

## MEMORANDUM FOR RECORD

**SUBJECT:** Department of the Army Environmental Assessment and Statement of Finding for Permit Application SAJ-1995-03779(SP-LCK)

This document constitutes the Environmental Assessment, 404(b)(1) Guidelines Evaluation, Public Interest Review, and Statement of Findings for the following:

**1.0** Application as described in public notice / coordination letter dated: The project was originally Public Noticed on 25 October 2013. A supplemental Public Notice was issued on 3 February 2014 due changes in the proposed project regarding increase fill volumes associated with the proposed work.

**1.1** Applicant:

Town of Palm Beach  
Attn: Peter B. Elwell  
360 South County Road  
Palm Beach, FL 33480

**1.2** Location and Affected Waterway:

The project would affect waters of the United States associated with the discharge of fill material within the Atlantic Ocean. The project site is located along approximately 2.75 miles of shoreline between Florida Department of Environmental Protection (FDEP) monuments R-89 and R-102, and in the Atlantic Ocean. The current project is located entirely within the Town of Palm Beach with the northern limit located three properties north of Casa Bendita and the southern limit at Banyan Road (Sections 20, 23 and 26, Township 43 South, Range 43 East), in Palm Beach County, Florida.

**1.2.1** Approximate Central Coordinates:

### Fill Locations

	Latitude	Longitude
North	26.73105°	-80.03497°
South	26.69049°	-80.03377°

### Borrow Site:

	Latitude	Longitude		Latitude	Longitude
Point 1	26.8023°	-80.0246°	Point 12	26.7895°	-80.0241°
Point 2	26.8023°	-80.0233°	Point 13	26.7907°	-80.0242°
Point 3	26.8023°	-80.0220°	Point 14	26.7917°	-80.0242°
Point 4	26.7991°	-80.0203°	Point 15	26.7939°	-80.0242°
Point 5	26.7981°	-80.0209°	Point 16	26.7948°	-80.0242°
Point 6	26.7874°	-80.0210°	Point 17	26.7963°	-80.0234°
Point 7	26.7874°	-80.0222°	Point 18	26.7966°	-80.0232°

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Point 8	26.7874°	-80.0234°	Point 19	26.7974°	-80.0233°
Point 9	26.7874°	-80.0236°	Point 20	26.7997°	-80.0243°
Point 10	26.7879°	-80.0241°	Point 21	26.8003°	-80.0243°
Point 11	26.7885°	-80.0241°			

1.3 Existing conditions: The project area consists of an existing beach which has been heavily armored with both seawalls and 11 groin structures (0.49 acres). The project area has been further delineated into three separate sub-regions for the purposes of project design:

North Mid-Town: The northern segment of the project area was added to the project in 2003 and includes the beaches north of the breakers complex.

Breakers Complex: The Breakers area consists of a seawall and groin field at the seaward extent of the headland. The remains of a concrete pier structure are present in the nearshore (Breakers Rockpile).

South Mid-Town: The south Mid-Town segment extends from the Breakers Complex to the south. This segment comprises the remainder of the beach and includes the main public beach area.

Natural nearshore reefs are present immediately offshore of the proposed fill placement area. Sub-tidal areas consist of ephemeral stretches of sand (softbottom) and hard, calcium carbonate substrate (hardbottom). Extensive hardbottom areas are located 500 feet to 2,000 feet offshore.

1.3.1 Project History (*if applicable*): A Department of the Army permit was issued for the project on August 29, 1995. The permit authorized the placement of sand on the beach utilizing a hydraulic pipeline between Reaches 3 and 4 (FDEP monuments R- 95 to R-100)). In addition, 11 groins were constructed at an average spacing of 325 feet. Existing nearshore reef structures (failed shoreline protection methodology) located immediately offshore were used to construct the bulk of the 11 groins. Approximately 880,000 cubic yards of material from an offshore borrow area was placed on the beach in December 1995. In February 2003, the beach was re-nourished with approximately 1.23 million cubic yards of material from two offshore borrow areas located south of the Lake Worth Inlet. Material was placed from R-90.4 to R-101.4. In January 2006 and February 2006 the beach was re-nourished placing approximately 900,000 cubic yards of material along the same stretch of shoreline. In December 2010 approximately 52,000 cubic yards of beach material was placed between R-95 and R-100. The FDEP issued a modification to the applicant on April 26, 2013 authorizing mitigation to compensate for 24.63 acres unanticipated temporary impacts to hardbottom adjacent to the project area from the 2003 and 2006 Mid-Town nourishment projects.

The Corps authorized an intent to issue letter dated 1 April 2014 for a onetime interim beach placement that authorized the placement of approximately 51,000 cubic yards of compatible beach quality sand between Florida Department of Environmental Protection (FDEP) monuments R-90.5 and R-93 within the previously authorized fill template in order to restore this segment of beach that has recently eroded. Beach compatible sand will be supplied from an upland source and will be transported to the site by dump truck. Access to the beach would be provided via the existing town-owned beach access at Dunbar Road. Sand will be offloaded from the transport trucks into a temporary sand stockpile (400 square foot area) located in the vicinity of Dunbar Road, with an elevation of approximately 8 feet relative to existing grade. Sand will be transferred from the stockpile on a continual basis to off-road trucks with a backhoe for transport and placement within the project template. Final grading of material to the lines and grades of the template will be completed utilizing standard mechanized equipment. All sand placements will be completed using upland equipment and no water dependent equipment (barges, etc.) will be utilized. All work will be conducted during daylight hours and no project lighting will be required. Equipment will be stored in the vicinity of the beach access at Dunbar Road within the project template. Limited temporary fencing will be required to delineate a safety/security zone in the vicinity of the active work area. Project completion is expected to require approximately 45 days, however the interim work never commenced.

1.4 Work Proposed: The applicant proposes to place beach quality sand within the footprint of previously authorized beach nourishment by conducting the following activities:

(1) Placement of 875,586 cubic yards of compatible beach quality sand between FDEP monuments 89-102. The beach template has been slightly expanded to the North from R-89 to 90.5 and to the South from R101.4 to 102. A 1V:10H beach construction slope is being maintained seaward of the berm crest. The seaward limits of fill are maintained within the previously permitted project limits with constructed berm width average of 143 feet.

(2) The project requires dredging 1,035,500 cubic yards of beach quality sand from a 250.5 acre offshore borrow area between R-65 and R-70. Of the total, approximately 159,938 cubic yards of excess dredged material is proposed to be used for beach restoration at Phipps Ocean Park (Reach 7) and beach restoration at Reach 8. The Phipps segment is currently being reviewed under Corps permit application number SAJ-2000-00380 and requires approximately 112,554 cy of sand and Reach 8 will require the use of 47,384 cy of the sand. The proposed work in Reach 8 would occur above the mean high water line and would not be regulated by the Corps. Mechanized machinery and trucks will be staged in the dune area at Midtown to transport the sand to the other locations on an ongoing basis from the Mid-Town stockpile area during project construction. The sediment within the borrow area typically has a carbonate fraction of less than 0.5% and fines/silt of less than 1%. Mean grain sizes for

composited core samples in the borrow area range from 0.27 mm to 0.29 mm which exceed the minimum design grain size of 0.25 mm. The dredged material will be transported and discharged (pump) to the site via hopper dredge from a pre-determined offshore connection point. As the water/sand slurry is pumped onshore, mechanized construction equipment will be used to construct containment dikes and grade the material to the proposed design fill profile. Construction will be performed outside of peak turtle season (May 1 to October 31) to reduce potential for nest burial or excavation.

(3) Installation of one 256-square foot groin comprised of limestone boulders at R-99.3, with an elevation of +5 ft NAVD, crest width of 12-feet, and slope of 1:2. The dredged material will be transported and discharged (pump) to the site via hopper dredge from a pre-determined offshore connection point. As the water/sand slurry is pumped onshore, heavy construction equipment will be used to construct containment dikes and grade the material to the proposed design fill profile. Construction will be performed outside of peak turtle season (May 1 to October 31) to reduce potential for nest burial or excavation.

- 1.5 Avoidance and minimization statement from applicant: The project substantially lies within the design template of the previous re-nourishment projects. Fill template densities have been calculated to avoid direct and secondary impacts to nearshore hardbottom. Initial evaluations of the proposed modified project design suggested concerns regarding hardbottom impacts and reductions in the placed fill volume were incorporated into the design template and are discussed below on a segment by segment basis. A modified equilibrium analysis was adopted over the majority of the project area to determine a more accurate equilibrium profile volume distribution for the project template and provides a more conservative estimate of the seaward transition of the estimate toe of fill. The proposed design template represents a reduction in volume from the previous 2003 project template. This is equivalent to an average overall project density reduction of 9 cubic yards per linear foot.

Reduce volume for the North segment was partially offset by an extension of the project an additional 1,400 feet to the north which adds additional volume up drift of the project area. The taper has been based on an equilibrium toe landward of the nearshore hardbottom. A minor reduction in the southern segment taper was adopted to better align the transition into the structures in the vicinity of the Breakers (see Breakers discussion below). The net result of these design iterations is a project template that is significantly reduced from the previous (2003) project design. These reductions were primarily driven by hardbottom concerns, as the more conservative estimate of profile equilibration suggested a reduction in overall profile density was required to reduce the potential for hardbottom impacts. The adopted design results in volume density reduction of 14.1 cy/lf in comparison to the 2003 project template within the north Mid-Town project segment.

The modified design includes a minimum placement landward of the section of the beach in the area of the Breaker's rock pile. The fill volume is limited to what can be held on the upper beach and no fill placement is proposed seaward of these structures. The modified design includes an extended tapering of both the north and south sections of the fill template resulting in a more gradual transition between the project design sections. The tapers have been extended slightly to transition into the rehabilitated groin structures to further stabilize the taper transition. The result is a reduction in volume placement within the nearshore vicinity of the Breaker's rock pile. Sand that is placed within this gap is landward of the existing rehabilitated groin structures which have an increased capacity to retain this placed sand on the upper beach. Overall the modified design in this area results in a volume density reduction within this segment of approximately 28.4 cy/lf.

The modified project design for the southern segment includes moderate reductions in the volume density in the northern portion of the segment. The 2003 design cross-section for the southern portion of the project has been retained as the current analysis suggests that this design density provides an acceptable balance between beach volume need and hardbottom avoidance. An extension of the project taper has been adopted for the southern project boundary as this increase expands the transition of the project and should improve project performance. On average, the modified project template results in a minor reduction in placed density of 1.7cy/lf within the south Mid-Town segment.

The proposed groin structure will stabilize the beach and dune system in the vicinity of Gulfstream Road and provide improved protection to aging critical infrastructure, including the existing seawall and State Road A1A, a designated hurricane evacuation route. Additionally, the groin structure location has the added benefit of providing protection to the public-access stairs immediately landward of the structure and will also result in a stabilized beach platform adjacent to this public access point.

- 1.6 Compensatory mitigation proposal from applicant: No direct or secondary impacts to nearshore hardbottom or coral reefs are proposed or anticipated; therefore no compensatory mitigation is required. Mitigation will be required if quantifiable impacts to the resource are observed from within the post-project monitoring.
- 1.7 National Environmental Policy Act (NEPA) purpose and need:
  - 1.7.1 Project purpose as described by applicant: The overall project purpose is for shoreline stabilization for the Town of Palm Beach, Palm Beach Florida, Reaches 3 and 4.
  - 1.7.2 Basic project purpose: The basic project purpose is for shoreline stabilization.
  - 1.7.3 Water-dependency determination: The proposed project is not water dependent.

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1.7.4 Overall project purpose: The overall project purpose is for shoreline stabilization for the Town of Palm Beach, Palm Beach, Florida, Reaches 3 and 4.

**2.0 Authority:** Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 403) and Section 404 of the Clean Water Act of 1972 (33 U.S.C. § 1344)

2.1 Jurisdictional Determination Information: The U.S. Army Corps of Engineers (Corps) issued a preliminary jurisdictional determination the same date that the Corps authorized the project.

**3.0 Scope of Analysis** – *The Scope of Analysis listed in this section represents the scope of the final project description.*

3.1. National Environmental Policy Act (NEPA) – *Scope determination for NEPA review is found at 33 CFR 325, Appendix B, Paragraph 7.b. The following factors are considered in determining whether sufficient federal “control and responsibility” exists:*

3.1.1 Factors:

a. Whether or not the regulated activity comprises "merely a link" in a corridor type project – Rationale: The proposed project is a single and complete project and is not a corridor type of project. The project is not merely a link in a corridor type project since the extent of waters extends throughout the project area and regulated activities are proposed along the entire length of the project area.

b. Whether there are aspects of the upland facility in the immediate vicinity of the regulated activity that affect the location and configuration of the regulated activity – Rationale: A total project area of 88.7 acres of beach at Midtown will be impacted. 29 acres (33% of the total area) will occur on the beach above the HTL. The remaining 59.7 acres (67% of the total area) occurs below the HTL within jurisdictional waters. Of the 59.7 of in-water acres, 100% will be filled/impacted. In-water fill impacts are evenly distributed throughout the project area. A total project area of 14.3 for the Phipps Ocean Park project will be impacted. 8.6 acres (60% of the total area) occurs on the beach above the HTL. The remaining 5.7 acres (40% of the total area) occurs below the HTL within jurisdictional waters. Of the 5.7 acres, 100% will be filled/impacted. A total project area of 7.2 acres will occur on the beach within the dunes above the HTL at Reach 8. A total of 121.92 acres of the Borrow Area will be affected by the proposed action. The water and fill impacts are evenly distributed throughout the project area, and therefore the Corps has sufficient control over the entire site including the uplands.

c. The extent to which the entire project will be within Corps jurisdiction – Rationale: The entire project area includes fill placement located at or below the high tide line (HTL), and extending seaward below the mean high water line (MHW) to the equilibrium toe of fill (ETOF). The Corps has extended its jurisdiction to also include the

upland dune area landward of the HTL within the construction footprint as depicted on the construction drawings where staging of excess dredged material will be located and also the dunes at Reach 8 because the regulated dredged material is proposed to be located in these areas.

d. The extent of cumulative Federal control and responsibility – Rationale: The extent of federal control and responsibility extends to the United States Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) Protected Resources Division (PRD), since they are responsible for activities affecting species protected under the Endangered Species Act (ESA). NMFS Habitat Conservation Division (HCD) is responsible for activities affecting essential fish habitat (EFH), Marine Mammal Protection Act, Migratory Treaty Act, and the US Coast Guard for navigation/Hopper dredge vessel operation.

- 3.1.2 Determination of scope – Based on an examination of NEPA (33 CFR Part 325, Appendix B) and applicable program guidance (e.g. Council on Environmental Quality’s (CEQ) *Considering Cumulative Effects Under National Environmental Policy Act and the Standard Operating Procedures for the U.S. Army Corps of Engineers Regulatory Program, July 2009*), the Corps has determined that the appropriate scope for this project is: over the entire property.

Explanation: The fill placement occurs mostly within jurisdictional waters; however, a portion of the project is located above the HTL outside of jurisdictional waters but is included in the scope due to proposed work in this area being connected to the location of the regulated dredged material as well as the presence of nesting sea turtle habitat.

- 3.2 National Historic Preservation Act (NHPA) "Permit Area" – *The NHPA scope is defined as “permit area”. The permit area for an undertaking is defined in 33 CFR 325, Appendix C. The following three (3) tests must all be satisfied for an activity undertaken outside of waters of the United States to be included within the “permit area”.*

- 3.2.1 Tests (*check all that apply*):

a. The activity outside of waters of the United States would not occur but for the authorization of the work or structures within waters of the United States.

Explanation: The entire project area includes fill placement located at or below the high tide line (HTL), and extending seaward below the mean high water line (MHW) to the equilibrium toe of fill (ETOF) for both the Midtown and Phipps beach projects. The Corps has extended its jurisdictional area to also include the adjacent beach profile at the Midtown beach above the HTL where staging of excess dredged material will be located and also the placement of dredged material at the Phipps Reach 7 and 8 dunes. The upland trucking route of the dredged material to the Phipps Reach 7 and the dunes at Reach 8 are also included because of the transportation of the regulated dredged material would not occur but for these projects.

- b. The activity outside waters of the United States is integrally related to the proposed work or structures within waters of the United States (or, conversely, the proposed work or structures within waters of the United States must be essential to the completeness of the overall project or program).

Explanation: Areas outside waters of the United States are included because commencement of work associated with the stockpiling of material within the upland beach profile at the Midtown beach above the HTL and the beach nourishment below and above the HTL at Phipps Reach 7 and the dunes at Reach 8 would not occur but for the use of the regulated dredged material.

- c. The activity outside waters of the United States is directly associated (first order impact) with the proposed work or structures within waters of the United States.

Explanation: Areas outside waters of the United States are directly associated with the final placement of the regulated dredged material.

3.2.2 Scope Determination: Activities outside waters of the United States are included because all of the above tests apply to this project.

3.2.3 NHPA Scope Summary and Description: The entire project area includes fill placement located at or below the high tide line (HTL), and extending seaward below the mean high water line (MHW) to the equilibrium toe of fill (ETOF) for both the Midtown and Phipps beach projects. The Corps has extended its jurisdictional area to also include the adjacent beach profile at the Midtown beach above the HTL where staging of excess dredged material will be located and also the placement of dredged material at the Phipps Reach 7 and 8 dunes. The upland trucking route of the dredged material to the Phipps Reach 7 and the dunes at Reach 8 are also included because of the transportation of the regulated dredged material would not occur but for these projects.

3.3 Endangered Species Act (ESA) "Action Area" – *The ESA scope is defined as "action area". The action area means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action; and, is defined in for an undertaking is defined in 50 CFR 402.02, Definitions.*

3.3.1 Determined Scope: The entire project area includes fill placement located at or below the high tide line (HTL), and extending seaward below the mean high water line (MHW) to the equilibrium toe of fill (ETOF) for both the Midtown and Phipps beach projects. The Corps has extended its jurisdictional area to also include the adjacent beach profile at the Midtown beach above the HTL where staging of excess dredged material will be located and also the placement of dredged material at the Phipps Reach 7 and 8 dunes. The upland trucking route of the dredged material to the Phipps Reach 7 and the dunes at Reach 8 are also included because of the transportation of the regulated dredged material would not occur but for these projects.

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**4.0 Public Involvement** (*Public Notice required by 33 CFR 325.3*):

4.1 Public Notice Information:

Application Received: 30 July 2013

Application Complete: 13 September 2013

Date Public Notice Issued: 25 October 2013

Date Supplemental Public Notice Issued: 3 February 2014

End Date for Public Notice Comment Period: 24 February 2014

Additional Information: The project was originally Public Noticed on 25 October 2013. A supplemental Public Notice was issued on 3 February 2014 due changes in the proposed project regarding increase fill volumes and the stockpile of material for beach restoration at Phipps Ocean Park (Reach 7) and dune restoration at Reach 8.

4.2 Public Meeting(s): No

Discussion/Explanation: N/A

4.3 Public Notice Comments:

a. Comments Received From: State Historic Preservation Officer (SHPO)

Date Received: 26 November 2013

Comment/Issue: The SHPO requested that a professional perform a cultural resource assessment survey on the proposed addition to the project area, including judgmental subsurface testing, in order to assess the probability of the presence of historic properties. Refer to Section 10.3 for resolution to coordination with the SHPO.

b. Comments Received From: National Marine Fisheries Services (NMFS) Habitat Conservation Division (HCD)

Date Received: 3 March 2014

Comment/Issue: NMFS HCD provided three essential fish habitat conservation recommendations further discussed in Section 10.2.

c. Comments Received From: U.S. Fish and Wildlife Service (USFWS)

Date Received: 28 March 2014

Comment/Issue: By email, the FWS requested additional information discussed further in 10.1.

d. Comments Received From: National Marine Fisheries Services (NMFS) Protected Resource Division (PRD)

Date Received: 9 May 2014

Comment/Issue: By email, the NMFS requested additional information discussed further in Section 10.1.

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- 4.4 Corps acknowledgment of comments: By letter dated 9 May 2014, the Corps provided the applicant with a summary of the comments received from FWS and NMFS HCD.
- 4.5 Issues Identified by the Corps: The application referenced two biological monitoring plans, one which was submitted with the application and one that is described in the Beach Management Agreement (BMA). The Corps had concerns regarding the amount of proposed dredged material and avoidance and minimization to reduce the likelihood of direct and indirect impacts to the aquatic environment.
- 4.6 Comments/Issues Forwarded to Applicant: Yes  
Date Comments Forwarded: 6 September 2013
- 4.7 Applicant provided response to comments: Yes  
Summary of response: The Corps met with the applicant to discuss on 6 September 2013, to discuss their desire to have the proposed projects biological monitoring plan match the plan referenced in the BMA. The final monitoring plan submitted on 18 September 2014 is more extensive than the plan referenced in the BMA. The Corps requested that the applicant submit an avoidance and minimization statement by email dated 6 September 2014. The applicant provided a design summary report and avoidance and minimization statement by email dated 13 September 2013. By letter dated 14 November 2013, and a follow up meeting on 5 December 2013, the Corps informed the applicant that additional information would be needed regarding their proposal for the over dredging of the borrow area for stockpiled material to be placed for the beach re-nourishment at Phipps Ocean Park/Reach 7 and the dunes at Reach 8 (SAJ-2000-00380). The Corps requested that the applicant submit drawings indicating the location of the stock pile material and revised dredge volumes that are consistent with the proposed fill volumes for the work proposed in the pending application for SAJ-2000-00380. The Corps also requested information necessary to evaluate potential cumulative effects of the stockpiled material. The applicant submitted the requested information by letter dated 18 December 2013.
- 4.8 Corps Purview – The following comments are not discussed further in this document as they are outside the Corps purview: N/A
- 4.9 Additional information (*optional*): N/A
- 4.10 Public Hearing Request – *(33 CFR 327) Requests for a public hearing shall be granted unless the district engineer determines that the issues raised within the request(s) for a public hearing are insubstantial or there is otherwise no valid interest to be served by the hearing. The district engineer will make such a determination in writing, and communicate his reasons therefor to all requesting parties.*

Public Hearing: No public hearing was requested or held for this project.

Discussion/Explanation (*if necessary*): N/A

**5.0 Alternatives Analysis** – *(40 CFR 230.10, HQ Regulatory SOP July 2009, RGL 93-2, RGL 84-09)* If the project is sited in a special aquatic site (such as a wetland), and if the project does not need to be in or near the special aquatic site to fulfill its basic purpose (i.e., the project is not "water-dependent"), it is presumed that there are practicable alternatives that do not involve special aquatic sites. To overcome this presumption, the applicant must clearly demonstrate to the Corps that practicable alternatives are not available. If the presumption is not overcome, the Corps must deny the permit application. If the project is not sited in a special aquatic site and/or is water-dependent, the applicant is not required to overcome the presumption that upland alternatives are available. However, the Corps must still address whether there are any upland alternatives (or alternatives with less impact), and if any are identified, the applicant must clearly demonstrate that they are not feasible. If such a demonstration cannot be made, the Corps must deny the permit application. The Corps performed an evaluation of alternatives, as described below:

5.1 Overall Project Purpose (as independently defined by Corps): The overall project purpose is the same as the Corps determined overall project purpose (reference Section 1.7.4).

5.2 Screening Criteria:

Factor	Measure and/or constraint
Special Aquatic Sites (hardbottom)	Acres of direct impact
Quality of Borrow Material	Sand for the proposed project will be acceptable grain size.
Cost and logistics	Accessibility to project area for sand placement
Shoreline stabilization	Must reasonably stabilize the shoreline

5.3 No Action Alternative *(No action is defined as permit denial or alternative without impacts to waters of the United States)*: A project located offsite would not fulfill the project purpose of shoreline stabilization for the defined area. There is a possibility for continue shoreline erosion and although beaches naturally excrete and accumulate sediment there is a net increase in loss that is expected to occur from erosion over time.

5.4 Off-site locations and configurations: N/A

5.5 On-site configurations:

a. Plan A – Applicants preferred alternative as described in Section 1.4. This fill template is within a previously authorized fill template where hardbottom resources within the ETOF have been previously mitigated for. No hardbottom is located within the fill template or ETOF. The use of an offshore borrow site is readily available to use

and located offshore of the project area. However, sediments in the offshore borrow sites are typically more fine than upland sources and have the potential to create water quality issues. The use of an offshore borrow area for sand source is more cost effective than the use of upland sand mines for a beach nourishment projects of this size. Sediment will meet the requirements of the QA/QC plan that has been evaluated to ensure fill material is compatible with native beach. The design that includes tapered ends at both the north and south ends of the project and is proposed to keep the sand in place longer instead of quickly transitioning along the shoreline.

b. Plan B – Previously authorized reduced fill template area: No hardbottom or other submerged aquatic resources would be impacts. Use of offshore borrow area would be as described above and is considered to be the most cost effective means of material transport. A reduced fill template would temporarily stabilize that portion of the shoreline but re-nourishment would be expected at a much quicker rate.

c. Plan C - The use of material from upland resource: The material from upland borrow sites typically have larger grain size and therefore the material has the ability to remain within the fill template for a longer period of time compared to finer grain size material seen from offshore borrow areas. The use of an upland sand mines are not more cost effective than the use of offshore borrow sites for a beach nourishment project of this size. Sediment will meet the requirements of the QA/QC plan that has been evaluated to ensure fill material is compatible with native beach. The design includes tapered ends at both the north and south ends of the project and is proposed to keep the sand in place longer instead of quickly transitioning along the shoreline.

d. Plan D - Construction of structure such as breakwaters: Construction of in water structures such as breakwaters already exists within the project area. Heavy storms and wave action have removed substantial amount of beach landward of the armored shoreline, which is now being undermined. There are no nearshore hard bottom resources within the proposed fill area that have not already been previously mitigated for, that would preclude the use of sand placement as the preferred alternative. The cost of installation of breakwaters and the long-term maintenance of these structures is not considered to be cost effective. Breakwaters is properly designed and placed in appropriate locations can slow the effects of beach erosion and build up the beach in particular areas, however, down drift erosion is common.

5.6 Practicable Alternatives carried forward: The Corps has determined that Plan A, the applicant's preferred alternative is the least damaging practicable alternative that still meets the project purpose and all the screening criteria. Therefore the project description as stated in section 1.4 will be carried forward and authorized.

**6.0 Evaluation of the 404(b)(1) Guidelines:**

(40 CFR 230) For each of the below listed evaluation criterion, this section describes the potential impact, any minimization measures that would be used to reduce the level of impact, and the resultant impact level. For the purpose of this evaluation, the fill associated with this project is (1) Placement of 875,586 cubic yards of compatible beach quality sand between FDEP monuments 89-102. The beach template has been slightly expanded to the North from R-89 to 90.5 and to the South from R101.4 to 102. A 1V:10H beach construction slope is being maintained seaward of the berm crest.

Approximately 159,938 cubic yards of excess dredged material is proposed to be used for beach restoration at Phipps Ocean Park (Reach 7) and dune restoration at Reach 8. The Phipps segment is currently being reviewed under Corps permit application number SAJ-2000-00380 and requires approximately 112,554 cy of sand and the dunes at Reach 8 will require the use of 47,384 cy of the sand. The proposed work in Reach 8 would occur above the mean high water line.

Installation of one 256-square foot groin comprised of limestone boulders at R-99.3, with an elevation of +5 ft NAVD, crest width of 12-feet, and slope of 1:2. The dredged material will be transported and discharged (pump) to the site via hopper dredge from a pre-determined offshore connection point. As the water/sand slurry is pumped onshore, heavy construction equipment will be used to construct containment dikes and grade the material to the proposed design fill profile. Construction will be performed outside of peak turtle season (May 1 to October 31) to reduce potential for nest burial or excavation.

- 6.1 Potential effects on physical and chemical characteristics of the aquatic ecosystem (Subpart C):
  - 6.1.1 Substrate: Minor Effect (long term) – The borrow source consists primarily of fine to medium grained sand with a composite grain size of 0.28 mm and silt fine content of 2%. The fill material is beach compatible and consistent with existing sand within the template which is largely composed of material placed from similar offshore sources during previous nourishment events. The fill template density has been minimized to reduce the potential of sediment impacts to hardbottom substrate offshore and downdrift of the project. No direct or secondary impacts to hardbottom substrate are anticipated and the project will be monitored for impacts during and post construction.
  - 6.1.2 Suspended Particulates / Turbidity: Minor Effect (short term) – Project induced turbidity is anticipated during both excavation and placement activities. The borrow source is generally low in silt content (on the order of 2%) which reduces the potential for excessive construction related turbidity. Monitoring of project turbidity will be conducted during construction at both the excavation and placement sites. Cessation of construction activities will occur if excessive turbidity is observed.
  - 6.1.3

Water: Minor Effect (short term) – Project construction will involve the excavation and beach placement of sand material. No impacts to water resources are anticipated other than elevated turbidity during construction.

- 6.1.4 Current Patterns & Water Circulation: No Effect – Project excavation will occur within a borrow area approximately one mile offshore in open coastal waters. Excavation depths are on the order of 15 feet and occur in water depths in excess of 40 feet. No modification to existing current patterns are anticipated from the excavation or sand placement.
- 6.1.5 Normal Water Fluctuations: No Effect – Both excavation and placement will occur in open coastal waters. No modifications to existing water fluctuations are anticipated.
- 6.1.6 Salinity Gradients: No Effect – Both excavation and placement will occur in open coastal waters. No modifications to existing salinity gradients are anticipated.
- 6.2 Potential effects on biological characteristics of the aquatic ecosystem (Subpart D):
  - 6.2.1 Threatened or Endangered Species (also see section 10.1): May Affect but Not Likely to Adversely Affect – reference Section 10.1 below for ESA review.
  - 6.2.2 Fish, Crustaceans, Mollusks, and Other Aquatic Organisms: Minor Effect (short term) – The project will have a direct impact to open sandy habitat within the borrow and placement areas which provides habitat to fish, crustaceans, mollusks and other aquatic organisms. Impacts are anticipated to be directly related to construction disturbance and impacts are anticipated to be short term. Potential impacts to nearshore hardbottom resources in the vicinity of the project may occur, though direct and secondary impacts to these resources are not anticipated and monitoring during and post construction of these resources will be conducted.
  - 6.2.3 Other Wildlife: Minor Effect (short term) – Impacts to wildlife will be similar to previous beach nourishment projects. Impacts will occur primarily to open sandy areas both within the excavation and placement areas and impacts will occur to wildlife associated with these habitats. Impacts will be ephemeral in nature with negligible long term impacts to these habitats. There is a potential for impacts to hardbottom resources within the vicinity of the placement area. Such impacts would result in temporary coverage of ephemeral nearshore hardbottom.
- 6.3 Potential Effects on Special Aquatic Sites (Subpart E):
  - 6.3.1 Sanctuaries and Refuges: Not Applicable –
  - 6.3.2 Wetlands: Not Applicable –

- 6.3.3 Mud Flats: Not Applicable –
- 6.3.4 Vegetated Shallows: Not Applicable –
- 6.3.5 Coral Reefs: Minor Effect (short term) – Nearshore hardbottom resources (including corals) are present in the vicinity of the project area. There is the potential for increased stress to corals from project related turbidity. This potential will be minimized through monitoring of turbidity during construction. Direct and secondary coverage of coral resources is not anticipated and monitoring of adjacent hardbottom resources will be conducted during and post construction.
- 6.3.6 Riffle and Pool Complexes: Not Applicable –
- 6.4 Potential effects on human use characteristics (Subpart F):
  - 6.4.1 Municipal and Private Water Supplies: Not Applicable –
  - 6.4.2 Recreational and Commercial Fisheries: No Effect – The project has the potential to impact nearshore hardbottom resources which serve as habitat for both recreational and commercial fisheries. Direct and secondary impacts to hardbottom resources are not anticipated and both during and post construction monitoring for impacts will be conducted. While there is a potential for impact to hardbottom resources, impacts would only occur in the vicinity of the project. Given the limited extent of hardbottom resources in the vicinity of the project in comparison to the extent of hardbottom within the region, it is anticipated that such impacts would have a negligible impact to regional fisheries resources
  - 6.4.3 Water-related Recreation: Minor Effect (short term) – Impacts to water related recreation will occur during construction and will include restrictions on usage of areas in the vicinity of construction and elevated turbidity in the vicinity of the project area during construction. Impacts will be limited to direct construction activities. Providing beach nourishment will allow for the continued public recreational use of the area. No long term or cumulative impacts are anticipated.
  - 6.4.4 Aesthetics: Minor Effect (short term) – Beach aesthetics will be impacted by construction efforts due to the presence of heavy equipment on the beach and in the nearshore temporarily. Project related turbidity will reduce nearshore aesthetics during construction efforts. Impacts will be short term in nature. Long term beach aesthetics will be similar to existing and historic beach conditions.
- 6.5 Evaluation and testing (Subpart G):
  - 6.5.1 General Evaluation of Dredged or Fill Material:

A geotechnical evaluation of the borrow area material has been conducted and has documented that the material consists of fine to medium beach compatible sand. Material will be continuously monitored during project construction consistent with the project sediment QA/QC plan. Testing of placed material will be conducted consistent with the QA/QC plan.

This evaluation indicates that the proposed discharge material meets the testing exclusion criteria for the reason cited below.

Exclusion: Not applicable

- 6.5.2 Chemical, Biological, and Physical Evaluation and Testing:  
Physical and biological monitoring of the project includes pre, during and post construction efforts which will be conducted consistent with the physical and biological monitoring plans. Sand quality will be evaluated on a continual basis consistent with the project sediment QA/QC plan.
- 6.6 Actions to minimize adverse effects (Subpart H):
- Actions to be undertaken in response to 40 CFR Section 203.10(d) to minimize the adverse effects of discharges of dredged or fill material are incorporated into the discussion in sections 5.1 through 5.5 above. If applicable, additional actions to minimize adverse effects are discussed below, including actions concerning the location of the discharge, actions concerning the material to be discharged, actions controlling the material after discharge, actions affecting the method of dispersion, actions related to technology, actions affecting plant and animal populations, actions affecting human use, and other actions. A geotechnical evaluation of the borrow material has demonstrated that the material is beach compatible. The material will be assessed on a continual basis including material testing consistent with the project QA/QC plan. Physical monitoring of placed material will be conducted during construction to verify that placement occurs within the authorized beach template. Beach scarps will be graded as required during construction. Post-project tilling of the project template will be conducted following fill placement. Placed material will be measured and assessed consistent with the project QA/QC plan. Discharge operations on the beach will be evaluated on a continual basis during construction. The contractor will maintain a series of dikes on the beach to retain material on the upper beach during construction. Turbidity monitoring will be conducted.
- 6.7 Factual Determinations – (Subpart B, section 230.11) *The determinations below are based on the determination of effects described in detail in sections 6.1 – 6.6 above:*
- 6.7.1 Physical substrate: Negligible Effect
- 6.7.2 Water circulation, fluctuation and salinity: Not Applicable

- 6.7.3 Suspended particulates/turbidity: Minor Effect (short term)
- 6.7.4 Contaminants: Not Applicable
- 6.7.5 Aquatic ecosystem and organisms: Minor Effect (short term)
- 6.7.6 Proposed disposal site: Minor Effect (short term)
- 6.7.7 Cumulative effects on the aquatic ecosystem: Minor Effect (short term) – Cumulative effects are discussed in section 9 of this document.
- 6.7.8 Secondary effects on the aquatic ecosystem: Minor Effect (short term) – Secondary effects are discussed in section 9 of this document.
- 6.8 Restrictions on Discharges (Subpart B, section 230.10) *(an answer marked with an asterisk indicates noncompliance with the Guidelines):*

<b>No</b>	Based on the discussion in section 5, are there available, practicable alternatives having less adverse impact on the aquatic ecosystem and without other significant adverse environmental consequences that do not involve discharges into "waters of the US" or at other locations within these waters?
<b>Yes</b>	Based on the discussion in section 5, if the project is in a special aquatic site and is not water-dependent, has the applicant clearly demonstrated that there are no practicable alternative sites that do not involve SAS?
	Will the discharge:
<b>No</b>	Violate state water quality standards?
<b>No</b>	Violate toxic effluent standards (under Section 307 of the Act)?
<b>No</b>	Jeopardize endangered or threatened species or their critical habitat?
<b>No</b>	Violate standards set by the Department of Commerce to protect marine sanctuaries?
	Will the discharge contribute to significant degradation of "waters of the US" through adverse impacts to:
<b>No</b>	Human health or welfare, through pollution of municipal water supplies, fish, shellfish, wildlife and special aquatic sites?

<b>No</b>	Life stages of aquatic life and other wildlife?
<b>No</b>	Diversity, productivity, and stability of the aquatic ecosystem, such as the loss of fish or wildlife habitat, or loss of the capacity of wetland to assimilate nutrients, purify water or reduce wave energy?
<b>No</b>	Recreational, aesthetic, and economic values?
<b>Yes</b>	Will all appropriate and practicable steps (40 CFR 23.70-77) be taken to minimize the potential adverse impacts of the discharge on the aquatic ecosystem?

Remarks – *if necessary*:

6.9 Compliance with the 404(b)(1) Guidelines (*Reference section 12 of this document*):

**7.0 General Public Interest Review** – (*33 CFR 320.4 and RGL 84-09*) *All public interest factors have been reviewed and summarized below. Both cumulative and secondary impacts on the public interest have been considered.*

Public Interest Factors Considered:

a. Conservation: N/A –

b. Economics: Beneficial (major) – The placement of sand will increase storm protection for the properties along the beach and will preserve the integrity and value of the private and public waterfront in the area. Beach nourishment projects enhance property values to the extent that they receive storm protection or for those property owners not to be responsible for the cost of alternative protection measures such as seawalls. The project will also provide employment opportunities in the area and the tax base. Placement of sand will also increase the recreational interest of the beach which may attract visitors to the area.

c. Aesthetics: N/A –

d. General Environmental Concerns: – Beneficial Effects: The beach profile has been altered due to erosion. The project would restore the lost beach habitat that has been lost since the last sand placement on this stretch of beach due to storms. A wider beach is expected to increase nesting opportunities and foraging habitat for shorebirds and small mammals. A wider beach profile also creates additional sea turtle nesting area. Without additional sand placed on this beach, the shoreline would continue to erode, based on a net loss of sand from storm events, storm survey, and littoral transport of sand to neighboring beaches. Environmental Detriments: The project does not propose

to impact hardbottom resources. Sand resources within the project area have been previously covered in past nourishment projects. The Corps will require the applicant to provide mitigation for any unanticipated impacts to hardbottom or coral resources that may occur from the dredge and fill activities. Ecosystem Functions: Sediment deposition from the project will result in burial of subtidal unconsolidated sediment. Soft bottom communities will also become buried, smothering infauna that may be food source for fish and other marine life. Organisms living in the nearshore sand areas are adapted to increased turbidity and unstable substrate conditions. This generally recovers after one year.

e. Wetlands: N/A –

f. Historic Properties: No effect – refer to Section 10.3.6.

g. Fish and Wildlife Values: N/A –

h. Flood Hazards: Beneficial (major) – The placement of sand will provide an increased buffer to the upland and oceanfront structures from storm surge and flooding events.

i. Floodplain Values: N/A –

j. Land use: N/A –

k. Navigation: N/A –

l. Shore Erosion and Accretion: Beneficial (minor) – Shoreline erosion is variable between summer and winter months, pending no storms, and there is a littoral drift of sand to the south. The sand that is placed on this beach is expected to compensate for the loss of littoral sand drift from the north and sand loss due to storms and natural attrition.

m. Recreation: Beneficial (major) – Recreational fishing, nearshore snorkeling, and offshore diving would be temporarily affected in the area of active construction as a result of increased turbidity near the dredge sites and the presence of construction equipment. However, turbidity would be temporary, and the improved quality of the beach is expected to increase the recreational usage of the area.

n. Water Supply and Conservation: N/A –

o. Water Quality: Adverse (minor) – temporary turbidity is likely to occur during construction activities. Turbidity and water quality will be monitored during all in-water work according to the QA/QC plan

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p. Energy Needs: N/A –

q. Safety: N/A –

r. Food and Fiber Production: N/A –

s. Mineral Needs: N/A –

t. Consideration of Property Ownership: N/A –

u. Needs and Welfare of the People: N/A –

7.1 The relative extent of the public and private need for the proposed structure or work: Necessity for stabilization of the shoreline for public and private safety as well as continued recreational activities.

7.2 Are there unresolved conflicts as to resource use? No  
If so, are there reasonable and practicable alternative locations and/or methods to accomplish the objectives of the proposed action? NA

7.3 The extent and permanence of the beneficial and/or detrimental effects, which the proposed work is likely to have on the public and private use to which the area is suited: Necessity for stabilization of the shoreline for public and private safety as well as continued recreational activities.

**8.0 Mitigation – 33 CFR 320.4 (r); 33 CFR 332; 40 CFR 230.70-77; 40 CFR 230.90-99 and 40 CFR 1504.12(f):**

8.1 Avoidance – In evaluating a project area containing waters of the United States, consideration must be given to avoiding impacts on these sites. Avoidance measures for this project are: Avoidance measures indicated by the applicant in Section 1.5 of this document.

8.2 Minimization – If waters of the United States cannot be avoided, impacts must be minimized. Minimization measures for this project are: Minimization measures indicated by the applicant in Section 1.5 of this document.

8.3 Compensatory Mitigation:

8.3.1 Is Compensatory Mitigation required:

No

*(If No, provide explanation here. Do not complete [delete] rest of Section 8, Mitigation. If Yes, indicate N/A here):* No direct or secondary impacts to nearshore hardbottom or

coral reefs are proposed or anticipated; therefore no compensatory mitigation is required. Mitigation will be required if quantifiable impacts to the resource are observed from within the post-project monitoring.

Yes

*(If yes, complete the remainder of Section 8, Mitigation).*

- 9.0 Cumulative and Secondary Impacts** – *(40 CFR 230.11(g) and 40 CFR 1508.7, RGL 84-9) Cumulative impacts result from the incremental environmental impact of an action when added to all other past, present, and reasonably foreseeable future actions. They can result from individually minor but collectively significant actions taking place over a period of time. A cumulative effects assessment should consider both direct and indirect, or secondary, impacts. Indirect impacts result from actions that occur later in time or are farther removed in distance from the original action, but still reasonably foreseeable.*

*See attached cumulative impact analysis document*

**10.0 Other Laws, Policies, and Effects:**

10.1 Endangered Species Act (ESA):

- 10.1.1 Name of Species considered: The threatened Johnson’s seagrass (*Halophila johnsonii*), the endangered West Indian manatee (*Trichechus manatus*), the endangered and threatened nesting and swimming sea turtles (*Chelonia mydas*, *Eretmochelys imbricata*, *Lepidochelys kempii*, *Dermochelys coriacea*, *Caretta caretta*) , the threatened piping plover (*Charadrius melodus*), the endangered smalltooth sawfish (*Pristis pectinata*), the threatened Piping Plover (*Charadrius melodus*), the Acropora spp and the threatened corals: *Montastraea annularis*, *Montastraea faveolata*, *Montastraea franksi*, *Dendrogyra cylindrus*, *Mycetophyllia ferox*, *Dichocoenia stokes*, and *Agaricia lamarcki*.

10.1.2 Effects Determination:

No Effect

For these species: *Johnson’s seagrass*, *Acropora spp.* and candidate species: *Montastraea annularis*, *Montastraea faveolata*, *Montastraea franksi*, *Dendrogyra cylindrus*, *Mycetophyllia ferox*, *Dichocoenia stokes*, and *Agaricia lamarcki*.

May affect, not likely to adversely affect

For these species: Manatee, swimming sea turtle, smalltooth sawfish and the Loggerhead designated critical habitat.

May affect, likely to adversely affect

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For these species: Nesting sea turtle, and Piping Plover.

Jeopardize the continued existence of listed species or species proposed for such designation or adversely modify designated critical habitat

For these species:

#### 10.1.3 Basis for determination:

Acorpora spp. and above listed corals: The proposed beach fill template is within a previously authorized fill template and the previously identified estimated toe of fill (ETOF). No hardbottom habitat exists within the footprint of the proposed fill template or ETOF. The adjacent hardbottom habitat ranges from 20 to 100 feet in distance from the ETOF except for at FDEP monument 100 where the hardbottom directly abuts the ETOF. Secondary impacts to the hardbottom habitat is not proposed or anticipated.

Johnson's Seagrass: Johnson's seagrass is not present within the project area. The project is not occurring within Johnson's Seagrass Critical Habitat.

Manatee: As stated in the Statewide Programmatic Biological Opinion (SPBO) concerning sand placement activities along the coast of Florida for the Corps dated August 22, 2011, the FWS concurs that for dredging activities offshore, if the Manatee In-water Construction Conditions are implemented; these activities are not likely to adversely affect the manatee. The proposed activities will not adversely modify its critical habitat because the project is not located within the species designated critical habitat.

Nesting sea turtle: The project is located within nesting habitat for the above listed species of sea turtles. The installation of the proposed groin could impede nesting females as they enter and exit on water as well as sea turtle hatchlings.

Swimming sea turtle and smalltooth sawfish: The Corps is evaluating this project under the South Atlantic Regional Biological Opinion for the use of hopper dredging associated with the project. The NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions will be made a condition of any issued permit. Construction of the proposed groin may affect smalltooth sawfish and sea turtles by being temporarily unable to use the site around the construction area for the groin due to potential avoidance of construction activities and related noise, and physical exclusion from areas contained by turbidity curtains, but these effects are insignificant and temporary. Disturbance from construction activities and related noise will be intermittent and only occur during the day for part of the construction period; turbidity curtains will only enclose small areas at any one time in the project area, will be removed upon project completion, and will not appreciably interfere with use of the area by listed species. Additional avoidance and

minimization measures include the applicant adhering to the Swimming sea turtle and Smalltooth sawfish construction conditions.

Piping Plover: The project is located within the piping plover consultation area.

Nesting Loggerhead sea turtle designated critical habitat: The project would affect the following four primary constituent elements essential to the species survival:

1. Suitable nesting beach habitat that has (a) relatively unimpeded near shore access from the ocean to the beach for nesting females and from the beach to the ocean for both post-nesting females and hatchlings; and, (b) is located above mean high water to avoid being inundated frequently by high tides.
2. Sand that (a) allows for suitable nest construction, (b) is suitable for facilitating gas diffusion conducive to embryo development, and (c) is able to develop and maintain temperatures and moisture content conducive to embryo development.
3. Suitable nesting beach habitat with sufficient darkness to ensure nesting turtles are not deterred from emerging onto the beach, post-nesting females re-orient back to the sea and emerging hatchlings orient correctly towards the sea.
4. Natural coastal processes or artificially created or maintained habitat mimicking natural conditions. This includes artificial habitat types that mimic the natural conditions described in the PCEs above for beach access, nest site selection, nest construction, egg deposition and incubation, and hatchling emergence and movement to the sea turtles.

The project is a beach re-nourishment within a previously authorized fill template. The beach area is contains recreational use, predation, and in-water alternations through the proposed installation of a groin. Future coastal development is not anticipated because land based infrastructure already exists. Artificial lighting also exists but the County has an existing sea turtle protection ordinance that specifically addresses coastal lighting.

Swimming Loggerhead sea turtle designated critical habitat: The project may affect but is not likely to adversely affect the following neritic/Oceanic habitats identified to be essential to the species survival:

1. Nearshore Reproductive Habitat, including hatchling swim frenzy and inter-nesting female habitat. The following PCE's may be affected:
  - A. Waters sufficiently free of obstructions or artificial lighting to allow transit through the surf zone and outward toward open water;
  - B. Waters with minimal manmade structures that could promote predators (i.e., nearshore predator concentration caused by submerged and emergent offshore

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structures), disrupt wave patterns necessary for orientation, and/or create excessive longshore currents.

The project is a beach re-nourishment within a previously authorized fill template. The beach area is contains recreational use, predation, and in-water alternations through the proposed installation of a groin. Artificial lighting also exists but the County has an existing sea turtle protection ordinance that specifically addresses coastal lighting.

2. Foraging Habitat. The following PCE's may be affected:

A. prey availability and quality, such as benthic invertebrates, including crabs (spider, rock, lady, hermit, blue, horseshoe), mollusks, echinoderms and sea pens;

The project is a beach re-nourishment within a previously authorized fill template, all previous impacts to these habitats have been previously mitigated for. No additional or new impacts to hardbottom or coral reef are proposed.

3. Breeding Habitat; the following PCE's may be affected:

A. High concentrations of reproductive male and female loggerheads;

B. Proximity to primary Florida migratory corridor; and

C. Proximity to Florida nesting grounds.

The project is within an area that has high concentrations of reproductive male and females and is within a proximity to Florida nesting grounds.

10.1.4 Consultation: Informal and Formal

10.1.5 Consultation response(s):

FWS: The Corps coordinated the project with FWS by letter dated 14 February 2014. By email dated 28 March 2014, the FWS requested additional information. The applicant response to FWS comments were forwarded to FWS on 20 July 2014. The Corps informed FWS that attachments referenced in the applicants FWS response will be forwarded upon receipt. By email dated 20 July 2014, the Corps request informal consultation with FWS for the newly designated Loggerhead critical habitat. By email dated 25 July 2014, the FWS stated that given that the proposed project is not located in piping plover critical habitat and piping plovers have not been documented in the project area, the area would be designated as non-optimal piping plover habitat which would constitute a "may affect, but not likely to adversely affect" the piping plover and requested that the Corps change their determination from "may affect" to "may affect, but not likely to adversely affect" and confirm that the Applicant will implement the

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Conservation Measures for piping plovers in non-optimal habitat as outlined in the 2013 Programmatic Piping Plover Biological Opinion. By email dated 15 August 2014, the Corps accepted FWS effect determination for the Piping Plover and that the applicant will implement the Conservation Measures for non-optimal piping plover habitat. By letter dated 8 September 2014, the Corps reinitiated consultation with FWS for potential adverse effects to the recently designated terrestrial critical habitat for the Loggerhead sea turtle. The FWS provided the Corps with a Biological Opinion (BO) dated 10 December 2014, for the project. The BO stated that the beach placement portion of the project can be covered by the State Programmatic (SP) BO and the applicant will be required to adhere to the terms and conditions of the SPBO. The FWS further stated that the proposed project is also covered by the P3BO and the applicant will be required to follow and implement the Conservation Measures outlined in the P3BO that apply to the project. The BO dated 10 December 2014, also included 20 Reasonable and Prudent Measures and 20 Terms and Conditions, which will be made part of the permit authorization.

NMFS: By email dated 9 May 2014, NMFS requested whether the proposed groin will be constructed completely on the beach and have any in-water component and what type of dredging is proposed. The applicant's response was forwarded to the NMFS by email dated 23 May 2014 and stated that groin construction would occur from the upland and a hopper dredge is being proposed. By email dated 20 July 2014, the Corps requested initiation of informal consultation with NMFS for the newly designated Loggerhead critical habitat. By letter dated 3 December 2014, NMFS concurred with the Corps' effect determination for the above listed species. In the letter, NMFS stated that the project was appropriate to apply the 1997 South Atlantic Regional Biological Opinion (SARBO), which analyzed potential routes of effects for the above listed species from hopper dredging for channel construction and maintenance, sand mining, and for beach stabilization/nourishment activities using hopper dredged sand.

10.1.6 Additional information (*optional*): N/A

10.1.7 Compliance with ESA: Yes

10.2 Magnuson-Stevens Act – Essential Fish Habitat (EFH):

10.2.1 Name of Species considered: Various life stages of penaeid shrimp complex, reef fish, stone crab, spiny lobster, migratory/pelagic fish, and snapper/grouper complex.

10.2.2 Effects Determination:

No Effect

For these species:

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May affect, not likely to adversely affect

For these species: All species considered.

May adversely affect

For these species:

10.2.3 Basis for determination: The proposal would impact approximately 875,586 cubic yards acres existing beach and sandy benthic habitat.

10.2.4 Consultation: Informal

10.2.5 Consultation response: By email dated 21 February 2014, NMFS requested the full 30 days to provide their comments to the Corps. The Corps granted their request. NMFS also inquired whether the Corps was completing a compliance review on the unauthorized impacts that resulted from the last nourishments. The Corps informed NMFS that the Corps Enforcement completed a memorandum dated 10 September 2013 for the subject permit. No formal Corps enforcement action was initiated. The Corps did not require mitigation for the temporary impacts. Any work proposed by the permittee to mitigate for impacts determined by FDEP will need to be reviewed as a separate and complete project. By letter dated 3 March 2014, the NMFS HCD provided three EFH recommendations:

1. The permit shall require implementation of a biological monitoring plan that includes two pre-construction surveys, monitoring of hardbottom habitat at R-93, and monitoring of corals on the groins. The plan also shall define what qualifies as an impact and demonstrate the sample sizes are adequate for determining if levels of impacts authorized by the permit have been exceeded.
2. The permit shall prohibit impacts to coral, coral reef, and hardbottom habitat from the transport of dredge material from the borrow site and offshore connection points to the discharge points at Phipps Ocean Park, Reach 8, and Mid-Town Beach. The permit shall include pipeline corridors and leak monitoring.
3. The permit shall require a minimum buffer of 700 feet between the borrow site and the nearest coral, coral reef, or hardbottom habitat and a minimum buffer of 400 feet between the equilibrium toe-of-fill and the nearest coral, coral reef, or hardbottom habitat. NMFS notes the public notice currently reflects these buffers. Because coral, coral reef, and hardbottom habitat have exceptionally high value for fishery species,

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NMFS wants confirmation the buffers remain after all project design changes resulting from public review are complete.

A meeting was held on 31 July 2014, between NMFS HCD, the applicant and the Corps to discuss NMFS EFH recommendations. NMFS indicated that the plan should include the location of transects at specific monuments, justification for no monitoring on the groins and monitoring on the pipeline corridors. The Corps informed NMFS by letter dated 20 November 2014 that the Corps feels that the applicant has provided enough information to satisfy the EFH recommendations.

The applicant submitted a revised biological monitoring plan dated September 18, 2014, that includes two pre-construction surveys, monitoring of hardbottom habitat at R-93, and monitoring of corals on the groins. The plan also shall define what qualifies as an impact and demonstrate the sample sizes are adequate for determining if levels of impacts authorized by the permit have been exceeded. The permit will not authorize any impacts to coral, coral reef, and hardbottom habitat from any of the proposed work including the transport of dredge material from the borrow site and offshore connection points to the discharge points at Phipps Ocean Park, the dunes at Reach 8, and Mid-Town Beach. Pipeline corridors and leak monitoring will be required and following the monitoring outlines in the revised biological monitoring plan. The permit will require a minimum buffer of 700 feet between the borrow site and the nearest coral, coral reef, or hardbottom habitat and a minimum buffer of 400 feet between the equilibrium toe-of-fill and the nearest coral, coral reef, or hardbottom habitat.

NMFS did not respond to the Corps' letter therefore consultation with NMFS HCD is concluded.

10.2.6 Additional information (*optional*): N/A

10.2.7 Compliance with Magnuson-Stevens Act: Yes

10.3 National Historic Preservation Act – Section 106:

10.3.1 Known sites present: No

10.3.2 Survey required/conducted: Yes, the SHPO required a survey, however SHPO rescinded their request.

10.3.3 Effects determination:

No potential to cause effect

For these historic properties eligible or listed in the National Register of Historic Places:

No effect

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For these historic properties eligible or listed in the National Register of Historic Places:  
All sites considered.

No adverse effect

For these historic properties eligible or listed in the National Register of Historic Places:

Adverse effect

For these historic properties eligible or listed in the National Register of Historic Places:

10.3.4 Rationale for effects determination: The sand source is from an offshore borrow area, and will be discharged onto the beach via hopper dredge. The sand will be transported and deposited by trucks utilizing A1A and accessing the beaches via pre-established corridors to the beach. All activities will be confined to the beach area, avoiding the uplands. The project purpose is for stabilization of an eroding shoreline within previously authorized beach templates. The project area is below the dune area and seaward of the seasonal high tide line. Therefore it is the Corps is of the opinion there will be No Potential to Cause Adverse Effect to any historic properties.

10.3.5 Memorandum of Agreement required: NA

10.3.6 Date consultation complete (*if necessary*): By letter dated 28 January 2014, the SHPO stated that they were rescinding their request for a survey based on information submitted by letter dated 22 January 2014 from the Town of Palm Beach. The SHPO also stated that in addition to the standard permitting condition, this permit, if issued, should include the following special conditions regarding unexpected discoveries during ground disturbing activities on the property:

“If historic artifacts, such as pottery or ceramics, metal implements, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, the permitted project should cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee, should contact the Florida Department of State, Division of Historical Resources, Review and Compliance Section, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources. 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*.”

By letter dated 11 June 2014, the Corps informed the SHPO that the beach area has been re-nourished a minimum of three times since 1995. The sand source is from an offshore borrow area, and will be discharged onto the beach via hopper dredge. Excessive dredge material from the borrow pit will be stockpiled within the project area and used for another beach restoration project (SAJ-2000-00380) via trucks. The sand will be transported and deposited by trucks utilizing A1A and accessing the beaches via

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pre-established corridors to the beach. All activities will be confined to the beach area, avoiding the uplands. The project purpose is for stabilization of an eroding shoreline. The project area is below the dune area and seaward of the seasonal high tide line. Therefore it is the Corps is of the opinion there will be No Potential to Cause Adverse Effect to any historic properties. The Corps requested SHPO's comments in response to the Corps letter, per 33 CFR 325: Appendix C.4 (b) within 30-calender days of this letter, no response was received.

- 10.3.7 Additional information (*optional*): N/A
- 10.3.7 Compliance with National Historic Preservation Act: Yes
- 10.4 Corps Wetland Policy: Based on the public interest review (Section 7 of this document), the beneficial effects of the project outweigh the detrimental impacts of the project.
- 10.5 Water Quality Certification under Section 401 of the Clean Water Act:
  - 10.5.1 An individual water quality certification was issued.
  - 10.5.2 Date of Water Quality Certification decision: 28 October 2014
  - 10.5.3 Additional information (*optional*): This project is encompassed within the Florida Department of Environmental Protection (FDEP) Beach Management Agreement (BMA). Prior to construction, individual projects must demonstrate compliance with the conditions of this Agreement under the BMA process set forth in Articles H & I. When conducted pursuant to the conditions of this Agreement, those projects and activities will meet or exceed the applicable substantive criteria of Chapter 161, Chapter 253, Part IV Chapter 373, and Chapter 403, F.S., and their implementing rules. This Agreement also constitutes certification of compliance with state water quality standards under Section 401 of the Clean Water Act, 33 U.S.C., and a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act (CZMA). By letter dated 28 October 2014, the FDEP issued an Individual Project Approval No.: 0328802-001-BMA.
- 10.6 Coastal Zone Management Consistency under Section 307c of the Coastal Zone Management Act (CZMA):
  - 10.6.1 A CZMA consistency determination See Section 10.5.3 above with reference to the FDEP BMA and CZMA consistency.
  - 10.6.2 Date of CZMA decision: 28 October 2014
  - 10.6.3 Additional information (*optional*): N/A

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- 10.7 Effects on Federal Projects (33 CFR 320.4(g)(4)): This project is not located in the vicinity of an authorized federal project.
- 10.8 Effects on the limits of the territorial seas (33 CFR 320.4(f)): NA
- 10.9 Safety of impoundment structures (33 CFR 320.4(k)): This proposed project does not include any impoundment structures.
- 10.10 Activities in Marine Sanctuaries (33 CFR 320.4(i)): NA
- 10.11 Other Authorizations: N/a
- 10.12 Significant issues of Overriding National Importance (33 CFR 320.4(j)(2)): NA
- 10.13 Discussion (if necessary): N/A

**11.0 Final Project Description and Special Conditions:**

- 11.1 Final Project Description: The final project description is the same as the applicant's proposed project description which is indicated in Section 1.4 of this document.
- 11.2 Special Conditions: SAJ-1995-03779(SP-LCK):

1. Reporting Addresses: The Permittee shall reference this permit number, SAJ-1995-03779 (SP-LCK), on all correspondence. Unless specifically notified to the contrary, the Permittee shall use the following addresses for transmitting correspondence to the referenced agencies:

a) Jacksonville District Corps of Engineers (Corps), Regulatory Division, Enforcement Section, Jose Rivera, 4400 PGA Boulevard, Suite 500, Palm Beach Gardens, Florida 33410. phone: 561-472-3536, email: [Jose.J.Rivera@usace.army.mil](mailto:Jose.J.Rivera@usace.army.mil)

b) Regulatory Division, Palm Beach Gardens Section

4400 PGA Blvd, Ste 500 Palm Beach Gardens, FL 33410 phone: 561-472-3508

email: [Linda.C.Knoeck@usace.army.mil](mailto:Linda.C.Knoeck@usace.army.mil)

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When submitting any monitoring information to the Corps, please include a transmittal cover letter clearly labeled with the following at the top of each page: "This monitoring information is submitted in accordance with Specific Condition for Permit No. SAJ-1995-03779 (SP-LCK).

2. The Permittee shall use only beach compatible sand for beach placement that meets the standards in the attached QA/QC plan (Attachment B).

3. Biological Opinion: This permit does not authorize the Permittee to take an endangered species, in particular the nesting sea turtles (*Chelonia mydas*, *Eretmochelys imbricata*, *Lepidochelys kempii*, *Dermochelys coriacea*, *Caretta caretta*). In order to legally take a listed species, the Permittee must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a BO under ESA Section 7, with "incidental take" provisions with which you must comply). The enclosed United States Fish and Wildlife Service Biological Opinion (BO) dated December 10, 2014 (Attachment C) AND the FWS State Programmatic (SP)BO dated April 19, 2011 (Attachment D), contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Authorization under this permit is conditional upon compliance with all of the mandatory terms and conditions associated with incidental take of the enclosed BO, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute noncompliance with this permit. The United States Fish and Wildlife Service is the appropriate authority to determine compliance with the terms and conditions of its BO, and with the ESA.

4. All Terms and Conditions in the FWS Programmatic Piping Plover Biological Opinion, dated May 22, 2013 (Attachment E), shall be met as required in that document.

5. Turtle Nesting Season: Pursuant to the attached FWS SPBO from the U.S. FWS dated April 19, 2011 (Attachment D), beach nourishment activities will take place outside of the peak of sea turtle nesting season (May 1 through October 31).

6. Manatee Conditions: The Permittee shall comply with the "Standard Manatee Conditions for In-Water Work – 2011" provided in Attachment F of this permit.

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7. Sea Turtle/Small-tooth Sawfish Guidelines: The Permittee shall comply with the National Marine Fisheries Service's "Sea Turtle and Smalltooth Sawfish Construction Conditions" provided in Attachment G of this permit.

8. Regulatory Agency Changes: Should any other regulatory agency require changes to the work authorized or obligated by this permit, the Permittee is advised that a modification to this permit instrument is required prior to initiation of those changes. It is the Permittee's responsibility to request a modification of this permit from the Corps Palm Beach Gardens Regulatory Office.

#### CONSTRUCTION CONDITIONS

9. No impacts to hardbottom or biological resources are authorized for the project as a result of the placement of beach compatible material. Any unauthorized impacts to resources will require mitigation.

10. As-Builts: Within 60 days of completion of the authorized work or at the expiration of the construction window of this permit, whichever occurs first, the Permittee shall submit as-built drawings of the authorized work and a completed As-Built Certification Form (Attachment H) to the Corps. The drawings shall be signed and sealed by a registered professional engineer and include the following:

- a) A plan view drawing of the location of the authorized work footprint (as shown on the permit drawings) with an overlay of the work as constructed in the same scale as the attached permit drawings (8½-inch by 11-inch). The drawing should show all fill areas.
- b) List any deviations between the work authorized by this permit and the work as constructed. In the event that the completed work deviates, in any manner, from the authorized work, describe on the As-Built Certification Form the deviations between the work authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings any deviations that have been listed. Please note that the depiction and/or description of any deviations on the drawings and/or As-Built Certification Form does not constitute approval of any deviations by the U.S. Army Corps of Engineers.
- c) The Department of the Army Permit number.
- d) Include pre- and post-construction aerial photographs of the project site, if available.

## **PROJECT MONITORING CONDITIONS**

11. Physical Monitoring Plan: The applicant will adhere to the approved physical monitoring plan (Attachment I). The report will detail the performance of the beach fill project, identifying erosion and accretion patterns within the monitored area. In addition, the report shall include a comparative review of project performance to expectations and identify any adverse impacts attributable to the project. Monitoring reports and data associated with the physical monitoring plan shall be submitted to the Corps at the address listed in Special Condition #1 within 90 days of completion of the review.

12. Sediment Quality: Sediment quality shall be assessed as outlined in the Sediment QA/QC plan (Attachment B). Any occurrences of unacceptable material shall be handled according to the protocols set forth in the Sediment QA/QC plan. The sediment testing result will be submitted to the Corps within 90 days following the completion of beach construction.

13. Monitoring Report Timeframes: All pre-construction monitoring reports shall be provided to the District within 60 days of completion of the survey or monitoring event. Post-construction and annual monitoring reports shall be provided within 90 days of completion of the survey.

14. The Corps may require additional surveys beyond the post-construction monitoring events if impacts attributable to the project are evident prior to or at the conclusion of the monitoring.

## **HOPPER DREDGING CONDITIONS**

15. Reporting: The Permittee shall ensure all reports, notifications, documentation and correspondence required by the general or special conditions of this permit are submitted to the Corps at the following email address:

sajdredgenotice@usace.army.mil.

Requests for documents, forms or information should also be submitted to the Corps at this email address. The Permittee shall reference this permit number, SAJ-1995-03779(SP-LCK), SARBO, and include the topic in the subject line of the email and on all submittals.

16. Deflector Device Submittal: No dredging shall be performed by a hopper dredge without the inclusion of an approved rigid sea turtle deflector device. The Permittee shall ensure drawings of the proposed sea turtle deflector device and the Hopper Dredge Deflector Device Checklist form (Attachment J) are complete and all required

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documentation submitted to the Corps at least 30 days prior to initiating the authorized work. The Permittee shall not commence hopper dredging until approval of the sea turtle deflector device has been granted by the Corps. A copy of the approved drawings, calculations and signed Hopper Dredge Deflector Device Checklist form shall be available on the vessel during dredging operations.

17. Pre-Dredging Inspection Submittal: The Permittee shall submit the completed Hopper Dredge Pre-Dredge Inspection Checklist form (Attachment K) to the Corps, at least 5 days prior to initiating the authorized work.

18. Dredging Quality Management: Dredging and dredged material disposal and monitoring of dredging projects using the Dredging Quality Management (DQM) system shall be implemented for this permit. The Permittee shall ensure that each hopper dredge assigned to the work authorized by this permit is equipped with DQM, previously known as 'Silent Inspector', for hopper dredge monitoring. The Permittee's DQM system must have been certified by the DQM Support Team within one calendar year prior to the initiation of the dredging/disposal. Questions regarding certification should be addressed to the DQM Support Center at 251-690-3011. Additional information about the DQM System can be found at <http://dqm.usace.army.mil>. The Permittee is responsible for insuring that the DQM system is operational throughout the dredging and disposal project and that project data are submitted to the DQM National Support Center in accordance with the specifications provided at the aforementioned website. The data collected by the DQM system shall, upon request, be made available to the Regulatory Division of the U.S. Army Corps of Engineers - Jacksonville District.

19. Commencement Notification: Within 3 days from the date of initiating the authorized work, the Permittee shall provide to the Corps, the completed Hopper Dredge Startup Inspection Checklist form (Attachment L) with a written notification of the date of commencement of work authorized by this permit. An inspection of the hopper dredge will be scheduled and performed by the Corps after receipt of the notification of commencement.

20. Regional Biological Opinion: Hopper dredging is approved under the current National Marine Fisheries Service (NMFS) South Atlantic Regional Biological Opinion (SARBO) and its references which can be viewed on the following website:

<http://el.erdc.usace.army.mil/seaturtles/refs-bo.cfm>.

The Permittee is responsible for obtaining and complying with the SARBO. If the Permittee is unable to view the SARBO at this website, the Permittee shall contact the Corps to receive a copy of the SARBO. The Permittee shall implement all reasonable

and prudent measures identified in the SARBO. NMFS has issued the SARBO to the Corps for hopper dredge projects that limit the take of listed turtles, whales, sturgeon, sawfish, and any other species listed in the SARBO. Authorization under this permit is conditional upon compliance with all of the mandatory terms and conditions associated with the SARBO, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with the SARBO, where a take of the listed species occurs, would constitute noncompliance with this permit. Failure to comply with this permit will be the basis for suspension and revocation of this permit and may be the basis for other enforcement action. NMFS has directed that this SARBO issued to the Corps serve as the formal consultation for all hopper dredge projects in the area covered by the SARBO; however, where the terms and conditions of the SARBO differ from the special conditions of this permit, the special conditions of this permit will take precedence as the more stringent condition.

Incidental Take Statement: This permit does not authorize the Permittee to take an endangered species, in particular sea turtles, sturgeon, whales or any other endangered species listed in the SARBO. The SARBO includes an Incidental Take Statement (ITS) issued to the Corps. The Permittee understands and agrees that, even where it is in full compliance with the terms and conditions of the SARBO and this permit, incidental take by the Permittee or other hopper dredging operations within the area covered by the SARBO may result in suspension or modification of this permit by the Corps. The amount of incidental take that will trigger suspension, and the need for any such suspension, shall be determined at the discretion of the Corps. The Permittee understands and agrees on behalf of itself, its agents, contractors, and other representatives, no claim, legal action in equity or for damages, adjustment, or other entitlement against the Corps shall arise as a result of such suspension or related action.

21. Endangered Species Observers: During dredging operations, NMFS approved endangered species observers (Observer) shall be aboard each hopper dredge to monitor for the presence of endangered species including sea turtles, sturgeon, whales and manatees. Observers shall perform their observations 24hr/day and every day during dredging operation.

a. During transit to and from the disposal area, the Observer shall monitor from the bridge during daylight hours for the presence of endangered species, especially the Northern right whale, during the period December through March.

b. During dredging operations, while dragheads are submerged, the Observer shall continuously monitor the inflow and/or overflow screening for turtles and/or turtle parts and sturgeon and/or sturgeon parts.

c. Upon completion of each load cycle, dragheads should be monitored as the draghead is lifted from the sea surface and is placed on the saddle in order to assure sea turtles that may be impinged within the draghead are counted and recorded. The Observer shall physically inspect dragheads and inflow and overflow screening/boxes for threatened and endangered species take. The Observer shall identify, count, and record sea turtle or sturgeon parts during the inspection of the inflow and overflow screening/boxes. All debris shall be removed from the screening/boxes after the inspection is complete so as not to impede the functioning of the screens during the next load cycle.

d. The Observer shall maintain a log detailing all incidents, including sightings, collisions with, injuries to, or killing of endangered species during dredging operations. The data shall be recorded daily on the Observer forms which are located at the following web site under the heading "Turtle Information:"

<http://el.erdc.usace.army.mil/seaturtle>.

If the Permittee is unable to view the Observer forms at this website the Permittee shall contact the Corps to receive a copy of the Observer forms. Completed Observer forms shall be submitted to the Corps at the end of each day as identified in the reporting special condition. A summary report of the above incidents and sightings shall be submitted to the Corps within 15 days of project completion.

22. Observer Equipment: The Permittee shall provide a digital camera, with an image resolution capability of at least 300 dpi, in order to photographically report all incidental takes, without regard to species, during dredging operations. Immediately following the incidental take of any threatened or endangered species, images shall be submitted to the Corps in a .JPG or .TIF format and shall accompany incidental take forms. The nature of findings shall be fully described in the incidental take forms including references to photographs.

23. Incidental Take: The Permittee shall immediately cease all hopper dredging operations and notify the Corps upon discovery of an incidental take of a sea turtle or sturgeon. The Permittee shall not resume hopper dredging until notified by the District Engineer, or his designee. The Sea Turtle Incidental Take Data form which is located at the following web site under the heading "Turtle Information Observer Forms," <http://el.erdc.usace.army.mil/seaturtles>, will be filled out by the Observer and shall be submitted to the Corps with photographic documentation within 6 hours of the take event.

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24. Sea Turtle Trawling: Sea turtle trawling shall be conducted following the take of two sea turtles, without regard to species, and continue until the end of dredging or as directed by the Corps. Trawling shall be conducted in accordance with the Sea Turtle Trawling requirements (Attachment M). Hopper dredging shall not resume until trawling has been initiated and until notified by the District Engineer, or his designee. The results of each trawl shall be recorded on the Sea Turtle Trawling Report which is located at the following website under the heading "Turtle Information:"

<http://el.erdc.usace.army.mil/seaturtle>.

If you are unable to view the Trawling Report forms at this website you must contact the Corps to receive a copy of the forms. Interim trawling reports shall be submitted to the Corps by the end of each day. A final trawling report shall be prepared and submitted to the Corps after the completion of all trawling efforts. The final trawling report shall summarize the results of the trawling including total trawling times, number of trawls and number of captures. Any turtles captured during trawling shall be immediately release

Dredge Protocol: The Permittee will adhere to the South Atlantic Division Corps of Engineers Hopper Dredging Protocol for Atlantic coast.

25. Cultural Resources/Historic Properties:

a. No structure or work shall adversely affect impact or disturb properties listed in the National Register of Historic Places (NRHP) or those eligible for inclusion in the NRHP.

b. If during the ground disturbing activities and construction work within the permit area, there are archaeological/cultural materials encountered which were not the subject of a previous cultural resources assessment survey (and which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes, evidence of structures or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work in the vicinity and notify the Corps. The Corps shall then notify the Florida State Historic Preservation Officer (SHPO) and the appropriate Tribal Historic Preservation Officer(s) (THPO(s)) to assess the significance of the discovery and devise appropriate actions.

c. A cultural resources assessment may be required of the permit area, if deemed necessary by the SHPO, THPO(s), or Corps, in accordance with 36 CFR 800 or 33 CFR 325, Appendix C (5). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO and the Corps.

d. In the unlikely event that unmarked human remains are identified on non-federal lands, they will be treated in accordance with Section 872.05 Florida Statutes.

All work in the vicinity shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archeologist. The Corps shall then notify the appropriate SHPO and THPO(s). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the State Archeologist, SHPO and the Corps.

**12.0 Findings and Determinations:**

- 12.1 Section 176(c) of the Clean Air Act General Conformity Rule Review: The proposed permit action has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. It has been determined that the activities proposed under this permit would not exceed de minimis levels of direct or indirect emissions of a criteria pollutant or its precursors and are exempted by 40 CFR Part 93.153. Any later indirect emissions are generally not within the Corps' continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons, a conformity determination is not required for this permit action.
- 12.2 Relevant Presidential Executive Orders:
  - 12.2.1 EO 13175, Consultation with Indian Tribes, Alaska Natives, and Native Hawaiians: This action has no substantial effect on one or more Indian tribes, Alaska or Hawaiian natives.
  - 12.2.2 EO 11988, Floodplain Management: This action is not located in a floodplain.
  - 12.2.3 EO 12898, Environmental Justice: The Corps has determined that this proposed project would not use methods or practices that discriminate on the basis of race, color or national origin nor would it have a disproportionate effect on minority or low-income communities.
  - 12.2.4 EO 13112, Invasive Species: There are no invasive species issues involved in this proposed project.
  - 12.2.5 EO 13212 and EO 13302, Energy Supply and Availability: The project was not one that will increase the production, transmission, or conservation of energy, or strengthen pipeline safety.
  - 12.2.6 EO 13547, Stewardship of the Ocean, Our Coasts, and the Great Lakes: The project would not adversely affect America's stewardship of the ocean, coasts, or Great Lakes.
- 12.3 Finding regarding the need for an Environmental Impact Statement: Having reviewed the information provided by the applicant and all interested parties and an assessment

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of the environmental impacts, we find that this permit action will not have a significant impact on the quality of the human environment. Therefore, an Environmental Impact Statement will not be required.

- 12.4 Compliance with the Section 404(b)(1) Guidelines: Having completed the evaluation in Section 6, the undersigned have determined that the proposed discharge complies with the Guidelines.

Reason for noncompliance: N/A

- 12.4.1 The proposed action is the Least Environmentally Damaging Practicable Alternative (LEDPA).

- 12.5 Public Interest Determination: We find that issuance of a Department of the Army Permit is not contrary to the public interest.

**Prepared By:**

Digitally signed by  
KNOECK.LINDA.C.1299557746  
DN: c=US, o=U.S. Government,  
ou=DoD, ou=PKI, ou=USA,  
cn=KNOECK.LINDA.C.1299557746  
Date: 2014.12.11 13:36:40 -05'00'

Date: 11 December 2014

Linda C. Knoeck Project Manager

**Reviewed By:**

Date:



2014.12.11

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Date: 11 December 2014

Susan R. Kaynor Chief, Palm Beach Gardens Office

**Approved By:**



Date: 2014.12.11

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Date: 11 December 2014

Alan M. Dodd Colonel, Corps of Engineers Commanding