ipomoea pes-caprae),* and marshhay cordgrass *(Spartina patens).*

3.7 AIR QUALITY

"Florida is one of only three states east of the Mississippi River to meet all national ambient air quality standards established by the EPA to protect public health, including air quality standards for ground-level ozone."
(http://www.dep.state.fl.us/secretary/news/2006/04/0406_02.htm)

3.8 CULTURAL RESOURCES

In 1565, Pedro Menendez de Aviles was en route to the providence of Florida, then a Spanish territory. His orders were to create a Spanish presence in the area to prevent any further French advancement into Spanish lands. The intrusion into Spanish lands by Jean Ribualt in Port Royal had forced Philip II to act to preserve his lands. The creation of Fort Caroline on the St. Johns Rivers by Laudoniere pushed the French intrusion further south. Menendez was to gather a group of colonist and soldiers and create a garrison/colony in La Florida. He was to accomplish this before the French had time to re-supply and fortify their position at Fort Caroline. In September of 1565, Menendez claimed the land for the city of St. Augustine as a defensive position, having failed to reach Fort Carolina before the French reinforcements arrived.

With five ships and 600 people, the Spanish territory of Florida was colonized. The city of St. Augustine was created as a garrison for defense from a French attack. Located on a harbor with a sand bar across the entrance, this port became the location of the longest continuous Spanish presence in Florida. The city grew out of the garrison over the next two hundred years while maintaining its military role.

Key in the development of the city and garrison was its limited access at the St. Augustine inlet. The inlet was historically a series of shifting sand bars that only permitted shallower draft vessels to cross. This shallow access prevented large foreign ships of war from entering the channel and sailing directly up to the city. Today the historic inlet has closed in and only portions of it remain in the form of Salt Run which is now a small bay adjacent to Anastasia Island. The current inlet was created by the Corps in 1940 when a land cut was made across the southern tip of Vilano Point (Figure 3).

Previous project areas have included portions of St. Augustine inlet, a section of the IWW within the Tolomato River and beach and nearshore placement areas along Anastasia Island. Within the IWW portion of the project the Corps has conducted numerous surveys that have included IWW Cuts SJ-25 south to SJ-30A. This includes expansion areas and the St. Augustine Inlet. These surveys have resulted in the identification of four known archeological resources and four potential resources being identified within or adjacent to the project area. Site 8SJ4889, The Dixie Crystal has been identified as a historic ship wreck and may be potentially eligible for inclusion in the National Register Historic Places. Currently insufficient information exists to make a formal determination of the wrecks eligibility. A 150 foot buffer was recommended for navigation projects working near it to protect the resource. In addition to the Dixie Crystal, four targets were identified as potential resources within the St. Augustine

entrance channel (Hall 2000). No diver evaluations were performed on the targets and a buffer of 200 feet was recommended. Within the St. Augustine inlet previous consultation and surveys indicated that there were four known targets in the project area SA-T-5, SA-OS-2, SA-OS-3, SA-OS-4 (DHR File No 2010-04838-A and 04838-B). All four targets have a requirement for a 200 foot buffer around them for all maintenance activities.

Three known resources exist along the southern placement area. The three sites are 8SAJ69NR (Spanish Coquina Quarries), SJ3318 (St. Augustine Beach Site), and SJ4873 (13th Street Wreck). The Spanish Quarries located along Salt Run served as the historic stone quarries for the city of St. Augustine and the Castillo de San Marcos. This site is listed on the National Register of Historic Places. The St. Augustine Beach Site is the location of a vessel fragment that was recovered from the beach. At the time of its identification it was removed from the beach. The 13th Street Wreck is a deeply buried vessel that was exposed in the 1980's. Subsequent attempts to locate the vessel have failed. Located to the north of the Anastasia placement area are two sites. The Anastasia Recreation Area site (SJ3317) and the 1 Blowhole Shipwreck site (SJ 4853). Both sites are outside the area of placement and no impacts will occur to these resources. No known resources exist within the nearshore placement area although numerous remains of ship related materials are knowm in the area to the north which represents the old inlet entrance known as the "Crazy shoals". A large portion of the placement area has also been previously investigated by St. Johns County and no resources identified.

To the north along VB is the Chainplate site (SJ5442). This site is located along the shoreline and is situated west of the nearshore placement area. Identified materials were removed for conservation by Lighthouse Archaeological Maritime Program (LAMP) but it is likely that more materials may be just off shore in the surf. However no materials were identified during the Corps shoreline survey of the area. Within the nearshore placement area no resources are known to exist.

Further north of VB are the SPV placement areas. The SPV beach was subject to a shoreline survey by the Corps. No resources were identified as a result of this survey. The only known resource occurs west of state highway A1A. The Beachside Shell Midden (SJ3286) is a prehistoric site that dates from 300 BC to 750 A.D. No portion of this site has been reported to exist along the beach. Within the nearshore, a small portion of the northern area has been surveyed by LAMP and no resources identified. While potential resources may exist, most surveys in the region have focused their search further to the south and nearer to the historic inlet at St. Augustine.

3.9 RECREATION RESOURCES

Recreational boat traffic regularly transits the IWW and St. Augustine Inlet in order to access the Atlantic Ocean. In addition to boating, other locally available recreational activities include fishing, beach and park sports, and wildlife viewing.

3.10 AESTHETIC RESOURCES

The project area consists of sandy beaches and Atlantic Ocean nearshore bordered by various types of natural areas and development. The Atlantic coastline in the vicinity of the project is picturesque.

3.11 NOISE

The ambient sound level of a region is the total noise generated, including sounds from natural and artificial sources. The magnitude and frequency of environmental noise may vary considerably over the course of a day and throughout the month because of changing weather conditions and seasonal vegetative cover. Background noise from vessel traffic, urban beach, residential development, and nearby roadways appears to be moderate.

3.12 SOCIO-ECONOMIC

Tourism generates significant revenue for St. Johns County. Over $42 million in sales tax revenue was generated by visitor's purchases in 2008 and Last year, visitors spent almost $712 million in St. Johns County *(s*ource: http://www.co.st-johns.fl.us/tdc/).

3.13 SHORELINE STABILIZATION

A critically eroded area is a segment of the shoreline where natural processes or human activity have caused or contributed to erosion and recession of the beach or dune system to such a degree that upland development, recreational interests, wildlife habitat, or important cultural resources are threatened or lost (DEP 2014). As discussed in section 1.2, the proposed SPV and VB beach placement areas (Figure 1) compose 3.4 miles of the 11.5 miles of DEP designated critically eroded areas in St. Johns County. The critical erosion is threatening private development as well as State Road A1A. Homeowners have installed coastal armoring structures like the vinly sheet pile shown in Figure 7 along SPV. Figure 6 shows the eroding shoreline along VB with rock revetment coastal armoring.

Figure 6. Vilano Beach – August 26th, 2008. R-114 hotspot post-Tropical Storm Fay.

Figure 7. South Ponte Vedra Beach – May 11th, 2007.

3.14 NAVIGATION

The IWW in Florida annually transports over 1.7 million tons of commercial cargo and over 500,000 recreational vessels (FIND 2008). There were 13,325 pleasure craft and 309 commercial vessels registered in St. Johns County in 2009 (http://www.flhsmv.gov/dmv/vslfacts.html). St. Augustine Inlet is an improved tidal inlet connecting the San Sebastian River and the IWW Federal navigation channels to the Atlantic Ocean. Originally a natural inlet located south of its current location, the inlet was relocated in 1940 as part of the St. Augustine Harbor Navigation Project in response to public interests. Efforts to stabilize the inlet and improve navigation, between 1941 and 1957, have resulted in the construction of a north sand trap groin approximately 1,880 feet in length and a 3,695 foot south jetty. The authorized 16 foot inlet entrance channel is maintained at the best natural alignment while the geographically fixed IWW channel is maintained at 12 foot deep.

3.15 COASTAL BARRIER RESOURCES

The Coastal Barrier Resources Act (CBRA) of 1982 (PL 97-348) discourages development on largely undeveloped coastal barriers along the Atlantic, Gulf, and Great Lakes coasts by prohibiting use of Federal expenditures. The Act was designed to help conserve important coastal habitats, save Federal dollars and protect human lives. Portions of SPV and VB are within Coastal Barrier Resource System (CBRS) Unit FL-03P GTMNERR Otherwise Protected Area (OPA) and Unit P04A Usinas Beach respectively (Figure 5). Maintenance dredging of the IWW is consistent with provisions of the CBRA which excepts: "maintenance of existing channel improvements... and including the disposal of dredge materials related to such improvements". CBRA has no requirement to dispose of the material within the same CBRS Unit. CBRA does not otherwise regulate how the maintenance material may be used. This CBRA exemption was verified by Service letter dated 25 September 2003.

4 ENVIRONMENTAL EFFECTS

This section is the scientific and analytic basis for the comparisons of the alternatives. See table 1 in section 2.0 Alternatives, for summary of impacts. The following includes anticipated changes to the existing environment including direct, indirect, and cumulative effects.

4.1 THREATENED AND ENDANGERED SPECIES

4.1.1 NO-ACTION ALTERNATIVE

If the proposed north beach or nearshore placement areas were not used, unabated shoreline erosion and continued coastal armoring could negatively impact sea turtle nesting.

4.1.2 NORTH NEARSHORE PLACEMENT ALTERNATIVE

In accordance with Section 7 of the Endangered Species Act, consultation with the USFWS and NMFS has been performed. The Corps has determined that the proposed nearshore placement may affect, but is not likely to adversely affect sea turtles in the water, manatees, whales, or the smalltooth sawfish. This determination was based on the implementation of species specific protective measures and the type of dredging equipment typically used to maintain the IWW. The terms and conditions of the 1997 NMFS South Atlantic Division Regional Biological Opinion (SARBO) will be followed for these species. In addition, the Corps has determined that the presence of dredge and pipeline in the nearshore waters could temporarily impact the physical or biological features (PBF) and primary constituent elements (PCE) of loggerhead critical habitat unit LOGG-N-14 during construction. Hatchling egress from the water's edge to open water and nesting female transit back and forth between the open water and the nesting beach during nesting season could be hindered by the presence of the dredge and pipeline. However, the construction phase would typically last 3-5 months approximately every 10-12 years (shoaling due to storms could require more frequent events) and the daily construction activity would occur within only a small area at a time. In addition, the SARBO includes conditions that minimize incidental take of turtles. Finally, the placement of sand in the nearshore may increase sea turtle nesting habitat if the placed sand is highly compatible (i.e., grain size, shape, color, etc.) with naturally occurring beach sediments in the area, and compaction and escarpment remediation measures are incorporated into the project (i.e. the project complies with the terms and conditions of the SPBO). Therefore, the Corps has determined that the project will not destroy or adversely modify loggerhead critical habitat.

4.1.2.1 Sea Turtles and Smalltooth Sawfish

A hydraulic cutter suction pipeline dredge or one of the small Corps split-hull hopper dredges (Currituck and Murden) could be used for this project and therefore adverse impacts or "takings" of sea turtles within the proposed placement areas would not be anticipated. Pursuant to the SARBO and 9 March 1999 Corps Wilmington District ESA consultation (F/SER3:EGH:ts), these types of dredges do not pose a risk to sea turtles

like large commercial hopper dredges do. In addition, due to the nature of the dredging equipment and the very low anticipated sawfish abundance, the project is expected to have minimal impact on this species. Any sawfish foraging within or transiting through the project area could be reasonably expected to avoid the relatively slow moving equipment. However, in order to minimize potential adverse impacts to sea turtles and smalltooth sawfish, the following measures would be implemented:

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

- The contractor would advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or small tooth sawfish, which are protected under the Endangered Species Act of 1973.

- Siltation barriers would be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment.

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

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

- Any collision with and/or injury to a sea turtle or smalltooth sawfish would be reported immediately to the NMFS Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.

4.1.2.2 West Indian Manatee and North Atlantic Right Whale

Standard protective measures would be taken during placement activities to ensure the safety of manatees and whales. To make the contractor and his personnel aware of the potential presence of these species in the project area, their endangered status, and the need for precautionary measures, the contract specifications would include the following standard manatee and right whale protection clauses:

• The contractor would instruct all personnel associated with construction activities about the potential presence of manatees and right whales in the area and the need to avoid collisions with them.

• If siltation barriers are used, they shall be made of material in which manatees and whales cannot become entangled, are properly secured, and are regularly monitored to avoid manatee entrapment. Barriers must not block entry to or exit from essential habitat.

• If a manatee were sighted within 100 yards of the project area, all appropriate precautions would be implemented by the contractor to ensure protection of the manatee. These precautions would include the operation of all moving equipment no closer than 50 feet of a manatee. If a manatee were closer than 50 feet to moving equipment or the project area, the equipment would be shut down and all placement activities would cease to ensure protection of the manatee. Placement activities would not resume until the manatee has departed the project area.

• The vessel operators shall maintain a 500-yard buffer between the vessel and any whale.

• All vessels associated with the project would operate at 'no wake' speeds at all times while in shallow waters or channels where the draft of the boat provides less than three feet clearance from the bottom. Boats used to transport personnel would be shallow draft vessels, preferably of the light-displacement category, where navigational safety permits. Vessels transporting personnel between the landing and any workboat would follow routes of deep water to the greatest possible extent. Shore crews would use upland road access if available.

• Mooring bumpers would be placed on all large vessels wherever and whenever there is a potential for manatees to be crushed between two moored vessels. The bumpers would provide a minimum stand-off distance of four feet.

• All personnel would be advised that there are civil and criminal penalties for harming, harassing, or killing manatees and right whales, which are protected under the Endangered Species Act and the Marine Mammal Protection Act.

4.1.3 NORTH BEACH PLACEMENT ALTERNATIVE

As with the proposed nearshore placement, the Corps has consulted with the USFWS and NMFS on material placement on the beach. The Corps has determined that placement of the dredged material onto the beach is not likely to adversely affect swimming sea turtles, smalltooth sawfish, manatees or right whales. The terms and conditions of the SARBO will be followed for these species as listed in 4.1.2.1 and 4.1.2.2 above. In addition, the Corps has determined that the placement of dredged material onto the beach may affect, but is not likely to jeopardize the continued existence of nesting sea turtles and is not likely to adversely affect the piping plover, red

knot, or AIBM. The terms and conditions of the USFWS Statewide Programmatic Biological Opinion (SPBO) will be followed for these species. These determinations were based on the implementation of protective measures for these species.

4.1.3.1 Sea Turtles

Beach placement could occur year-round under the following conditions:

- Only beach compatible material containing no more than 10% fine material passing a #230 sieve would be placed on the beach.

- Daily sea turtle nest monitoring and relocation would be required. Only nests that would be affected by construction activities would be relocated to a nearby self-release beach site in a secure setting where artificial lighting would not interfere with hatchling orientation.

- Sand compaction and escarpment monitoring would occur post placement.

- Staging areas for construction equipment would be located off the beach to the maximum extent practicable.

- Direct lighting of the beach and near shore waters would be minimized through reduction, shielding, lowering, and appropriate placement to avoid excessive illumination of the waters surface and nesting beach while meeting all U.S. Coast Guard, EM 385-1-1, and Occupational Safety and Health Administration (OSHA) requirements.

4.1.3.2 Anastasia Island Beach Mouse

Although AIBM have not been trapped within the GTMNERR since 2006 and are not likely to be affected by the beach placement activities, the following conditions for the AIBM from the SPBO would be followed.

- Beach mouse habitat would be avoided when selecting sites for equipment, pipes, vehicle storage and staging to the maximum extent practicable.

- All construction activity would remain at least 5 to 10 feet seaward of the toe of the dune or 10% of the beach width seaward of the dune toe in areas of occupied beach mouse habitat.

- Existing beach access points shall be used for vehicle and equipment beach access to the maximum extent possible. These access points shall be delineated by post and rope or other suitable material to ensure vehicles and equipment transport stay within the access corridor. The topography at the access points shall be fully restored to preconstruction conditions following project completion. Parking areas for construction crews shall be located as close as possible to the work sites, but outside of vegetated

dune areas to minimize impacts to existing habitat and transporting workers along the beachfront.

• If needed personnel would trap any pipeline access corridor through beach mouse habitat for 5 days prior to pipeline placement and removal.

4.2 WATER QUALITY

4.2.1 NO-ACTION ALTERNATIVE

A temporary increase in turbidity at the existing south beach and nearshore placement areas could still occur as discussed in the 2011 EA (Corps, 2011).

4.2.2 NORTH NEARSHORE PLACEMENT ALTERNATIVE

The primary anticipated change in water quality at the nearshore placement site would be a temporary increase in turbidity. According to the State of Florida's Class III water quality standards, turbidity levels during placement of dredged material are not to exceed 29 nephelometric turbidity units (NTUs) above background levels at the edge of normally a 150-meter mixing zone. This would be the standard for the VB placement areas. However, since the SPV areas are within an OFW, turbidity levels there are not to exceed 0 NTUs above background levels unless a variance is obtained from DEP. In order to comply with these standards, turbidity will be monitored according to State protocols during the proposed nearshore placement work. If at any time the turbidity standards were exceeded, those activities causing the violation would temporarily cease.

4.2.3 NORTH BEACH PLACEMENT ALTERNATIVE

As with the nearshore placement activity, the primary change in water quality during placement of dredged material on the beach would be a temporary increase in turbidity. These activities would be monitored according to the State protocols listed above.

4.3 ESSENTIAL FISH HABITAT

4.3.1 NO-ACTION ALTERNATIVE

Impacts to EFH from the dredging and south nearshore and beach placement are discussed in detail in the 2011 EA (Corps, 2011).

4.3.2 NORTH NEARSHORE PLACEMENT ALTERNATIVE

The proposed nearshore placement areas could impact approximately 560 acres of marine/offshore water column and unconsolidated substrate. However, only a portion of these placement areas would be used during each maintenance dredging event. In addition with the revised IMP 1/3 north recommendation and with maintenance events spaced about 3-4 years apart, north nearshore placement could occur approximately every 10-12 years (shoaling due to storms could require more frequent events). Species managed by the NMFS that are common within the project area can be found in Table 4, and prey species in Table 5. The Corps has determined that the proposed

action would not have a substantial adverse impact on EFH or federally managed fisheries along the east coast of Florida. This determination was based on the fact that the substrate of the project area is naturally dynamic and unconsolidated, and measures shall be taken to protect adjacent habitat. Turbidity could affect vision of marine life within the sediment plume as well as those marine organisms with gills, but these effects would be temporary as they would be limited to the duration of the placement operations. North nearshore placement activities are anticipated to take up to 90 days every 10-12 years (shoaling due to storms could require more frequent events) and migrating larvae and/or juvenile fish could be subject to project related elevated turbidity and suspended sediment levels during that time period. A fall-winter placement window could minimize impacts to migrating larvae and juvenile fish. The Corps will consider this window as funding and scheduling allow. However, since north nearshore placement is anticipated approximately every 10-12 years (shoaling due to storms could require more frequent events), suppression of re-colonization of benthic organisms and other trophic levels up the food chain is not expected due to this long duration between events. In addition, it is important to note that the placement areas encompass a fraction of the entire water body, and similar habitat occurs immediately adjacent. EFH coordination with the NMFS was initiated concurrent with noticing of the draft NEPA document.

4.3.3 NORTH BEACH PLACEMENT ALTERNATIVE

Placement of dredged material onto the SPV and Vilano beach could directly and indirectly impact approximately 20,500 feet of ocean high salinity surf zone. Sand could be placed on a portion of this beach every 10-12 years and, therefore, the possibility of longer term adverse impacts (i.e. suppression of re-colonization of the infaunal community) is not anticipated. In addition, the dredged sediment is anticipated to be similar in composition to the existing beach sediments and only small portions of the placement areas are anticipated to be used during each individual dredging event. Beach placement is anticipated to take up to 90 days every 10-12 years (shoaling due to storms could require more frequent events) and migrating larvae and/or juvenile fish could be subject to project related elevated turbidity and suspended sediment levels during that time period. A fall-winter placement window could minimize impacts to migrating larvae and juvenile fish. As stated above, the Corps will consider this window as funding and scheduling allow. EFH coordination with the NMFS was initiated concurrent with noticing of the draft NEPA document.

4.4 FISH AND WILDLIFE RESOURCES

4.4.1 NO-ACTION ALTERNATIVE

Impacts to fish and wildlife resources from the dredging and south beach and nearshore placement are discussed in detail in the 2011 EA (Corps, 2011).

4.4.2 NORTH NEARSHORE PLACEMENT ALTERNATIVE

As previously stated, nearshore placement would result in temporary impacts to benthos. The nearshore bottom is expected to be re-colonized with benthic organisms

from adjacent similar habitats especially since nearshore placement is anticipated to occur approximately every 10-12 years (shoaling due to storms could require more frequent events). In addition, any fish or seabirds displaced during placement operations would be expected to return following completion of construction. In addition, some opportunistic foraging during placement is expected by some fish and birds.

4.4.3 NORTH BEACH PLACEMENT ALTERNATIVE

This project could place dredged material on the beach every 10-12 years (shoaling due to storms could require more frequent events) so re-colonization of the areas by benthic organisms is expected. The Corps would implement its migratory bird protection policy if work were performed on the beach during the nesting season, April 1 through August 31. The policy requires monitoring the site during the nesting season. If nests were found, then a buffer zone of at least 200 feet would be placed around each nest. The beach attracts foraging, roosting, and nesting wading and shorebirds. However, no significant adverse impacts to migratory birds are anticipated with the migratory bird protection policy in effect. Other types of wildlife that utilize the sites would be temporarily displaced during construction.

4.5 AIR QUALITY

4.5.1 NO-ACTION ALTERNATIVE

The effects of dredging on air quality are discussed in detail in the 2011 EA.

4.5.2 NORTH NEARSHORE PLACEMENT ALTERNATIVE

Construction equipment would emit exhaust fumes, but this is anticipated to be a temporary and minor degradation of local air quality. The contract specifications would require the contractor to minimize pollution of air resources such as controlling particulates, i.e. excess machinery emissions.

4.5.3 NORTH BEACH PLACEMENT ALTERNATIVE

Construction equipment at the beach placement sites would emit exhaust fumes and could create dust clouds at the beach. The contract specifications would require the contractor to minimize pollution of air resources such as controlling particulates, i.e. dust, or excess machinery emissions.

4.6 CULTURAL RESOURCES

The Corps has conducted numerous surveys in and around St. Augustine inlet. The area surrounding the inlet is one the most studied areas of the state of Florida for the presence of historic resources associated with the historic city of St. Augustine. Investigations that cover this area are as follows:

- Cultural Resources Marine Remote Sensing Survey and Terrestrial Survey at St. Augustine Entrance Channel, St. Johns County, Florida, Wes Hall, 2000.

- "Historic Assessment and Remote Sensing Survey of Intracoastal Waterway Near St. Augustine, Florida." SEARCH, 2009.

- Historic Assessment and Remote Sensing Survey of the St. Johns County Beach Erosion Control Project St. Johns County, Florida. SEARCH 2009.

- Phase I Cultural Resources Survey as Part of the St. Johns County Shoreline Protection Feasibility Study, St. Johns County, Florida, Brockington and Associates, 2010.

4.6.1 NO-ACTION ALTERNATIVE

There would be no impact to significant cultural resources eligible for or listed on the National Register of Historic Places.

4.6.2 NORTH NEARSHORE PLACEMENT ALTERNATIVE

Consultation for the VB nearshore placement area is ongoing. No effects to historic properties are expected from use of this portion of the project area. As part of this determination, the Corps has reviewed cultural resource locations and consulted with the local St. Johns County Archaeologist (Robin Moore) and staff at LAMP. Portions of the southern nearshore placement area were covered in their 2002 report entitled: *The St. Johns County Submerged Cultural Resources Inventory and Management Plan Phase I.* This survey was designed to test most probable areas for wrecks around the inlet and while the survey did indentify resources, none are within the north nearshore placements areas. The SPV and VB nearshore placement areas are designed to avoid all known resources that may have surface expressions on the ocean floor. If subsurface resources are present, the additional materials should have a beneficial effect by providing additional coverage and lower the possibility of wave action on such resources. Consultation for VB nearshore placement is ongoing although no effects are anticipated. No determination has yet to be made for the use of the South Ponte Vedra nearshore placement area as additional surveys are required. Consultation with the Florida State Historic Preservation Officer (SHPO) and appropriate federally recognized tribes will be conducted. The work will be conducted in a manner that will not adversely impact cultural resources.

4.6.3 NORTH BEACH PLACEMENT ALTERNATIVE

Shoreline placement within the VB and SPV beach placement areas was examined as part of the Corps study entitled: *Phase I Cultural Resources Survey as Part of the St. Johns County Shoreline Protection Feasibility Study, St. Johns County, Florida, Brockington and Associates, 2010*. No resources were identified within the placement areas. Consultation for the Vilano placement area is ongoing. However, use of any pipelines for material transport along the coast will have to take into account required buffers associated with targets located along Vilano Point and within the St. Augustine channel itself. Within the St. Augustine inlet previous consultation and surveys indicated that there were four known targets in the project area SA-T-5, SA-OS-2, SA-OS-3, SA-OS-4. All four targets have a 200 foot buffer that must be maintained and no impacts

within this buffer will be permitted (DHR File No 2010-04838-A and 04838-B). No determination has yet to be made for the use of the SPV beach placement area. Consultation with the SHPO and appropriate federally recognized tribes will be conducted.

4.7 RECREATIONAL RESOURCES

4.7.1 NO-ACTION ALTERNATIVE

There would be temporary impacts to recreational boating from the presence of the dredge and equipment as discussed in the 2011 EA.

4.7.2 NORTH NEARSHORE PLACEMENT ALTERNATIVE

There would be temporary impacts to recreational boating from the presence of the dredge and equipment.

4.7.3 NORTH BEACH PLACEMENT ALTERNATIVE

Recreational use of the beach would be temporarily disrupted if dredged material was placed there. In addition, if a pipeline is required to transport the dredged material to these north beach placement areas, beach driving could be impacted if the pipeline was routed along the beach. If that were required, ramps would be provided to minimize impacts to driving along Vilano Beach.

4.8 AESTHETIC RESOURCES

4.8.1 NO-ACTION ALTERNATIVE

See the 2011 EA for a discussion of the aesthetic impacts from dredging and south placement.

4.8.2 NORTH NEARSHORE PLACEMENT ALTERNATIVE

Aesthetic resources, or visual appeal, of the nearshore placement areas would be temporarily adversely impacted if dredged material was placed at there.

4.8.3 NORTH BEACH PLACEMENT ALTERNATIVE

The aesthetics of the beach placement areas would be temporarily adversely impacted if dredged material was placed there.

4.9 NOISE

4.9.1 NO-ACTION ALTERNATIVE

The dredging and south beach placement requires use of booster pumps to transport the coarse beach compatible material. The south beach pipeline route runs through Salt Run. The Corps has received complaints from homeowners living along the western shoreline during past maintenance dredging events. The 24/7 sound produced by the lighted booster pumps was the issue. Despite muffling apparatus, the sound produced by these diesel powered booster pumps can be impactful.

4.9.2 NORTH NEARSHORE PLACEMENT ALTERNATIVE

The nearshore placement areas are bounded by residential development and the noise created by construction equipment could result in a temporary adverse effect on the local community.

4.9.3 NORTH BEACH PLACEMENT ALTERNATIVE

The beach placement areas are bounded by residential development and the noise created by construction equipment could result in a temporary adverse effect on the local community. If a pipeline is required, careful placement of any required booster pumps would be required by the Corps in the contract specifications.

4.10 SHORELINE STABILIZATION

4.10.1 NO-ACTION ALTERNATIVE

The critically eroded beaches north of the inlet would not receive any sand and erosion there would be expected to continue. There is an ongoing Feasibility Study by the Corps and local sponsor St. Johns County which is evaluating beach renourishment for SPV and VB using an offshore sand source. However, the current schedule has project authorization in late 2017/early 2018. After authorization, Congressional appropriations would be needed to fund construction.

4.10.2 NORTH NEARSHORE PLACEMENT ALTERNATIVE

Dredged material placed in the nearshore could augment sand in the littoral drift system which could be beneficial to shoreline stabilization. The nearshore areas are located close to the beach within the -6 to -12’ MLLW bathymetric contours. The material would be expected to be transported via wave action to the beach.

4.10.3 NORTH BEACH PLACEMENT ALTERNATIVE

Placement of dredged material onto the beach would benefit these critically eroding areas. The currently authorized south beach placement area berm dimensions are 10’ NGVD elevation by 100’ width with a seaward slope of 1:20 (vertical:horizontal). The north beach placement areas would also be constructed to these dimensions.

4.11 SOCIO-ECONOMIC

4.11.1 NO-ACTION ALTERNATIVE

Lack of north placement could result in additional costal armoring expenses.

4.11.2 NORTH NEARSHORE PLACEMENT ALTERNATIVE

The dredged material placed in the nearshore areas would be expected to migrate towards the recreational beach which could increase tourism. Nearshore placement could be conducted using a small Corps split-hull hopper dredge discussed in section 4.1.2.1 above. Bottom dumping the dredged sediments would be less costly than beach placement.

4.11.3 NORTH BEACH PLACEMENT ALTERNATIVE

Beach placement could reduce erosion on these critically eroded recreational beaches which generate revenue from tourism. Reducing erosion could also reduce costs associated with coastal armoring if the placed sand eliminates that need. It should be noted that the SPV beach placement area is approximately 5 miles further from the dredge area than VB and transporting the dredged material there would increase construction costs. In addition, beach placement requires heavy machinery (bulldozers) to re-shape the hydraulically pumped sediments into the berm dimensions discussed in 4.10.3 above which would also increase construction costs.

4.12 NAVIGATION

4.12.1 NO-ACTION ALTERNATIVE

See the 2011 EA.

4.12.2 NORTH NEARSHORE PLACEMENT ALTERNATIVE

Temporary navigation impacts could occur with use of the nearshore placement area. Based on the overall beach and inlet processes described in Corps, 2012, the placement areas are sufficiently far north of the inlet and the placed volume is small enough in comparison with the overall inlet shoal volume, that VB nearshore placement is not anticipated to appreciably increase shoaling within the project channels.

4.12.3 NORTH BEACH PLACEMENT ALTERNATIVE

The use of the beach placement areas would have minimal impact on navigation. However, if a hydraulic pipeline dredge is used, temporary impacts to vessel traffic could occur due to the presence of the floating and submerged pipeline.

4.13 CUMULATIVE IMPACTS

Cumulative impact is the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7). 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. The table also illustrates the with-project and without-project condition (the difference being the incremental impact of the project). Also illustrated is the future condition with any reasonable alternatives (or range of alternatives).

TABLE 5: SUMMARY OF CUMULATIVE IMPACTS (NOTE: The inlet was physically relocated and stabilized starting in 1940. The IWW was completely man made and dredging to its current depths was completed by 1951. Therefore, the timeline for this cumulative impacts analysis is from 1940 to the present, and is limited in space to the project area.)

	Past (historical project impacts)	Present (current project impacts)	Future without project	Future with proposed north beach placement	Future with proposed north nearshore placement
Sea turtles	Relocation of the inlet and construction of the IWW altered the hydrology of the system ultimately stabilizing nesting beach habitat.	Use of clamshell or cutterhead results in no mortalities. Sand bypass enhances nesting beach habitat.	Degradation of nesting beach due to critical erosion.	Temporary impact to nesting during construction and while berm equilibrates. Benefit to nesting habitat.	Minimal effect with use of protection measures. Potential benefit to nesting habitat.
Manatees	Stabilization of the inlet and dredging of the IWW increased vessel traffic.	Minimal effect with use of standard protection measures.	Minimal effect.	Minimal effect with use of standard protection measures.	Minimal effect with use of standard protection measures.
Smalltooth sawfish	Mortality from commercial fishing by-catch.	Minimal effect.	Minimal effect.	Minimal effect with use of standard protection measures.	Minimal effect with use of standard protection measures.
Piping Plover	Stabilization of inlet and dredging of IWW altered tidal flows affecting wintering habitat.	Minimal effect with use of standard protection measures.	Minimal effect.	Minimal effect with use of standard protection measures.	Minimal effect.
Anastasia Island Beach Mouse	Relocation and stabilization of the inlet helped create ASP habitat.	Minimal effect with use of standard protection measures.	Degradation and loss of habitat due to erosion.	Minimal effect with use of trapping and protection measures.	No effect.
North Atlantic Right Whale	Stabilization of the inlet and dredging of the IWW increased vessel traffic.	Minimal effect with use of standard protection measures.	Minimal effect.	Minimal effect with use of standard protection measures.	Minimal effect with use of standard protection measures.
Water quality	Temporary increase in turbidity with past dredging. Long-term alteration of system hydrology from relocation of inlet and dredging of IWW.	Pollution prevention measures have resulted in Class III designation. Temporary increase in turbidity during dredging.	Unabated shoreline erosion could increase turbidity.	Temporary increase in turbidity during placement.	Temporary increase in turbidity during placement.

	Past (historical project impacts)	Present (current project impacts)	Future without project	Future with proposed north beach placement	Future with proposed north nearshore placement
Essential Fish Habitat	Inlet and IWW increased tidal flushing. No substantial effect on Federally managed fish species.	No substantial effect on Federally managed fish species with avoidance of resources outside the channels.	Minimal effect.	No substantial effect on Federally managed fish species with avoidance of resources outside the channels. Frequency not expected to depress benthic recovery post placement.	No substantial effect with avoidance of resources outside the channels. Frequency not expected to depress benthic recovery post placement.
Fish and Wildlife Resources	Loss of terrestrial and aquatic habitat with relocation of inlet and dredging of IWW. Stabilization of inlet helped create ASP.	Minimal impact on migratory birds with protective measures. Other wildlife temporarily displaced during beach placement.	Degradation and loss of habitat due to erosion.	Beach placement would impact benthic organisms. Minimal impact on migratory birds with protective measures. Other wildlife temporarily displaced when beach site is used.	Nearshore placement would impact benthic organisms. Other wildlife temporarily displaced.
Air Quality	Local emissions increased with creation of navigation channels. Minor emissions from dredging equipment.	Minor emissions from dredging equipment. In attainment with air quality standards.	No effect.	Minor emissions from construction equipment. Expected to be in attainment.	Minor emissions from construction equipment. Expected to be in attainment.
Cultural Resources	No Historic Properties affected.	No adverse effects to Historic Properties.	No Historic Properties affected.	No adverse effects to Historic Properties.	No adverse effects to Historic Properties anticipated.
Recreation Resources	Construction of navigation channels created recreational opportunities (boating).	Dredging beneficial to boating. Dredging equipment temporarily disrupts boat traffic.	Continued erosion of recreational beaches.	Equipment could temporarily disrupt beach recreation. Benefit from increased recreational beach area.	Equipment could temporarily disrupt boat traffic.
Aesthetic Resources	Construction of inlet and IWW affected local aesthetic resources.	Equipment temporarily affects aesthetic resources.	Unabated beach erosion.	Equipment would temporarily affect aesthetic resources.	Equipment would temporarily affect aesthetic resources.
Noise	Construction of navigation channels increased local noise levels.	Equipment noise is impactful.	Equipment noise is impactful.	Equipment noise could be impactful.	Equipment noise could be impactful.
Shoreline Stabilization	Stabilization of inlet and dredging of IWW affected hydrology of the system.	Beach placement beneficial to shoreline stabilization.	Shoreline recession due to erosion.	North beach placement would benefit shoreline stabilization.	North nearshore placement would benefit shoreline stabilization.
Socio-Economics	Construction of navigation channels created a significant positive economic stimulus.	Inlet and IWW continue to provide an economic stimulus.	Coastal armoring costs.	Positive economic impact if the proposed beach placement was performed.	Positive economic impact if the proposed nearshore placement was performed.

	Past (historical project impacts)	Present (current project impacts)	Future without project	Future with proposed north beach placement	Future with proposed north nearshore placement
Navigation	Stabilization of inlet and dredging of IWW improved navigation along the northeast coast of Florida.	Continued maintenance dredging provides safe navigation.	Minimal effect.	Minimal effect. Not anticipated to increase channel shoaling due to distance and quantity.	Minimal effect. Not anticipated to increase channel shoaling due to distance and quantity.

4.14 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

4.14.1 IRREVERSIBLE

An irreversible commitment of resources is one in which the ability to use and/or enjoy the resource is lost forever. Other than the use of fuel, equipment and supplies, there would be no irreversible commitment of resources.

4.14.2 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. Placement of dredged material could temporarily disrupt navigation and recreational activities.

4.15 UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS

The placement of dredged material onto the beach or into the nearshore would temporarily adversely impact benthic organisms, some fish species, and other wildlife.

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

The proposed placement work is typically of short duration. Adversely affected benthos would be expected to recover in less than a year, possibly longer. Most fish species and other motile organisms like crabs should be able to avoid the placement. Since the project area is limited in size, the long-term productivity of fish and other motile species should not be significantly affected. As the sites are only periodically used, wildlife would re-colonize and habituate the sites between placement events. Nesting sea turtle and shorebird habitat should be enhanced.

4.17 INDIRECT EFFECTS

Beach and nearshore placement should minimize critical shoreline erosion which could increase tourism.

4.18 COMPATIBILITY WITH FEDERAL, STATE, AND LOCAL OBJECTIVES

This project has wide support and is compatible with Federal, State, and most local objectives.

4.19 CONFLICTS AND CONTROVERSY

- Beach and nearshore placement would be done in a manner that would avoid or minimize impacts to resources outside the project area.

- The placement would be performed in compliance with the State water quality standards.

- St. Johns County was issued an Incidental Take Permit (ITP) pursuant to section 10(a)(1)(B) of the Endangered Species Act of 1973, as amended by the USFWS for the

incidental take of federally listed sea turtles and Anastasia Island beach mice on selected Atlantic coast beaches of St. Johns County causally related to vehicular driving and associated activities. The St. Johns County Habitat Conservation Plan (HCP) was developed in support of the County's ITP application. The ITP limits public vehicular beach access between 8:00 PM and 8:00 AM from May 1 through October 31. However, specifically excluded from the scope of the HCP are: "Activities associated with beach nourishment and other federally permitted beach projects, including those involving the use of vehicles on the beach." (St. Johns County, 2003) The USFWS has issued the SPBO which covers the Corps action of year-round dredging and beach placement including sea turtle nest relocation from the project footprint as required.

4.20 UNCERTAIN, UNIQUE, OR UNKNOWN RISKS

There is a potential for dredged sediments placed north to migrate south back towards the inlet and its associated navigation channels. The exact amount is uncertain and although not anticipated, it is unknown if this would increase maintenance dredging requirements.

4.21 PRECEDENT AND PRINCIPLE FOR FUTURE ACTIONS

North beach and nearshore placement would be a precedent as all past dredging events have placed the sediments to the south of the inlet.

4.22 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. A clamshell, cutterhead, or small Corps hopper dredge would most likely be used to perform the proposed work; therefore, adverse impacts to sea turtles and smalltooth sawfish would not be anticipated. Dredged material would only be placed on the beach pursuant to the conditions listed in section 4.1.3 above; therefore adverse impacts to nesting sea turtles, AIBM and Piping Plover would be minimized. Other sea turtle, AIBM, Piping Plover and sawfish protective measures, such as informing contract personnel of the presence of these species in the area and the need to avoid collisions/harm to them as well as equipment lighting requirements shall also be implemented.

2. Standard protective measures for manatees and whales shall be required.

3. The District's migratory bird protection measures 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.

4.23 COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS

4.23.1 NATIONAL ENVIRONMENTAL POLICY ACT OF 1969

Environmental information on the project was compiled and this EA was prepared and notification provided to the public. Comments received were incorporated into this document. The project is in compliance with the National Environmental Policy Act.

4.23.2 ENDANGERED SPECIES ACT OF 1973

The project has been coordinated under the Endangered Species Act. Programmatic consultation covers the proposed action including the USFWS SPBO dated 13 March 2015 and NMFS SARBO dated 25 September 1997.

4.23.3 FISH AND WILDLIFE COORDINATION ACT OF 1958

This project will be coordinated with the USFWS. A Coordination Act Report is not required for the proposed work. This project is in full compliance with the Act.

4.23.4 NATIONAL HISTORIC PRESERVATION ACT OF 1966

The proposed action is in compliance with Section 106 of the National Historic Preservation Act, as amended (PL89-665). As part of the requirements and consultation process contained within the National Historic Preservation Act implementing regulations of 36 CFR 800, this project is also in compliance through ongoing consultation with the Archaeological and Historic Preservation Act, as amended (PL93-29), Archeological Resources Protection Act (PL96-95), American Indian Religious Freedom Act (PL 95-341), Native American Graves Protection and Repatriation Act (NAGPRA), Executive Order 11593, 13007, and 13175, the Presidential Memo of 1994 on Government to Government Relations and appropriate Florida Statutes. Consultation with the Florida SHPO, appropriate federally recognized tribes, and other interested parties has been initiated and is ongoing. The proposed action will be in compliance with the goals of this Act upon completion of coordination as stated above.

4.23.5 CLEAN WATER ACT OF 1972

The project shall be in compliance with this act. A Section 401 water quality certification shall be obtained from the Florida Department of Environmental Protection. All State water quality standards would be met. A Section 404(b) evaluation is included in this report as Appendix A. A public notice will be issued in a manner which satisfies the requirements of Section 404 of the Clean Water Act.

4.23.6 CLEAN AIR ACT OF 1972

Vehicular emission and airborne dust particulates resulting from construction activities shall be controlled. This project will be coordinated with EPA and is in compliance with Section 309 of the Act.

4.23.7 COASTAL ZONE MANAGEMENT ACT OF 1972

A federal consistency determination in accordance with 15 CFR 930 Subpart C is included in this report as Appendix B. State consistency review was performed during the coordination of the draft EA. The Corps has determined that the project is consistent with the Florida Coastal Management Program. Issuance of WQC, or State permit, will confirm consistency with the program.

4.23.8 FARMLAND PROTECTION POLICY ACT OF 1981

No prime or unique farmland would be impacted by the use of the beach and nearshore placement areas. Therefore, this Act is not applicable to the proposed work.

4.23.9 WILD AND SCENIC RIVER ACT OF 1968

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

4.23.10 MARINE MAMMAL PROTECTION ACT OF 1972

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

4.23.11 ESTUARY PROTECTION ACT OF 1968

The protective measures described in section 4 would insure avoidance and minimization of impacts to the GTMNERR from the proposed placement. This project is in compliance with this Act.

4.23.12 FEDERAL WATER PROJECT RECREATION ACT

The principles of the Federal Water Project Recreation Act, (Public Law 89-72) as amended, are not applicable to this project.

4.23.13 SUBMERGED LANDS ACT OF 1953

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

4.23.14 COASTAL BARRIER RESOURCES ACT AND COASTAL BARRIER IMPROVEMENT ACT OF 1990

Portions of SPV and VB are within CBRS Unit FL-03P GTMNERR OPA and Unit P04A Usinas Beach respectively. Maintenance dredging of the IWW is consistent with provisions of the CBRA which excepts: "maintenance of existing channel improvements... and including the disposal of dredge materials related to such improvements". CBRA has no requirement to dispose of the material within the same CBRS Unit. CBRA does not otherwise regulate how the maintenance material may be used. This CBRA exemption was verified by Service letter dated 25 September 2003.

4.23.15 RIVERS AND HARBORS ACT OF 1899

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

4.23.16 ANADROMOUS FISH CONSERVATION ACT

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

4.23.17 MIGRATORY BIRD TREATY ACT AND MIGRATORY BIRD CONSERVATION ACT

Measures shall be taken to protect migratory birds, i.e. avoiding nesting sites. The project is in compliance with these Acts.

4.23.18 MARINE PROTECTION, RESEARCH AND SANCTUARIES ACT

The term "dumping" as defined in the Act (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.

4.23.19 MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

The Corps has determined that the project would not have a substantial adverse impact on EFH or federally managed fish species occurring along the east-central coast of Florida. The proposed work has been coordinated with the NMFS. The project is in full compliance with the Act.

4.23.20 E.O. 11990, PROTECTION OF WETLANDS

There would be no impacts to wetlands by project activities. This project is in compliance with the goals of this Executive Order.

4.23.21 E.O. 11988, FLOOD PLAIN MANAGEMENT

This project would have no adverse impacts to flood plain management.

4.23.22 E.O. 12898, ENVIRONMENTAL JUSTICE

The proposed action would not result in adverse human health or substantial environmental effects. The work would not impact "subsistence consumption of fish and wildlife".

4.23.23 E.O. 13089, CORAL REEF PROTECTION

This project would not impact those species, habitats, and other natural resources associated with coral reefs.

4.23.24 E.O. 13112, INVASIVE SPECIES

This project would not introduce any invasive species.

5 LIST OF PREPARERS

5.2 PREPARERS

Preparer	Discipline	Role
Paul DeMarco, U.S. Army Corps of Engineers	Biologist	Principal Author
Daniel Hughes, U.S. Army Corps of Engineers	Archaeologist	Cultural Resources

5.3 REVIEWERS

This Final Environmental Assessment was reviewed by the supervisory chain of the Environmental Branch and Planning Division, as well as the Construction-Operations Division, Project Management, and the Office of Counsel of the US Army Corps of Engineers, Jacksonville District.

6 PUBLIC INVOLVEMENT

6.2 SCOPING AND DRAFT EA

A Public Notice has been issued for this action. The draft EA and Finding of No Significant Impact (FONSI) were made available to the public. Comments received were incorporated into this document.

6.3 AGENCY COORDINATION

Coordination has been conducted with appropriate agencies and is described in this report. Agency coordination letters can be found in Appendix C.

6.4 LIST OF RECIPIENTS

Per the Public Notice, copies of the draft EA were made available to appropriate stakeholders. A list of stakeholders receiving notification can be found within the Public Notice in Appendix C.

6.5 COMMENTS RECEIVED AND RESPONSE

Comments received on the draft EA are summarized below. All comment letters received can be found in Appendix C.

Florida Department of Environmental Protection-Division of Water Resource Management: The DEP's Division of Water Resource Management finds the Draft SEA to be consistent with its authorities under the FCMP. The document addresses recommendations in the St. Augustine Inlet Management Plan, and one nearshore placement event has already been permitted under Joint Coastal Permit Modification No. 0251706-006-JN. The DEP's Florida Coastal Office also offers the following specific comments: The proposed South Ponte Vedra placement areas (between R-84 and R-98) are within the Guana River Marsh Aquatic Preserve and the Guana Tolomato Matanzas NERR. This area is a State Sea Turtle Index beach with a monitoring dataset beginning in 1987; any artificial manipulation during sea turtle nesting season could compromise the integrity of this long-standing data. The waters of the aquatic preserve are also classified as an OFW. The Draft SEA uses data collected between 2001 and 2008. Since that time, the area has seen a significant increase in nesting. Staff suggests that more recent data be used, including this year’s nests: a Leatherback nest documented near R-105 on May 17, 2015, and a Kemp's Ridley nest documented near R-102 on May 23, 2015. It is likely that the “nest per kilometer” ranking has changed as well. Although alterations to the beach could compromise the beach as an index beach, staff will defer to the FWC's recommendations, as they are the lead agency for protected species. The beaches within the Guana River Marsh Aquatic Preserve have not been previously nourished. Therefore, it is recommended that that sand placed on these beaches be carefully selected and monitored to ensure that the original grain size is preserved. Sediment samples used to determine the native beach grain size should be obtained from beaches within the aquatic preserve that have not been previously nourished.

RESPONSE: The Corps acknowledges the presence of the State Sea Turtle Index Beach referenced in the comment. Material placement on this beach would be performed in compliance with the USFWS SPBO dated 13 March 2015 as well as the State permit. Conditions provided within the SPBO were prepared using more recent nesting data.

Florida Fish and Wildlife Conservation Commission: The FWC notes that Section 4 of the draft SEA addresses environmental effects, proposed minimization measures, and environmental commitments. The USACE has determined that the nearshore placement “may affect but is not likely to adversely affect” sea turtles in the water, manatees, right whales, or the smalltooth sawfish, and that the north beach placement is “not likely to adversely affect” these species. FWC staff offers the following additional recommendations for consideration in the final SEA. Placement of sand in the nearshore along a marine turtle nesting beach from May 1 through October 31 can interfere with nesting or hatchling marine turtles. Vessels operating along the nesting beach at night can block access to or from the beach. Lights on the dredge and other vessels operating in proximity to the nesting beach could be visible for miles along the shoreline, causing disorientation of nesting and/or hatchling sea turtles. Minimization measures need to be proposed to ensure that nesting and hatchling marine turtles are protected if nearshore placement occurs at night during the nesting season. FWC staff may provide more specific recommendations once project specifications have been finalized, such as during the permit review process. The draft SEA states that the USACE would implement its migratory bird protection policy should dredged sand be placed on the beach during the April 1 through August 31 seabird and shorebird nesting season. It is stated that the policy requires monitoring and a buffer of at least 200 feet around nests. FWC's standard shorebird conditions recommend a buffer distance of 300 feet. Buffer zones and other avoidance measures can be used to reduce the potential for "take" of state-listed species, as defined in Chapter 68A-27, F.A.C., which would eliminate the need to obtain an Incidental Take Permit from the FWC. Staff is available to assist with determining avoidance and minimization measures or discuss permitting alternatives.

RESPONSE: The project would be performed in compliance with the USFWS SPBO dated 13 March 2015 and NMFS SARBO dated 25 September 1997 as well as the State permit.

Florida Department of State: The DOS notes that a new cultural resource assessment survey will be conducted by the USACE of the South Ponte Vedra (SPV) Near Shore Placement Area. Staff looks forward to receiving a copy of this survey for review. Regarding the proposed maintenance dredging activities, the DOS' May 8, 2015 comments concerning the maintenance of buffers around known targets and magnetic anomalies are still applicable. DOS notes that these concerns are addressed in the Draft SEA (April 2015). If the above conditions are met, the DOS concurs with the USACE's determination that the proposed undertakings will have no adverse effect on historic properties.

RESPONSE: Buffers surrounding targets of interest would be maintained as discussed with DOS/SHPO. Survey information will also be provided to DOS/SHPO when available.

St. Johns River Water Management District: No comments.

NE Florida RPC - Northeast Florida Regional Planning Council: No comments.

National Marine Fisheries Service: The NMFS affirms its earlier recommendations for monitoring programs to guide appropriate balancing of the timing and frequency of dredging needed for safe navigation with the time periods needed for recovery of foraging areas used by fishery species. In the absence of such monitoring to guide development of best management practices for this inlet, the proposed environmental window is acceptable.

RESPONSE: The work would be performed in accordance with the timing and duration information previously provided to NMFS.

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APPENDIX A - SECTION 404(B) EVALUATION

SECTION 404(b) EVALUATION

NORTH BEACH AND NEARSHORE PLACEMENT
MAINTENANCE DREDGING
ST. AUGUSTINE INLET AND ADJACENT INTRACOASTAL WATERWAY
ST. JOHNS COUNTY, FLORIDA

I. Project Description

a. Location. The proposed work would be performed along the beach and nearshore areas of SPV and VB (please see Figures 1 and 2).

b. General Description. The work would involve periodic dredged material placement in the beach or nearshore placement areas.

c. Authority and Purpose. Spanning nearly the entire length of Florida from Jacksonville to Miami, an 8 ft deep x 75 ft wide channel was authorized 21 January 1927 by House document 586, 69th Congress, 2nd Session. The present configuration (12 ft deep x 125 ft wide) was authorized by House Document 740, 79th Congress, 2nd Session, 2 March 1945. Authorization was received for improvements to the St. Augustine Harbor and Inlet, under House Document 133, 81st Congress, 1st Session. Maintenance of the channels is the responsibility of the Corps. The Florida Inland Navigation District serves as the IWW local sponsor while the St. Augustine Port, Waterway and Beach District is the Harbor/Inlet local sponsor. The revised IMP recommends 1/3 north placement on the critically eroded beaches in SPV and VB.

d. General Description of Dredged or Fill Material.

(1) General Characteristics of Material. Dredged material from the project channels typically consists of shoal material containing silt, clay, sand and shell. Silt content averages 2.6%.

(2) Quantity of Material. Up to 200,000 cubic yards would be periodically dredged and placed north.

(3) Source of Material. From the St. Augustine Inlet entrance channel and the adjacent IWW federal navigation channel (please refer to Section 1.1 for more information).

e. Description of the Proposed Discharge Site(s).

(1) Location. The beach and nearshore placement areas (please see Figure 1 and 2 and Section 2 for more information).

(2) Size. Beach: 20,500 linear feet; Nearshore: 560 acres.

(3) Type of Site: Beach: open water (ocean) and sand beach berm; Nearshore: open water (ocean).

(4) Type(s) of Habitat. Beach is open water habitat with unconsolidated substrate and high-energy surf zone; Nearshore is open water habitat with unconsolidated substrate (please see Section 3 for more information).

(5) Timing and Duration of Discharge. Timing is undetermined and duration is generally less than four months. Beach and nearshore placement could occur year-round.

f. Description of Disposal Method. Dredging is typically performed by cutterhead suction pipeline dredge. Material is hydraulically pumped via pipeline to beach or nearshore for disposal. A small Corps split-hull hopper dredge could also perform the dredging and would bottom dump the sediments in the nearshore areas.

II. Factual Determinations

a. Physical Substrate Determinations.

(1) Substrate Elevation and Slope. The project channels have sloped bottoms with authorized depths (please see Section 1.1 for more information). Actual depths vary widely though due to shoaling and local hydrodynamic processes.

(2) Sediment Type. Unconsolidated with sand, silt, clay and shell.

(3) Dredged/Fill Material Movement. Material placed on the beach and in the nearshore becomes part of the littoral drift system.

(4) Physical Effects on Benthos. Benthic organisms would be impacted by dredging activity and placement operations. Re-colonization should begin in less than one year.

(5) Actions to minimize impacts. Placement operations would be monitored to ensure that construction activities are performed in authorized project areas only.

b. Water Circulation. Fluctuation and Salinity Determinations.

(1) Water Column Effects.

(a) Salinity: No significant effect.
(b) Water Chemistry: No significant effect.

(c) Clarity: Turbidity would temporarily decrease clarity.
(d) Color: Turbidity would temporarily change color.
(e) Odor: No significant effect.
(f) Taste: No significant effect.
(g) Dissolved Gas Levels: No significant effect.
(h) Nutrients: No significant effect.

(2) Current Patterns and Circulation.

(a) Current Patterns and Flow: Currents in the project area are primarily tidal.
(b) Velocity: No significant effect.
(c) Stratification: No significant effect.
(d) Hydrologic Regime: No significant effect.

(3) Normal Water Level Fluctuations. Tides in the project area are semi diurnal with varying levels throughout the year. The project would not affect normal water level fluctuations.

(4) Salinity Gradients. The project would not affect salinity gradients.

(5) Actions to minimize impacts. The project would not affect water levels. Turbidity would be monitored per the requirements of the State permit. If at any time the turbidity standard were exceeded, those activities causing the violation would cease.

c. Suspended Particulate/Turbidity Determinations.

(1) Expected Changes in Suspended Particulates and Turbidity Levels in Vicinity of Disposal Site. There will be an increase in suspended particulates and turbidity levels in the vicinity of the disposal site.

(2) Effects (degree and duration) on Chemical and Physical Properties of the Water Column.

(a) Light Penetration: Light penetration would decrease during placement operations.
(b) Dissolved Oxygen: Dissolved oxygen levels would not be significantly altered by this project.
(c) Toxic Metals and Organics: This project would not cause any significant release of toxic metals or organics.
(d) Pathogens: This project would not cause any release of pathogens.
(e) Aesthetics: Turbidity would temporarily impact aesthetic quality of the placement areas.

(3) Effects on Biota.

(a) Primary Production, Photosynthesis: The project would not have a significant impact on primary production or photosynthesis.
(b) Suspension/Filter Feeders: Turbidity would affect suspension/ filter feeders, but the effects would not be significant.
(c) Sight Feeders: Sight feeders would be affected by turbidity, but the effects would not be significant.

(4) Actions to minimize impacts. As stated earlier, turbidity would be monitored per the requirements of the State permit. If at any time the turbidity standard were exceeded, those activities causing the violation would cease.

d. Contaminant Determinations. Levels of contaminants are not expected to have a significant impact on plankton, benthos, nekton, or the aquatic food web. Re-suspension of sediment within the placement areas is expected to have minimal impact on these organisms.

e. Aquatic Ecosystem and Organism Determinations.

(1) Effects on Plankton: Significant effects on plankton are not anticipated.
(2) Effects on Benthos: Benthos would be impacted by the project, but benthic organisms would be expected to begin recovery within one year.
(3) Effects on Nekton: Significant effects on nekton are not anticipated.
(4) Effects on Aquatic Food Web: As stated earlier, benthos would be impacted, but additional significant effects on the food web are not anticipated.
(5) Effects on Special Aquatic Sites.

(a) Sanctuaries and Refuges: Beach and nearshore placement is not expected to have a significant impact on the adjacent areas. This work would be performed in compliance with the Water Quality Certification issued by the State of Florida.
(b) Wetlands: The proposed work would not affect to wetlands.
(c) Mud Flats: The proposed work would not have a significant affect to mud flats.
(d) Vegetated Shallows: The proposed work would not affect vegetated shallows.
(e) Coral Reefs: There are no coral reefs in the project area.
(f) Riffle and Pool Complexes: There are no riffle and pool complexes in the project area.

(3) Threatened and Endangered Species. The project would not have a significant impact on threatened and endangered species. AIBM trapping would

relocate any mice from any pipeline corridor, sea turtle nests would be relocated from the beach placement area, piping plover optimal habitat would be avoided to the maximum extent practicable, and standard manatee and right whale protection measures would be employed thereby minimizing impacts to these species.

(4) Other Wildlife. Use of the beach and nearshore could temporarily displace wildlife. Re-colonization of these sites would occur between maintenance events.

(5) Actions to Minimize Impacts. Measures shall be taken to avoid or minimize impacts to threatened and endangered species as well as other wildlife (please refer to Section 4).

e. Proposed Disposal Site Determinations

(1) Mixing Zone Determination. This determination will be in accordance with the Water Quality Certification issued for this project.

(2) Determination of Compliance with Applicable Water Quality Standards. The work would be conducted in accordance with the Water Quality Certification issued for this project.

(3) Potential Effects on Human Use Characteristic.

(a) Municipal and Private Water Supply: No effects are anticipated.
(b) Recreational and Commercial Fisheries: Impacts to fisheries would not be significant (please see Sections 3.5 and 4.3).
(c) Water Related Recreation: Construction activities would temporarily disrupt water related recreation.
(d) Aesthetics: Construction would temporarily impact aesthetics.
(e) Parks, National and Historical Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Preserves: The SPV placement areas lie adjacent to the GTMNERR. Work would be conducted in compliance with the Water Quality Certification issued by the State of Florida.

f. Determination of Cumulative Effects on the Aquatic Ecosystem. Periodic placement operations would have impacts on the aquatic ecosystem. Most impacts should be relatively short-term and populations of benthic organisms within the placement areas should fully recover due to the anticipated long duration (10-12 years) between events (please see Section 4.3 for more information).

h. Determination of Secondary Effects on the Aquatic Ecosystem. Placing dredged material north of the inlet may provide a stimulus for economic growth and could encourage additional development.

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 practical alternative exists which meets the project objectives that do not involve discharge of fill into waters of the United States.

c. Compliance with Applicable State Water Quality Standards: After consideration of material placement site dilution and dispersion, the discharge of fill materials would not cause or contribute to, violations of any applicable State water quality standards for Class III Waters. Dredging would be performed in compliance with the Water Quality Certification issued by the State of Florida.

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

e. Compliance with Endangered Species Act of 1973: The proposed project would not jeopardize the continued existence of any species listed as threatened or endangered or result in the destruction or adverse modification of any critical habitat as specified by the Endangered Species Act of 1973.

f. Compliance with Specified Protection Measures for Marine Sanctuaries Designated by the Marine Protection, Research, and Sanctuaries Act of 1972: This act does not apply to this project.

g. Evaluation of Extent of Degradation of the Waters of the United States

(1) Significant Adverse Effects on Human Health and Welfare

(a) Municipal and Private Water Supplies: No effect.
(b) Recreation and Commercial Fisheries: No significant adverse impacts are anticipated.
(c) Plankton: No substantial adverse impacts are anticipated.
(d) Fish: No substantial adverse impacts are anticipated.
(e) Shellfish: No substantial adverse impacts are anticipated.
(f) Wildlife: Use of the beach and nearshore could temporarily displace wildlife. Re-colonization of these sites would occur between maintenance events.
(g) Special Aquatic Sites: No substantial adverse impacts are anticipated.

(2) Significant Adverse Effects on Life Stages of Aquatic Life and Other Wildlife Dependent on Aquatic Ecosystems: Most impacts should be relatively short-term (see section 4.2).

(3) Significant Adverse Effects on Aquatic Ecosystem Diversity, Productivity and Stability: No significant adverse effects are anticipated.

(4) Significant Adverse Effects on Recreational, Aesthetic, and Economic Values: Recreation and aesthetic values would be temporarily disrupted due to construction activity.

h. Appropriate and Practicable Steps Taken to Minimize Potential Adverse Impacts of the Discharge on the Aquatic Ecosystem: Measures shall be taken to minimize impacts (please see Section 4.22 for more information).

i. On the basis of the guidelines the proposed disposal sites for the discharge of dredged material are specified as complying with the requirements of these guidelines, with the inclusion of appropriate and practical conditions to minimize pollution or adverse effects on the aquatic ecosystem.

FINDING OF COMPLIANCE
FOR
NORTH BEACH AND NEARSHORE PLACEMENT
MAINTENANCE DREDGING
ST. AUGUSTINE INLET AND ADJACENT IWW
ST. JOHNS COUNTY, FLORIDA

1. No significant adaptations of the guidelines were made relative to this evaluation.

2. Two beach placement and two nearshore placement sites are available for this project. Use of any of these sites (Figures 1 and 2) would not result in significant impacts to water level fluctuation, circulation or currents.

3. The planned disposal of dredged material at any of the sites would not violate any applicable State water quality standards with the possible exception of turbidity. Therefore, turbidity standards would be monitored per the Water Quality Certification issued by the State of Florida. If a turbidity violation is noted, then those activities causing the violation shall be terminated. The disposal operation will not violate the Toxic Effluent Standards of Section 307 of the Clean Water Act.

4. Use of the beach and nearshore disposal sites would 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. Consultation with the U.S. Fish and Wildlife Service will be completed.

5. The proposed disposal of dredged material will not result in significant long-term adverse effects on human health and welfare, including municipal and private water supplies, recreation and commercial fishing, plankton, fish, shellfish, wildlife, and special aquatic sites. Significant adverse effects on life stages of aquatic life and other wildlife, aquatic ecosystem diversity, productivity and stability, and recreational, aesthetic and economic values will not occur.

6. Appropriate steps shall be taken to minimize potential adverse impacts of the discharge on aquatic systems.

7. On the basis of the guidelines the proposed disposal sites for the discharge of dredged material are specified as complying with the inclusion of appropriate and practical conditions to minimize pollution or adverse effects to the aquatic ecosystem.

APPENDIX B - COASTAL ZONE MANAGEMENT CONSISTENCY

FLORIDA COASTAL MANAGEMENT PROGRAM
FEDERAL CONSISTENCY EVALUATION PROCEDURES

NORTH BEACH AND NEARSHORE PLACEMENT
MAINTENANCE DREDGING
ST. AUGUSTINE INLET AND ADJACENT IWW
ST. JOHNS COUNTY, FLORIDA

1. 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 will be submitted to the State in compliance with this chapter.

2. 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 an orderly social, economic and physical growth.

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

3. 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 placement of dredged material on the critically eroded shorelines of SPV and VB which should alleviate some of the erosion. Therefore, this project is consistent with the efforts of Division of Emergency Management.

4. 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.

5. 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 or is under an easement for public placement use, this chapter does not apply.

6. 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 proposed project will be coordinated with the State of Florida regarding project activities within and adjacent to the GTMNERR. The project is consistent with this chapter.

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

Response: This project has been coordinated with the State Historic Preservation Officer (SHPO). Because of the nature of the project there is little potential for impact to historic properties. The project is consistent with this chapter.

8. 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 proposed placement 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.

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

Response: The placement would help protect A1A against erosion and therefore is consistent with the goals of this chapter.

10. 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 proposed dredged material placement would not have a substantial adverse impact on saltwater living resources. Benthic organisms may be adversely affected by the work, but full recovery is expected at the placement areas due to the anticipated long duration (10-12 years) between events. In addition, the project footprint is relatively small and lies adjacent to similar habitat. 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.

11. 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 would be re-colonized between uses.

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

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

13. 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.

14. 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.

15. 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 dredged material placement will be coordinated with the local regional planning commission. Therefore, the project is consistent with the goals of this chapter.

16. 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.

17. 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 Regulation (now a part of the Florida Department of Environmental Protection).

Response: An Environmental Assessment addressing project impacts has been prepared and will be reviewed by the appropriate resource agencies including the Florida Department of Environmental Protection. Environmental protection measures will be implemented to ensure that no lasting adverse effects on water quality, air quality, or other environmental resources will occur. A Water Quality Certification is being sought from the State. The project complies with the intent of this chapter.

18. 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 C - PERTINENT CORRESPONDENCE

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32207-8175

REPLY TO
ATTENTION OF

Planning and Policy Division
Environmental Branch

MAY 0 1 2015

PUBLIC NOTICE

To Whom It May Concern:

U.S. Army Corps of Engineers, Jacksonville District pursuant to Pursuant to 33 CFR 337.7, is initiating maintenance dredging with dredged material placement north of St. Augustine Inlet as described below:

CORPS DISTRICT: U.S. Army Corps of Engineers, Jacksonville District
701 San Marco Boulevard
Jacksonville, Florida 32207

SPONSOR: Florida Inland Navigation District
St. Augustine Port, Waterway, and Beach District

WATERWAY & LOCATION: The project area is located along the Jacksonville to Miami segment of the Intracoastal Waterway (IWW) and St. Augustine Harbor and Inlet, east of State Route A1A, and 13 miles north of the Matanzas Inlet, in Section 7, Township 9 South, Range 30 East; St. Augustine, St. Johns County, Florida **(Plate C1-1A).**

PROJECT PURPOSE: As part of its navigation mandate, the U.S. Army Corps of Engineers conducts annual surveys of the Federal navigation channels. The most recent survey conducted in 2014, determined sufficient shoals exist to warrant channel maintenance. Maintenance dredging is needed to restore project depths and ensure safe channel navigation.

PROPOSED WORK: Maintenance dredging is for proposed for Cuts 27A to 30A of the IWW, and the St. Augustine Inlet entrance channel and settling basins. The IWW Channel would be dredged to restore a bottom depth of -12 feet MLLW (plus 2 ft. allowable over depth for a total project depth of -14 ft MLLW) and bottom width of 125 feet. A "best fit" alignment would be accomplished within the constraints of the north sand trap groin and south jetty to restore the Inlet's entrance channel bottom depth of -16 ft MLW (plus 2 ft of allowable over depth for a total project depth of -18 ft MLW) and bottom width of 200 feet. The 50-foot wide settling basins on the north and south sides of the entrance channel would also be dredged.

A cutterhead or similar-type dredge with hydraulic discharge pumpout capability or a small Corps hopper dredge with bottom dump capability are proposed to remove approximately 200,000 cubic yards of shoals that have accumulated in the waterway. A 2015 dredging event is proposed with subsequent events to occur every 3 to 4 years, or as needed to maintain waterway depths.

Disposal alternatives include beach placement above mean high water on St. Augustine Beach or Anastasia State Park (between DEP Monuments R-131-A toR-148). The nearshore placement alternative would be below mean lower low water (MLLW) between DEP Monuments R-141 to R-146. Additional placement areas are proposed which correspond to DEP designated critically eroding areas in South Ponte Vedra (SPV) and Vilano Beach (VB).

A total of four new placement options are proposed with beach and nearshore placement areas at SPV between DEP Monuments R-84 to R-98 and VB between R-109 to R-117. Nearshore placement would occur between the -6 and -12' MLLW contours. All disposal alternatives would be within existing disposal templates of past dredging or beach nourishment events except for the four newly proposed options north of the inlet as recommended by the revised St. Augustine Inlet Management Plan. The pipeline corridor would follow an alignment that would avoid or minimize adverse impacts to the practicable extent possible.

AVOIDANCE AND MINIMIZATION INFORMATION: The proposed dredging action has been designed to remove only those shoals that are restricting navigation depths and impeding safe channel navigation. Design consideration has also been given to avoidance of saltmarsh impacts and limiting the pipeline corridor to avoid existing dunes, vegetated areas, and recreational users.

COMPENSATORY MITIGATION: Mitigation is not necessary to offset environmental impacts associated with the proposed project. Actions have been taken to reduce any potential environmental impacts to the fullest extent practicable.

EXISTING CONDITIONS: Shoals have formed along specific stations of the channels and are creating conditions which impede safe passage of recreational, commercial, and federal vessels using the IWW and Inlet connecting channels.

CULTURAL OR HISTORIC RESOURCES: The U.S. Army Corps of Engineers, Jacksonville District has conducted testing for the presence of cultural resources per requirements of the National Historic Preservation Act. No resources are known to exist within the planned 2015 dredge event portion of the federal channels. The only known resource to exist near the channel is the 8SJ4889 (the Dixie Crystal). A new resource assessment survey will be conducted for the SPV nearshore placement area and coordinated with the State Historic Preservation Officer and appropriate federally recognized tribes.

No impacts to cultural resources are anticipated with beach placement at SPV or VB and nearshore placement at VB provided known resources are adequately buffered and avoided.

ENDANGERED SPECIES: With the issuance of this Public Notice coordination is requested of NOAA, National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS). The requirements of the NMFS South Atlantic Regional Biological Opinion will be implemented for the occurring marine mammals and sea turtles. In addition, the Corps has determined that nearshore placement will not adversely modify loggerhead sea turtle nearshore reproductive critical habitat unit LOGG-N-14. Finally, the requirements of the USFWS Statewide Programmatic Biological Opinion will be implemented for the protection and preservation of the West Indian manatee, migratory birds, Anastasia island beach mouse, piping plover, red knot and nesting sea turtles.

ESSENTIAL FISH HABITAT (EFH): In accordance with the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) of 1996, the waters and substrate within the project area have been identified as EFH. Those waters and substrate necessary for fish to spawn, breed, feed or grow to maturity are defined as EFH. The estuarine water column with unconsolidated substrate in the dredge area and ocean high-salinity surf zone and nearshore water column with unconsolidated substrate in the placement areas are considered estuarine inshore EFH and coastal EFH respectively. Coordination with NMFS is initiated with this public notice.

AUTHORIZATION FROM OTHER AGENCIES: Water quality certification was obtained for the dredging and south placement options under the Florida State Department of Environmental Protection (DEP) Joint Coastal Permit number 0251706-001-JC, St. Johns County and for the VB nearshore placement area under modification number 0251706-006-JN. An application for a major modification to include the SPV and VB beach placement and SPV nearshore placement options will be submitted to DEP.

COASTAL ZONE MANAGEMENT CONSISTENCY: The project would be undertaken in a manner consistent to the maximum extent practicable with the State's Coastal Management Program. The State's concurrence was issued with the DEP water quality certification and modification for the dredging and placement options referenced above.

COMPLIANCE WITH 404(B)(1) GUIDELINES: The proposed action is not anticipated to cause or contribute to the violation of State water quality standards. However, turbidity would be monitored according to State protocols during the proposed action and if at any time the turbidity standards were exceeded, those activities causing the violation would temporarily cease. No significant degradation is expected and all appropriate and practicable steps would be taken to minimize impacts.

FINDING OF NO SIGNIGICANT IMPACT (FONSI): The impacts associated with the proposed action should not be long-term or permanent to the quality of the human environment. As such, the project would not require an Environmental Impact Statement. A draft FONSI is attached to this notice. In addition, a draft supplemental environmental assessment covering the proposed SPV and VB placement options has been prepared and is available at this website: http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx#St_Johns.

SUBMITTAL OF COMMENTS: Within 30 days of this notice, written comments should be submitted to either the letterhead address to the attention of Mr. Eric Summa, at Post Office Box 4970, Jacksonville, Florida 32232-0019; facsimile number 904-232-3442 or email address paul.m.demarco@usace,army.mil.

REQUEST FOR PUBLIC HEARING: Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period and must state the specific reason(s) for requesting a public hearing.

PROJECT DRAWINGS: The project drawings and related information can be viewed at the U.S. Army Corps of Engineers, Jacksonville District website at: http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx#St_Johns.

Sincerely,

Eric P. Summa
Chief, Environmental Branch

DRAFT FINDING OF NO SIGNIFICANT IMPACT
NORTH BEACH AND NEARSHORE PLACEMENT
MAINTENANCE DREDGING
ST. AUGUSTINE INLET AND ADJACENT INTRACOASTAL WATERWAY
ST. JOHNS COUNTY, FLORIDA

I have reviewed the Environmental Assessment (EA) for the proposed north beach and nearshore placement of material from the maintenance dredging of the federally authorized St. Augustine Inlet and adjacent Intracoastal Waterway in St. Johns County, FL. Dredged material would be placed either on the South Ponte Vedra or Vilano beach placement areas or in the South Ponte Vedra or Vilano nearshore placement areas. 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. Reasons for this conclusion are in summary:

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

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

c. The proposed work has been determined by the State of Florida to be consistent with the Florida Coastal Management Program.

d. Coordination with the Florida State Historic Preservation Officer and appropriate federally recognized tribes is ongoing. It has been determined that the proposed Vilano beach and nearshore placement options would not adversely affect any properties eligible for or listed on the National Register of Historic Places. Use of the South Ponte Vedra for nearshore placement will require additional consultation for potential impacts to cultural resources. No adverse affects would result from shoreline placement.

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

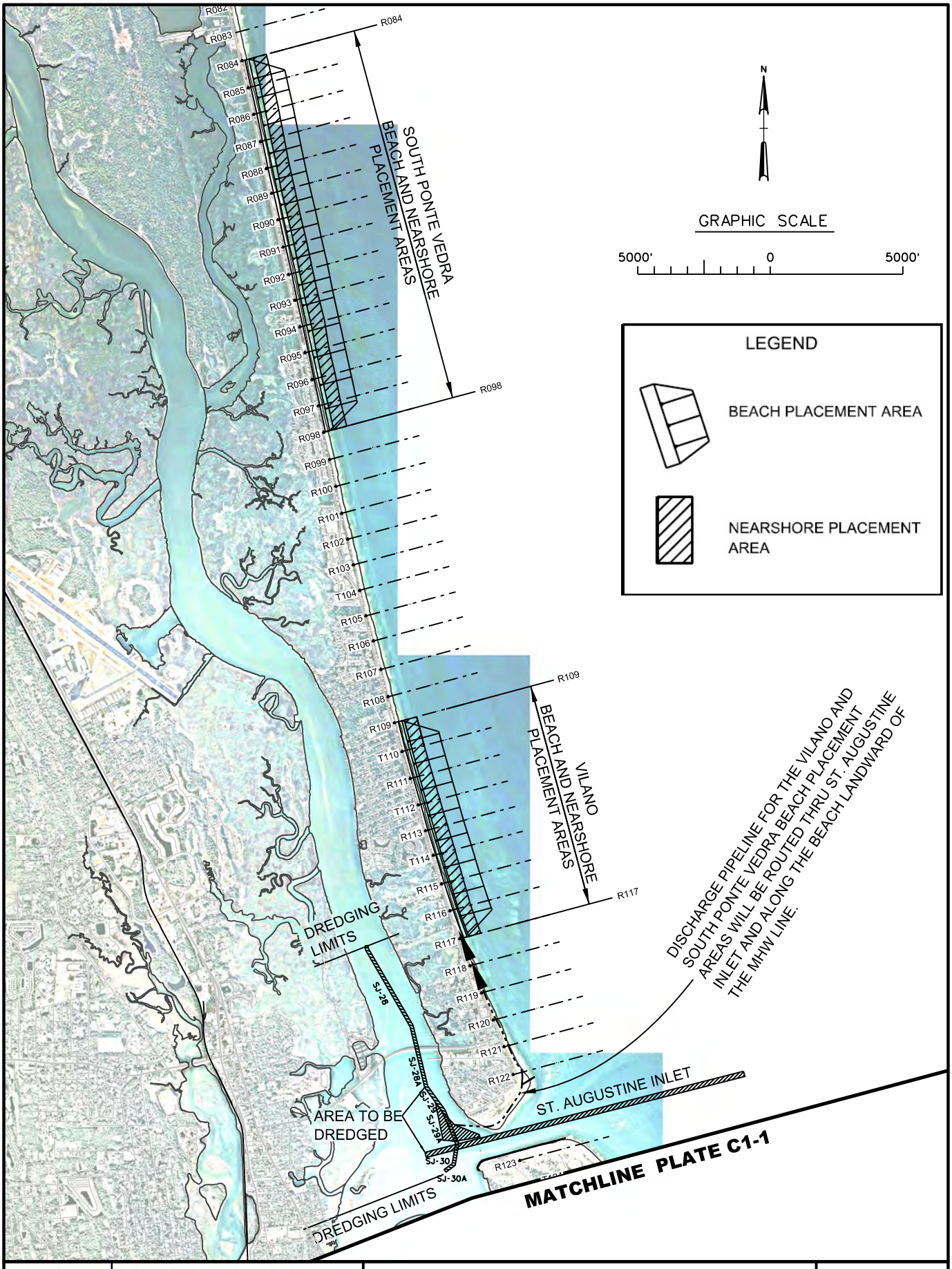
f. Public benefits will be provided from reduced shoreline erosion.

In consideration of the information summarized, I find that the proposed Federal Navigation Projects, north beach and nearshore placement of material from the maintenance dredging of St. Augustine Inlet and adjacent Intracoastal Waterway, will not significantly affect the human environment and does not require an Environmental Impact Statement. A copy of this document will be made available to the public at the following website: http://www.saj.usace.army.mil/Divisions/Planning/Branches/Environmental/DocsNotices_OnLine_StJohnsCo.htm.

_____ _____

ALAN M. DODD
Colonel, Corps of Engineers
Commanding

Date



US Army Corps of Engineers
Jacksonville District

NOT FOR CONSTRUCTION
60% PLAN DRAWINGS

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

ST. AUGUSTINE, FLORIDA
MAINTENANCE DREDGING PERMIT DRAWING
FEBRUARY 2015
LOCATION MAP

PLATE
C1-1A

Florida Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Jonathan P. Steverson
Interim Secretary

June 24, 2015

Mr. Eric P. Summa, Chief
Environmental Branch, Jacksonville District
U.S. Army Corps of Engineers
P.O. Box 4970
Jacksonville, FL 32232-0019

RE: Department of the Army, Jacksonville District Corps of Engineers – Draft Supplemental Environmental Assessment, North Beach and Nearshore Placement, Maintenance Dredging St. Augustine Inlet and Adjacent Intracoastal Waterway – St. Johns County, Florida.
SAI # FL201505017280C

Dear Mr. Summa:

The Florida State Clearinghouse has coordinated a review of the subject Draft Supplemental Environmental Assessment (SEA) under the following authorities: Presidential Executive Order 12372; § 403.061(42), *Florida Statutes*; the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, as amended.

The following agencies submitted comments, concerns and recommendations regarding the Draft SEA, all of which (memorandum and letters) are attached hereto, incorporated herein by this reference, and made an integral part of this letter:

- Florida Department of Environmental Protection
- Florida Fish and Wildlife Conservation Commission
- Florida Department of State, Division of Historical Resources

Based on the information contained in the Draft SEA and enclosed state agency comments, the state has determined that, at this stage, the proposed federal action is consistent with the Florida Coastal Management Program (FCMP). To ensure the project's continued consistency with the FCMP, the concerns identified by our reviewing agencies must be addressed prior to project implementation. The state's continued concurrence will be based on the activities' compliance with FCMP authorities, including federal and state monitoring of the activities to ensure their continued conformance, and the adequate resolution of issues

identified during this and any subsequent reviews. The state's final concurrence of the project's consistency with the FCMP will be determined during the environmental permitting process, in accordance with Section 373.428, *Florida Statutes*.

Thank you for the opportunity to review the draft document. Should you have any questions regarding this letter, please don't hesitate to contact me at Lauren.Milligan@dep.state.fl.us or (850) 245-2170.

Yours sincerely,

Lauren P. Milligan, Coordinator
Florida State Clearinghouse
Office of Intergovernmental Programs

Enclosures

ec: Roxane Dow, DEP, DWRM
Rebecca Prado, DEP, FCO
Cheri Albin, DEP, FPS
Scott Sanders, FWC
Timothy Parsons, DOS

Project Information	
Project:	FL201505017280C
Comments Due:	06/12/2015
Letter Due:	06/30/2015
Description:	DEPARTMENT OF THE ARMY, JACKSONVILLE DISTRICT CORPS OF ENGINEERS - DRAFT SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT, NORTH BEACH AND NEARSHORE PLACEMENT, MAINTENANCE DREDGING ST. AUGUSTINE INLET AND ADJACENT INTRACOASTAL WATERWAY - ST. JOHNS COUNTY, FLORIDA.
Keywords:	ACOE - MAINTENANCE DREDGING ST. AUGUSTINE INLET AND IWW - ST. JOHNS CO.
CFDA #:	12.107

Agency Comments:

ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

The DEP's Division of Water Resource Management finds the Draft SEA to be consistent with its authorities under the FCMP. The document addresses recommendations in the St. Augustine Inlet Management Plan, and one nearshore placement event has already been permitted under Joint Coastal Permit Modification No. 0251706-006-JN. The DEP's Florida Coastal Office also offers the following specific comments: The proposed South Ponte Vedra placement areas (between R-84 and R-98) are within the Guana River Marsh Aquatic Preserve and the Guana Tolomato Matanzas NERR. This area is a State Sea Turtle Index beach with a monitoring dataset beginning in 1987; any artificial manipulation during sea turtle nesting season could compromise the integrity of this long-standing data. The waters of the aquatic preserve are also classified as an OFW. The Draft SEA uses data collected between 2001 and 2008. Since that time, the area has seen a significant increase in nesting. Staff suggests that more recent data be used, including this year's nests: a Leatherback nest documented near R-105 on May 17, 2015, and a Kemp's Ridley nest documented near R-102 on May 23, 2015. It is likely that the "nest per kilometer" ranking has changed as well. Although alterations to the beach could compromise the beach as an index beach, staff will defer to the FWC's recommendations, as they are the lead agency for protected species. The beaches within the Guana River Marsh Aquatic Preserve have not been previously nourished. Therefore, it is recommended that that sand placed on these beaches be carefully selected and monitored to ensure that the original grain size is preserved. Sediment samples used to determine the native beach grain size should be obtained from beaches within the aquatic preserve that have not been previously nourished....

FISH and WILDLIFE COMMISSION - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

The FWC notes that Section 4 of the draft SEA addresses environmental effects, proposed minimization measures, and environmental commitments. The USACE has determined that the nearshore placement "may affect but is not likely to adversely affect" sea turtles in the water, manatees, right whales, or the smalltooth sawfish, and that the north beach placement is "not likely to adversely affect" these species. FWC staff offers the following additional recommendations for consideration in the final SEA. Placement of sand in the nearshore along a marine turtle nesting beach from May 1 through October 31 can interfere with nesting or hatchling marine turtles. Vessels operating along the nesting beach at night can block access to or from the beach. Lights on the dredge and other vessels operating in proximity to the nesting beach could be visible for miles along the shoreline, causing disorientation of nesting and/or hatchling sea turtles. Minimization measures need to be proposed to ensure that nesting and hatchling marine turtles are protected if nearshore placement occurs at night during the nesting season. FWC staff may provide more specific recommendations once project specifications have been finalized, such as during the permit review process. The draft SEA states that the USACE would implement its migratory bird protection policy should dredged sand be placed on the beach during the April 1 through August 31 seabird and shorebird nesting season. It is stated that the policy requires monitoring and a buffer of at least 200 feet around nests. FWC's standard shorebird conditions recommend a buffer distance of 300 feet. Buffer zones and other avoidance measures can be used to reduce the potential for "take" of state-listed species, as defined in Chapter 68A-27, F.A.C., which would eliminate the need to obtain an Incidental Take Permit from the FWC. Staff is available to assist with determining avoidance and minimization measures or discuss permitting alternatives.

STATE - FLORIDA DEPARTMENT OF STATE

The DOS notes that a new cultural resource assessment survey will be conducted by the USACE of the South Ponte Vedra (SPV) Near Shore Placement Area. Staff looks forward to receiving a copy of this survey for review. Regarding the proposed maintenance dredging activities, the DOS' May 8, 2015 comments concerning the maintenance of buffers around known targets and magnetic anomalies are still applicable. DOS notes that these concerns are addressed in the Draft SEA (April 2015). If the above conditions are met, the DOS concurs with the USACE's determination that the proposed undertakings will have no adverse effect on historic properties.

ST. JOHNS RIVER WMD - ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

SJRWMD has no comments.

NE FLORIDA RPC - NORTHEAST FLORIDA REGIONAL PLANNING COUNCIL

The NEFRC and St. Johns County have no comments on the proposal.

Florida Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Jonathan P. Steverson
Interim Secretary

MEMORANDUM

TO: Lauren Milligan, Office of Intergovernmental Programs

FROM: Roxane Dow, Division of Water Resource Management

Rebecca Prado, Florida Coastal Office

Cheri Albin, Florida Park Service

SUBJECT: Department of the Army, Jacksonville District Corps of Engineers – Draft Supplemental Environmental Assessment (SEA), North Beach and Nearshore Placement, Maintenance Dredging St. Augustine Inlet and Adjacent Intracoastal Waterway – St. Johns County, Florida.
SAI # FL201505017280C

DATE: June 15, 2015

Staff of the Department's Division of Water Resource Management finds the Draft SEA to be consistent with its authorities under the Florida Coastal Management Program. The document addresses recommendations in the St. Augustine Inlet Management Plan (IMP), and one nearshore placement event has already been permitted under Joint Coastal Permit Modification No. 0251706-006-JN.

The Department's Florida Coastal Office also offers the following specific comments:

The proposed South Ponte Vedra placement areas (between range monuments R-84 and R-98) are within the Guana River Marsh Aquatic Preserve and the Guana Tolomato Matanzas National Estuarine Research Reserve. This area is a State Sea Turtle Index beach with a monitoring dataset beginning in 1987; any artificial manipulation during sea turtle nesting season could compromise the integrity of this long-standing data. The waters of the aquatic preserve are also classified as Outstanding Florida Waters (OFW).

The Draft SEA uses data collected between 2001 and 2008. Since that time, the area has seen a significant increase in nesting. Staff suggests that more recent data be used, including this year's nests: a Leatherback sea turtle nest documented near monument R-105 on May 17, 2015, and a Kemp's Ridley sea turtle nest documented near R-102 on May 23, 2015. It is

likely that the "nest per kilometer" ranking has changed as well. Although alterations to the beach could compromise the beach as an index beach, staff will defer to the Florida Fish and Wildlife Conservation Commission's recommendations, as they are the lead agency for protected species.

The beaches within the Guana River Marsh Aquatic Preserve have not been previously nourished. Therefore, it is recommended that that sand placed on these beaches be carefully selected and monitored to ensure that the original grain size is preserved. Sediment samples used to determine the native beach grain size should be obtained from beaches within the aquatic preserve that have not been previously nourished. This should not only help reduce turbidity to the OFW classified waters, but also lead to quicker stabilization of the beach profile, reduce erosion and serve to maximize the interval between future nourishments.

For further information and assistance, please contact Mr. Mike Shirley or Ms. Andrea Noel in the Florida Coastal Office's East Coast Region at (904) 823-4500.

The following comments are provided by the Department's Florida Park Service (FPS):

The FPS recognizes the St. Augustine IMP and will work with the Division of Water Resource Management to provide support and further the objectives of the plan, particularly optimizing the protection of beach habitat and beach front recreation at Anastasia State Park.

In recent years, FPS staff has observed increased erosion on the north end of Anastasia State Park following dredging projects north of and offshore the park. These alterations have led to the loss of significant beach front, and endangered beach mouse and shorebird nesting habitat in the northernmost strand of the park. The FPS, therefore, requests that sand transfer material be placed south of the inlet between R-125 and R-127 in an effort to replace loss of this significant habitat and recreational area on the park's north end. Placement of sand as noted above would further the objective to replicate the natural drift of sand that has been interrupted or altered, and to place sand on adjacent eroding beaches put forward in the IMP.

If you have any questions, please contact Ms. Cheri Albin in the FPS Bureau of Natural and Cultural Resources at (850) 245-3105.

Florida Fish and Wildlife Conservation Commission

Commissioners
Richard A. Corbett
Chairman
Tampa

Brian Yablonski
Vice Chairman
Tallahassee

Ronald M. Bergeron
Fort Lauderdale

Richard Hanas
Oviedo

Aliese P. "Liesa" Priddy
Immokalee

Bo Rivard
Panama City

Charles W. Roberts III
Tallahassee

Executive Staff
Nick Wiley
Executive Director

Eric Sutton
Assistant Executive Director

Jennifer Fitzwater
Chief of Staff

Office of the Executive Director
Nick Wiley
Executive Director

(850) 487-3796
(850) 921-5786 FAX

Managing fish and wildlife resources for their long-term well-being and the benefit of people.

620 South Meridian Street
Tallahassee, Florida
32399-1600
Voice: (850) 488-4676

Hearing/speech-impaired:
(800) 955-8771 (T)
(800) 955-8770 (V)

MyFWC.com

June 16, 2015

Lauren P. Milligan, Coordinator
Florida State Clearinghouse
Florida Department of Environmental Protection
3900 Commonwealth Blvd, M.S. 47
Tallahassee, FL 32399-3000
Lauren.Milligan@dep.state.fl.us

Re: SAI #FL201505017280C, Department of the Army, Jacksonville District Corps of Engineers, Draft Supplemental Environmental Assessment (SEA), Maintenance Dredging of St. Augustine Inlet with Beach and Nearshore Placement, St. Johns County

Dear Ms. Milligan:

Florida Fish and Wildlife Conservation Commission (FWC) staff has reviewed the above-referenced project, and provides the following comments and recommendations for your consideration in accordance with Chapter 379, Florida Statutes, and the Coastal Zone Management Act, Florida's Coastal Management Program.

Project Description

The U.S. Army Corps of Engineers (USACE) proposes to conduct periodic maintenance dredging of the St. Augustine Inlet, including Intracoastal Waterway (IWW) Cuts SJ-28 to SJ-30, a portion of the inlet flood shoal, and a portion of the inlet entrance channel along Porpoise Point. The proposed project includes placement of beach-compatible dredge spoil along the shorelines of: 1) Anastasia State Park and St. Augustine Beach from Florida Department of Environmental Protection (FDEP) monuments R-132 to R-152 located south of the inlet, 2) South Ponte Vedra from R-84 to R-98 located north of the inlet, and 3) Vilano Beach from R-109 to R-117 north of the inlet. Dredge spoil that is not beach-compatible is proposed to be placed in near-shore placement areas from FDEP monuments R-141 to R-146 south of the inlet or from R-84 to R-98 and R-109 to R-117 north of the inlet.

An Environmental Assessment was completed in 2011 for the proposed maintenance dredging with spoil disposal on the beach and nearshore areas south of the inlet with a Finding of No Significant Impact. In 2014 the FDEP issued the "Critically Eroded Beaches in Florida" report, which identified 11.5 miles of critically eroded shoreline in St. Johns County and a revision to the St. Augustine Inlet Management Plan. The plan recommended placement of dredged beach-compatible dredge spoil on designated critically eroded shorelines to the north or south of the inlet. The subject draft SEA is intended to only evaluate placement of dredge spoil north of the inlet. It is noted that the FDEP issued Joint Coastal Permit (JCP) Modification No. 0251706-006-JN on April 21, 2015, for nearshore placement of dredge spoil at Vilano Beach.

Potentially Affected Resources

As discussed in Section 3.3 of the draft SEA, the project areas may provide habitat for the following federally listed species:

- Green sea turtle (*Chelonia mydas,* Federally Endangered [FE])
- Loggerhead sea turtle (*Caretta caretta,* Federally Threated [FT])
- Leatherback sea turtle (*Dermochelys coriacea,* FE)
- Kemp's ridley sea turtle (*Lepidochelys kempii*, FE)
- Florida manatee (*Trichechus manatus latirostris,* FE)
- Smalltooth sawfish (*Pristis pectinate*, FE)
- Piping plover (*Charadrius melodus,* FT)
- Anastasia Island beach mouse (*Peromyscus polionotus phasma*, FE)
- North Atlantic right whale (*Eubalaena glacialis*, FE)

The draft SEA notes that the project area is located within critical habitat for the loggerhead sea turtle, designated by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (NMFS) in July 2014. It is also noted that the project site is located within NMFS-designated critical habitat for the North Atlantic right whale. Section 3.6 of the draft SEA notes that species common to northeast Florida may be found within the dredge spoil placement areas, including wading birds, shorebirds and other colonial nesting birds, gopher tortoises, and benthic organisms.

Comments and Recommendations

Section 4 of the draft SEA addresses environmental effects, proposed minimization measures, and environmental commitments. The USACE has determined that the nearshore placement "may affect but is not likely to adversely affect" sea turtles in the water, manatees, right whales, or the smalltooth sawfish, and that the north beach placement is "not likely to adversely affect" these species.

<u>Marine Turtles</u>

The draft SEA notes that the terms and conditions of the NMFS South Atlantic Division Regional Biological Opinions (SARBO) that are intended to minimize incidental take of marine turtles will be followed. The draft SEA also includes measures to minimize potential adverse impacts to marine turtles. FWC staff offers the following additional recommendations for consideration in preparing the final SEA. Placement of sand in the nearshore along a marine turtle nesting beach from May 1 through October 31 can interfere with nesting or hatchling marine turtles. Vessels operating along the nesting beach at night can block access to or from the beach. Lights on the dredge and other vessels operating in proximity to the nesting beach could be visible for miles along the shoreline, causing disorientation of nesting and/or hatchling sea turtles. Minimization measures need to be proposed to ensure that nesting and hatchling marine turtles are protected if nearshore placement occurs at night during the nesting season. FWC staff

may provide more specific recommendations once project specifications have been finalized, such as during the permit review process.

Seabirds and Shorebirds

The draft SEA states that the USACE would implement its migratory bird protection policy should dredged sand be placed on the beach during the April 1 through August 31 seabird and shorebird nesting season. It is stated that the policy requires monitoring and a buffer of at least 200 feet around nests. The FWC standard shorebird conditions recommends a buffer distance of 300 feet. Buffer zones and other avoidance measures can be used to reduce the potential for "take" of state-listed species, as defined in Chapter 68A-27, Florida Administrative Code (Rules Relating to Endangered or Threatened Species), which would eliminate the need to obtain an Incidental Take Permit from the FWC. FWC staff is available to assist with determining avoidance and minimization measures or to discuss permitting alternatives.

We appreciate the opportunity to review the draft SEA and FWC staff is available to provide technical assistance as needed in preparation of the final SEA to ensure that potential impacts to fish and wildlife resources are minimized. We find the information submitted in the draft SEA consistent with FWC's authorities under Chapter 379, F.S. If you need any further assistance, please do not hesitate to contact Jane Chabre either by phone at (850) 410-5367 or by email at FWCConservationPlanningServices@MyFWC.com. If you have specific technical questions regarding the content of this letter, please contact Laura DiGruttolo by phone at (352) 732-1225 or by email at Laura.Digruttolo@MyFWC.com.

Sincerely,

Jennifer D. Goff
Land Use Planning Administrator
Office of Conservation Planning Services

jdg/ld
ENV 1-3-2
St Augustine Inlet and IWW North Placement Draft EA_21077_061615

cc: Paul Demarco, USACE, paul.m.demarco@usace.army.mil

FLORIDA DEPARTMENT of STATE

RICK SCOTT
Governor

KEN DETZNER
Secretary of State

Mr. Eric P. Summa
Jacksonville USACE, Planning & Policy Division
Environmental Branch
701 San Marco Boulevard
Jacksonville, Florida 32207-8175

June 2, 2015

Re: DHR Project: 2015-2095/ Received by DHR: May 4, 2015
Sponsor: Florida Inland Navigation District, St. Augustine Port, Waterway and Beach District
Project: U.S. Army Corp of Engineers, Maintenance Dredging for Proposed Cuts 27A to 30A of the IWW and the St. Augustine Inlet Channel and Settling Basins
Disposal Alternatives for Beach Placement above Mean High Water: St. Augustine Beach or Anastasia State Park (Between DEP Monuments R-131-A to R-148)
Nearshore Placement Alternatives below Mean Lower Low Water between DEP Monument R-141 to R-146
Additional Placement Areas for Critically Eroding Areas in South Ponte Vedra (SPV) and Vilano Beach (VB)
St. Johns County

Dear Mr. Summa:

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

We note that a new cultural resource assessment survey will be conducted by the Corps of the South Ponte Vedra (SPV) Near Shore Placement Area. We look forward to receiving a copy of this survey for review. Regarding the above referenced maintenance dredging activities: our comment of May 8, 2015 (DHR Project File # 2015-1661 copy attached) still stand. We note that these concerns are addressed in the Draft Environmental Assessment (April 2015).

If the above conditions are met, we concur with the Corps' determination that the proposed undertakings will have no adverse effect on historic properties.

For any questions concerning our comments, please contact Robin Jackson, Historic Preservationist, Compliance and Review, by electronic mail at robin.jackson@dos.myflorida.com, or at 850.245.6333, or 800.847.7278.

Sincerely

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

FLORIDA DEPARTMENT of STATE

RICK SCOTT
Governor

KEN DETZNER
Secretary of State

Mr. Eric P. Summa
Jacksonville USACE, Permits Section
701 San Marco Boulevard. RM 372
Jacksonville, Florida 32207

May 08, 2015

Re: DHR No.: 2015-1661/ Received by DHR: April 09, 2015
Applicant: U.S. Army Corps of Engineers
Project: St. Augustine Maintenance Dredge – Cuts SJ 28, 29, 29A, 30 and 30A

Dear Mr. Summa:

Our office received and reviewed the project in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended and the *National Environmental Policy Act of 1969*. The State Historic Preservation Officer is to advise and assist federal agencies when identifying historic properties (archaeological, architectural, and historical resources) listed, or eligible for listing, in the National Register of Historic Places, assessing the project's effects, and considering alternatives to avoid or minimize adverse effects.

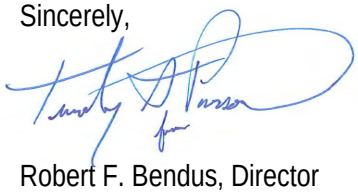
- Maintain a 200 foot buffer from these four known targets (SA-T-5, SA-OS-2, SA-OS-3 & SA-OS-4)
- We would like to remind the applicant of our previous recommendation regarding dredging of the St. Augustine Inlet Channel. There are 20 magnetic anomalies (Cluster SR 1-6) within the South Reach Cuts SJ-29, 29A and 30. Our recommendation for a 100 foot buffer to be maintained still stands.
- Maintain a 150 foot buffer around site 8SJ4889, Target 1 (Dixie Crystal Wreck)
- We recommend that the applicant make contingency plans in the case of fortuitous finds or unexpected discoveries during ground disturbing activities within the project area:

  If prehistoric or historic artifacts are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the immediate vicinity of the discovery. The applicant shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)-245-6333. Project activities shall not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

- Any anomalies that cannot be avoided by project activities will need to be subjected to diver investigation to determine if they represent significant cultural resources that may be impacted by the proposed undertaking.

For any questions concerning our comments, please contact Mary Berman, Historic Preservationist, Compliance and Review at 850.245.6333, or by electronic mail at Mary.Berman@dos.myflorida.com.

Sincerely,



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

Northeast Florida Regional Council

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JUN 09 2015
DEP Office of Intergovt'l Programs

Bringing Communities Together

Baker • Clay • Duval • Flagler • Nassau • Putnam • St. Johns

June 5, 2015

Lauren P. Milligan
Florida State Clearinghouse
Florida Department of Environmental Protection
3900 Commonwealth Boulevard, MS 47
Tallahassee, Florida 32399-3000

SAI # FL201505017280C
NEFRC # FSC-15-R004

Project Description: Department of the Army, Jacksonville District Corps of Engineers – Draft Supplemental Environmental Assessment, North Beach and Nearshore Placement, Maintenance Dredging St. Augustine Inlet and Adjacent Intracoastal Waterway – St. Johns County, Florida .

Attn: Florida State Clearinghouse

Pursuant to the provisions of Presidential Executive Order 12372, Governor's Executive Order 95-359 and Chapter 29E-6 Florida Administrative Code, the staff of the Northeast Florida Regional Council (NEFRC) has reviewed the above referenced project for dredging and nearshore replacement in St. Johns County. After review, staff at the Northeast Florida Regional Council has no comments.

All the best,

Eric B. Anderson

Eric B. Anderson, AICP
Senior Regional Planner
Intergovernmental Coordination & Review
Northeast Florida Regional Council
(904) 279-0885 x178
eanderson@nefrc.org

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
http://sero.nmfs.noaa.gov

June 29, 2015 F/SER47:BH/pw

(Sent via Electronic Mail)

Colonel Alan M. Dodd, Commander
Jacksonville District Corps of Engineers
PO Box 4970
Jacksonville, Florida 32232-0019

Attention: Paul Demarco

Dear Colonel Dodd:

NOAA's National Marine Fisheries Service (NMFS) reviewed the Jacksonville District's public notice dated May 1, 2015, and Draft *Supplemental Environmental Assessment, Maintenance Dredging St. Augustine Inlet and Adjacent Intracoastal Waterway, St. Johns County, Florida* (SEA), dated April 2015. The Jacksonville District proposes to maintenance dredge approximately 200,000 cubic yards of material from Cuts 27A to 30A of the Intracoastal Waterway (IWW) and the St. Augustine Inlet entrance channel and settling basins. The IWW would be dredged to -12 feet mean lower low water (MLLW) plus 2 feet of allowable over dredge, and the inlet entrance channel and settling basins would be dredged to -16 feet MLLW plus 2 feet of allowable over dredge. Dredge material disposal alternatives include:

- Beach placement above mean high water on St. Augustine Beach or Anastasia State Park between Florida Department of Environmental Protection (FDEP) monuments R-131A to R148.
- Nearshore (subtidal) placement between FDEP monuments R-141 to R-146.
- Placement in FDEP-designated critically eroding areas in South Ponte Vedra and Vilano Beach between FDEP Monuments R-84 to R-98 and between R109 to R-117, respectively. Adding this disposal area is the primary reason for the SEA.

The initial determination by the Jacksonville District is the proposed maintenance dredging of sand from St. Augustine Inlet, which the South Atlantic Fishery Management Council designates a Habitat Area of particular Concern (HAPC) and the IWW and disposal onto the beach and into nearshore waters SAFMC designates essential fish habitat (EFH), would not have a substantial adverse impact on EFH or federally managed fishery species. As the nation's federal trustee for the conservation and management of marine, estuarine, and anadromous fishery resources, NMFS provides the following comments and recommendations pursuant to authorities of the Fish and Wildlife Coordination Act and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

Consultation History
The Jacksonville District initiated EFH consultation by letter dated November 18, 2009, and provided a the Draft *Environmental Assessment, St. Augustine Inlet and Atlantic Intracoastal*

Waterway, Maintenance Dredging with Beach Placement, St. Johns County, Florida (EA), dated October 2009. By letter dated March 2, 2010, the NMFS provided three EFH conservation recommendations for the work, and the Jacksonville District responded to the EFH conservations recommendations by letter on May 10, 2010:

- The NMFS recommended Best Management Practices, such as restricting the time of year the dredging is done, be followed to reduce impacts to EFH and vulnerable life stages of federally managed fishery species. The Jacksonville District responded indicating it would follow to the extent practicable a schedule of seasonal sediment placement (August to March) to reduce these impacts.
- The NMFS requested the Final EA provide additional information supporting the District's contention that impacts to benthic communities at the nearshore disposal area would be minimal or, better, include a monitoring program to evaluate the impacts from nearshore disposal. The Jacksonville District provided additional citations of scientific reports concluding impacts to nearshore benthic communities may be minimal.
- The NMFS requested the Final EA provide additional information supporting the District's contention that benthic communities in the beach disposal areas would recover between dredging events, or better, include a monitoring program to evaluate the impacts from frequent disposal on the bench communities. The Jacksonville District provided additional citations of scientific reports concluding impacts to the beach communities may be minimal despite the frequent disposal events.

Due to staffing limitations, the NMFS did not further pursue the recommended monitoring programs, and the Jacksonville District released the Final EA and Finding of No Significant Impact (FONSI) on January 19, 2011.

Essential Fish Habitat in the Project Area

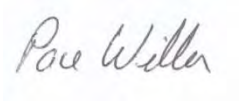
As is normal for an SEA, the discussion of impacts to EFH rely heavily on the discussion in the Final EA and focus on the areas not covered previously, i.e., the new disposal areas South Ponte Vedra Beach and Vilano Beach (Draft SEA Sections 3.5 and 4.3). Hardbottom habitat is not present near the new disposal area and the predominant EFH present is sandy bottom. Draft SEA Section 3.5 lists hard clams and menhaden as federally managed fishery species. While these species are important components of marine food webs in the project area, they are not federally managed. Additionally, this section identifies flounder (*Paralichthys* sp.) as a federally managed fishery species. Summer flounder (*Paralichthys dentatus*) is a federally managed species; however, it is not abundant in the area and could be removed from the EFH section of the Final SEA. Draft SEA Sections 4.3.2 and 4.3.3 affirm the Jacksonville District's commitment made in the Final EA to minimize impacts to vulnerable life stages of federally managed fishery species by restricting dredging to the fall and winter as funding and scheduling allow.

Recommendations

The NMFS affirms its earlier recommendations for monitoring programs to guide appropriate balancing of the timing and frequency of dredging needed for safe navigation with the time periods needed for recovery of foraging areas used by fishery species. In the absence of such monitoring to guide development of best management practices for this inlet, the proposed environmental window is acceptable.

Thank you for the opportunity to provide comments. Please direct related questions or comments to the attention of Brandon Howard at 400 N Congress Avenue, Suite 110, West Palm Beach, Florida 33401. He may be reached by telephone at 561-249-1652 or by e-mail at Brandon.Howard@noaa.gov.

Sincerely,



/ for

Virginia M. Fay
Assistant Regional Administrator
Habitat Conservation Division

cc: COE, Paul.M.Demarco@usace.army.mil
FWS, Ashleigh_Blackford@fws.gov
EPA, Eric.H.Hughes@usace.army.mil
SAFMC, Roger.Pugliese@safmc.net
F/SER4, David.Dale@noaa.gov, Brandon.Howard@noaa.gov