



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

MARJORY STONEMAN DOUGLAS BUILDING
3900 COMMONWEALTH BOULEVARD
TALLAHASSEE, FLORIDA 32399-3000

RICK SCOTT
GOVERNOR

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SECRETARY

CONSOLIDATED JOINT COASTAL PERMIT AND SOVEREIGN SUBMERGED LANDS AUTHORIZATION

PERMITTEE:

Daniel Bates, Deputy Director, DERM
Palm Beach County
2300 North Jog Road, 4th Floor
West Palm Beach, FL 33411

AGENT:

Kenneth R. Craig, P.E., Vice President
Taylor Engineering
10151 Deerwood Park Boulevard
Building 300, Suite 300
Jacksonville, FL 32256

PERMIT INFORMATION:

Permit Number: 0303863-002-JC
Project Name: Jupiter-Carlin Nourishment
County: Palm Beach
Issuance Date: September 10, 2013
Expiration Date: September 10, 2028

REGULATORY AUTHORIZATION:

This permit is issued under the authority of Chapter 161 and Part IV of Chapter 373, Florida Statutes (F.S.), and Title 62, Florida Administrative Code (F.A.C.). Pursuant to Operating Agreements executed between the Department of Environmental Protection (Department) and the water management districts, as referenced in Chapter 62-113, F.A.C., the Department is responsible for reviewing and taking final agency action on this activity.

PROJECT DESCRIPTION:

The project is to nourish a 1.0-mile segment of beach. The design template includes a berm crest elevation of +7.5 feet North American Vertical Datum 1988 (NAVD) and a foreshore slope of 1:10 (vertical:horizontal). The design also includes a dune with a variable width, a crest elevation of +10.5 feet NAVD and a seaward slope of 1:3 (vertical:horizontal). The source of the fill material will be an offshore borrow area.

PROJECT LOCATION:

The beach nourishment site is located south of Jupiter Inlet, between R-13 and R-19, in the Town of Jupiter, Palm Beach County, Sections 5 and 32, Township 40 and 41 South, Range 43 East, in the Atlantic Ocean, Class III Waters. The offshore borrow area extends parallel to the beach, approximately 3,900 feet offshore of R-54 through R-65.

PROPRIETARY AUTHORIZATION:

This activity also requires a proprietary authorization, as the activity is located on sovereign submerged lands held in trust by the Board of Trustees of the Internal Improvement

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Trust Fund (Board of Trustees), pursuant to Article X, Section 11 of the Florida Constitution, and Sections 253.002 and 253.77, F.S. The activity is not exempt from the need to obtain a proprietary authorization. The Board of Trustees delegated, to the Department, the responsibility to review and take final action on this request for proprietary authorization in accordance with Section 18-21.0051, F.A.C., and the Operating Agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C. This proprietary authorization has been reviewed in accordance with Chapter 253, F.S., Chapter 18-21, F.A.C., and the policies of the Board of Trustees.

As staff to the Board of Trustees, the Department has reviewed the project described above, and has determined that the beach nourishment activity qualifies for a Letter of Consent to use sovereign, submerged lands, as long as the work performed is located within the boundaries as described herein and is consistent with the terms and conditions herein. Therefore, consent is hereby, pursuant to Chapter 253.77, F.S., to perform the activity on the specified sovereign submerged lands.

The Department has also determined that the use of the offshore borrow area for more than 5 years requires a public easement, pursuant to Chapter 253.77, F.S. The Department intends to issue the public easement, subject to the conditions outlined in the previously issued *Consolidated Intent to Issue* and in the Recommended Proprietary Action (entitled *Delegation of Authority*).

The final documents required to execute the easement have been sent to the Division of State Lands. The Department intends to issue the easement upon satisfactory execution of those documents. **You may not begin construction of this activity on state-owned, sovereign submerged lands until the easement has been executed to the satisfaction of the Department.**

COASTAL ZONE MANAGEMENT:

This permit constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act.

WATER QUALITY CERTIFICATION:

This permit constitutes certification of compliance with state water quality standards pursuant to Section 401 of the Clean Water Act, 33 U.S.C. 1341.

OTHER PERMITS:

Authorization from the Department does not relieve you from the responsibility of obtaining other permits (Federal, State or local) that may be required for the project. When the Department received your permit application, a copy was sent to the U.S. Army Corps of Engineers (Corps) for review. The Corps will issue their authorization directly to you, or contact you if additional information is needed. If you have not heard from the Corps by now, we recommend that you contact the nearest Corps regulatory office for status and further

information. Failure to obtain Corps authorization prior to construction could subject you to federal enforcement action by that agency.

AGENCY ACTION:

The above named Permittee is hereby authorized to construct the work outlined in the project description and project location of this permit and shown on the approved permit drawings, plans and other documents attached hereto. This agency action is based on the information submitted to the Department as part of the permit application, and adherence with the final details of that proposal shall be a requirement of the permit. **This permit and authorization to use sovereign submerged lands are subject to the General Conditions and Specific Conditions, which are a binding part of this permit and authorization.** Both the Permittee and their Contractor are responsible for reading and understanding this permit (including the permit conditions and the approved permit drawings) prior to commencing the authorized activities, and for ensuring that the work is conducted in conformance with all the terms, conditions and drawings.

GENERAL CONDITIONS:

1. All activities authorized by this permit shall be implemented as set forth in the plans and specifications approved as a part of this permit, and all conditions and requirements of this permit. The permittee shall notify the Department in writing of any anticipated deviation from the permit prior to implementation so that the Department can determine whether a modification of the permit is required pursuant to section 62B-49.008, Florida Administrative Code.
2. If, for any reason, the permittee does not comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Bureau of Beaches and Coastal Systems and the appropriate District office of the Department with a written report containing the following information: a description of and cause of noncompliance; and the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.
3. This permit does not eliminate the necessity to obtain any other applicable licenses or permits that may be required by federal, state, local, special district laws and regulations. This permit is not a waiver or approval of any other Department permit or authorization that may be required for other aspects of the total project that are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of sovereignty land of Florida seaward of the mean high-water line, or, if established, the erosion control line, unless herein provided and the necessary title, lease, easement, or other form of consent

authorizing the proposed use has been obtained from the State. The permittee is responsible for obtaining any necessary authorizations from the Board of Trustees of the Internal Improvement Trust Fund prior to commencing activity on sovereign lands or other state-owned lands.

5. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this permit or a formal determination under section 373.421(2), F.S., provides otherwise.
6. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee. The issuance of this permit does not convey any vested rights or any exclusive privileges.
7. This permit or a copy thereof, complete with all conditions, attachments, plans and specifications, modifications, and time extensions shall be kept at the work site of the permitted activity. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.
8. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel with proper identification and at reasonable times, access to the premises where the permitted activity is located or conducted for the purpose of ascertaining compliance with the terms of the permit and with the rules of the Department and to have access to and copy any records that must be kept under conditions of the permit; to inspect the facility, equipment, practices, or operations regulated or required under this permit; and to sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
9. At least forty-eight (48) hours prior to commencement of activity authorized by this permit, the Permittee shall submit to the Bureau of Beaches and Coastal Systems (JCP Compliance Officer) and the appropriate District office of the Department a written notice of commencement of construction indicating the actual start date and the expected completion date and an affirmative statement that the permittee and the contractor, if one is to be used, have read the general and specific conditions of the permit and understand them.
10. If historic or archaeological artifacts, such as, but not limited to, Indian canoes, arrow heads, pottery or physical remains, are discovered at any time on the project site, the permittee shall immediately stop all activities in the immediate area that disturb the soil in the immediate locale and notify the State Historic Preservation Officer and the Bureau of Beaches and Coastal Systems (JCP Compliance Officer). In the event that unmarked human remains are encountered during permitted activities, all work shall stop in the

immediate area and the proper authorities notified in accordance with Section 872.02, F.S.

11. Within 30 days after completion of construction or completion of a subsequent maintenance event authorized by this permit, the permittee shall submit to the Bureau of Beaches and Coastal Systems (JCP Compliance Officer) and the appropriate District office of the Department a written statement of completion and certification by a registered professional engineer. This certification shall state that all locations and elevations specified by the permit have been verified; the activities authorized by the permit have been performed in compliance with the plans and specifications approved as a part of the permit, and all conditions of the permit; or shall describe any deviations from the plans and specifications, and all conditions of the permit. When the completed activity differs substantially from the permitted plans, any substantial deviations shall be noted and explained on two paper copies and one electronic copy of as-built drawings submitted to the Bureau of Beaches and Coastal Systems (JCP Compliance Officer).

SPECIFIC CONDITIONS:

1. The terms, conditions and provisions of the required easement shall be met. The Notice to Proceed shall not be issued and construction of this activity shall not commence on sovereign submerged lands, title to which is held by the Board of Trustees, until all easement documents have been executed to the satisfaction of the Department.
2. No work shall be conducted until and unless the Department issues a Final Order of Variance (File No. 0303863-003-BV) from Rule 62-4.244(5)(c), F.A.C. to establish an expanded mixing zone for this project.
3. No work shall be conducted under this permit until the Permittee has received a written notice to proceed from the Department. At least 30 days prior to the requested date of issuance of the notice to proceed, the Permittee shall submit a written request for a Notice to Proceed, along with the following items for review and approval by the Department:
 - a. Final plans and specifications for this project, which must be consistent with the activity description of this permit and the approved permit drawings;
 - b. Documentation that the Public Easement has been executed and recorded to the satisfaction of the Department;
 - c. Turbidity monitoring qualifications;
 - d. A Scope of Work for the turbidity monitoring to ensure that the right equipment is available to conduct the monitoring correctly at any location, and under any conditions; and

- e. Prior to the second nourishment event authorized under this permit, and each subsequent event, the results of the intermediate turbidity monitoring shall be evaluated and provided to the Department. If the results indicate that the project can be built using a smaller mixing zone, this adjustment shall be made through an administrative modification to the permit prior to commencement of construction.
4. All reports or notices relating to this permit shall be sent to the Department's JCP Compliance Officer (e-mail address: JCP.Compliance@dep.state.fl.us), unless otherwise specified in the specific conditions.
5. The Permittee shall not store or stockpile tools, equipment, materials, etc., within littoral zones or elsewhere within surface waters of the state without prior written approval from the Department. Storage, stockpiling or access of equipment on, in, over or through hardbottom, seagrass (or other aquatic vegetation) beds or wetlands is prohibited unless within a work area or ingress/egress corridor specifically approved by this permit. Anchoring or spudding of vessels and barges within beds of aquatic vegetation or over hardbottom areas is also prohibited.
6. The Permittee shall not conduct project operations or store project-related equipment in, on or over dunes, or otherwise impact dune vegetation, outside the approved staging, beach access and dune restoration areas designated in the permit drawings.
7. **Pre-Construction Conference.** The Permittee shall conduct a pre-construction conference to review the specific conditions and monitoring requirements of this permit with Permittee's contractors, those responsible for turbidity monitoring, the engineer of record and the JCP Compliance Officer (or designated alternate). In order to ensure that appropriate representatives are available, at least twenty-one (21) days prior to the intended commencement date for the permitted construction, the Permittee is advised to contact the Department, and the other agency representatives listed below:

JCP Compliance Officer
e-mail: JCP.Compliance@dep.state.fl.us

DEP District Office
Submerged Lands & Environmental Resources
400 North Congress Avenue, Suite 200
West Palm Beach, FL 33401-2913
(561) 681-6600

Imperiled Species Management Section
Florida Fish & Wildlife Conservation Commission (FWC)
620 South Meridian Street
Tallahassee, Florida 32399-1600

phone: (850) 922-4330
fax: (850) 921-4369 or email: marineturtle@myfwc.com

The Permittee is also advised to schedule the pre-construction conference at least a week prior to the intended commencement date. At least seven (7) days in advance of the pre-construction conference, the Permittee shall provide written notification, advising the participants (listed above) of the **agreed-upon** date, time and location of the meeting, and also provide a meeting agenda and a teleconference number.

The Permittee may wish to combine this Pre-Construction Conference with the marine turtle Pre-Construction Meeting (see Specific Condition 13).

8. The Permittee shall ensure that the following dredging procedures and appropriate equipment are used by the Contractor during construction of the permitted activity.
 - a. Prior to commencement of work, the Contractor shall submit a plan detailing the method for removal of rock to the Contracting Officer for approval and to the JCP Compliance Officer. The plan shall also include the method by which the quantity of rock removed is measured. The Contractor may dispose of rock in the rock disposal area as shown in the permit drawings. If this rock disposal location is used, the Contractor is responsible for providing pre-disposal and post-disposal surveys 200 feet in any direction of the demarcated disposal area. If this rock disposal location is not used, the Contractor shall submit a plan that provides all details and design documentation regarding their proposed disposal plan to the JCP Compliance Officer, including but not limited to a complete listing of equipment used for removal, transport and disposal of non-compliant material. A revised rock disposal site may require a permit modification prior to disposal.
 - b. The method by which the Contractor removes and disposes of the rock shall be of his own design and shall be constructed so as to ensure removal of all such rock. The Contractor's method of rock removal and disposal shall be submitted for approval to the Contracting Officer prior to commencement of work.
 - c. The Contractor shall remove all fractions of the fill material of sufficient size to be retained on a grizzly with parallel bars spaced to provide openings no wider than 1 inch or equivalent. The material retained will include rock fragments, whole and broken shell and coral.
 - d. Beach fill shall not differ from the beach fill Compliance Values listed in Table 1. All material greater than 1 inch shall be separated. Dredged materials greater than 1 inch diameter shall be disposed of in the rock disposal area as shown in the permit drawings. The Contractor shall separate all dredged materials greater than 1 inch in diameter from the fill at the borrow area. Crushing of the rock and dispersing of it in the fill material shall not be allowed.

Table 1- Sediment Compliance Specifications

Sediment Parameter	Parameter Definition	Compliance Value
Max. Silt Content	passing #230 sieve	2%
Max. Shell Content*	retained on #4 sieve	5%
Munsell Color Value	moist Value (chroma = 1)	10YR hue/6.5-7 value/1-2 chroma
The beach fill material shall not contain construction debris, toxic material, other foreign matter, coarse gravel or rocks.		

*Shell Content is used as the indicator of fine gravel content for the implementation of quality control/quality assurance procedures.

9. Sediment quality shall be assessed as outlined in the Sediment QA/QC Plan dated June 2013 (received on June 27, 2013). Any occurrences of placement of material not in compliance with the Plan shall be handled according to the protocols set forth in the Sediment QA/QC plan. The sediment testing result shall be submitted to the JCP Compliance Officer within 90 days following the completion of beach construction. The Sediment QC/QA plan includes the following:
 - a. If during construction, the Permittee or Engineer determines that the beach fill material does not comply with the sediment compliance specifications, measures shall be taken to avoid further placement of noncompliant fill, and the sediment inspection results shall be reported to the JCP Compliance Officer.
 - b. The Permittee shall submit post-construction sediment testing results, and an analysis report as outlined in the Sediment QC/QA plan, to the JCP Compliance Officer within 90 days following beach construction. The sediment testing results shall be certified by a P.E. or P.G. from the testing laboratory. A summary table of the sediment samples and test results for the sediment compliance parameters, as outlined in Table 1 of the Sediment QC/QA plan, shall accompany the complete set of laboratory testing results. A statement of how the placed fill material compares to the sediment analysis and volume calculations from the geotechnical investigation shall be included in the sediment testing results report.

A post-remediation report containing the site map, sediment analysis and volume of noncompliant fill material removed and replaced shall be submitted to the JCP Compliance Officer within 7 days following completion of remediation activities.

Manatee Protection Conditions

10. During all construction authorized by this permit and subsequent to authorization of incidental take by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS), in accordance with Florida Statute 161.041 (5), 379.2431 (1), the Permittee shall comply with the following conditions intended to protect manatees from direct project effects:
 - a. All personnel associated with the project shall be instructed about the presence of marine turtles, manatees and manatee speed zones, and the need to avoid collisions with (and injury to) these protected marine species. The Permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing or killing manatees, which are protected under the Marine Mammal Protection Act, the Endangered Species Act and the Florida Manatee Sanctuary Act.
 - b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels shall follow routes of deep water whenever possible.
 - c. Siltation or turbidity barriers, if used, shall be made of material in which manatees and marine turtles cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid entanglement or entrapment. Barriers must not impede manatee or marine turtle movement.
 - d. All on-site project personnel are responsible for observing water-related activities for the presence of marine turtles and manatee(s). **All in-water operations, including vessels, shall be shutdown if a marine turtle or manatee comes within 50 feet of the operation.** Activities shall not resume until the animal(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the animal(s) has not reappeared within 50 feet of the operation. Animals shall not be herded away or harassed into leaving.
 - e. Any collision with, or injury to, a marine turtle or manatee shall be reported immediately to the FWC Hotline at 1-888-404-3922, and to FWC at ImperiledSpecies@myFWC.com. Collision and/or injury should also be reported to the FWS in Jacksonville at 1-904-731-3336.
 - f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the Permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the

requirements for “Idle Speed/No Wake” and the shutdown of in-water operations must be posted in a location that is prominently visible to all personnel engaged in water-related activities. Approved signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.



- g. All personnel associated with the project shall be instructed about the potential presence of nesting shorebirds and the need to avoid Take of (including disturbance to) these protected species.
- h. All vehicles shall be operated in accordance with the FWC’s Best Management Practices for Operating Vehicles on the Beach (<http://myfwc.com/conservation/you-serve/wildlife/beach-driving/>). Specifically, the vehicle must be operated at a speed <6 mph and run at or below the high-tide line.

Hopper Dredging

- 11. In the event a hopper dredge is utilized for this project, the following requirements shall be met in addition to the Terms and Conditions of the applicable NMFS Regional Biological Opinion for Hopper Dredging:

- a. Handling of captured sea turtles or sea turtle shall be conducted only by persons with prior experience and training in these activities and who is duly authorized to conduct such activities through a valid Marine Turtle Permit issued by the FWC, pursuant to Florida Administrative Code (FAC) 68E-1.
- b. Standard operating procedure shall be that dredging pumps be disengaged by the operator, or the draghead bypass valve be open and in use when the dragheads are not firmly on the bottom, to minimize impingement or entrainment of sea turtles within the water column. This precaution is especially important during the cleanup phase of dredging operations.
- c. A deflector draghead shall be used on all hopper dredges, in all channels, at all times of the year.
- d. The Sea Turtle Stranding and Salvage Network (STSSN) Coordinator shall be notified at Allen.Foley@myfwc.com at the start-up and completion of hopper dredging operations. In the event of capturing or recovering sea turtles or sea turtle parts, the STSSN should be contacted at SeaTurtleStranding@myfwc.com
- e. Relocation trawling or non-capture trawling shall be implemented in accordance with the applicable NMFS Biological Opinion and Incidental Take authorization. Any activity involving the use of nets to harass and/or to capture and handle marine turtles in Florida waters requires a Marine Turtle Permit from FWC.

The Permittee or their contractor shall e-mail (MTP@MyFWC.com) weekly reports to the Imperiled Species Management section on Friday each week that trawling is conducted in Florida waters. These weekly reports shall include: the species and number of turtles captured in Florida waters, general health, and release information. A summary (FWC provided Excel spreadsheet) of all trawling activity, including non-capture trawling, and all turtles captured in Florida waters, including all measurements, the latitude and longitude (in decimal degrees) of captures and tow start-stop points, and times for the start-stop points of the tows, including those tows on which no turtles are captured, shall be submitted to MTP@myfwc.com by January 15 of the following year or at the end of the project.

Marine Turtle Nesting Beach Protection

12. All derelict concrete, metal, and coastal armoring material and other debris shall be removed from the beach prior to any material placement to the maximum extent practicable. If debris removal activities will take place during shorebird breeding or sea turtle nesting seasons, the work shall be conducted during daylight hours only and shall not commence until completion of daily seabird, shorebird or sea turtle surveys each day.

All excavations and temporary alterations of the beach topography shall be filled or leveled to the natural beach profile prior to 9 p.m. each day unless otherwise authorized.

13. **Pre-Construction Meeting:** A meeting between representatives of the contractor, the FWS, the FWC, the permitted sea turtle surveyor and other species surveyors as appropriate, shall be held prior to commencement of work on projects. Advance notice of at least 10 business days shall be provided prior to conducting this meeting. The meeting will provide an opportunity for explanation and/or clarification of the protection measures, as well as additional guidelines when construction occurs during nesting season, such as staging equipment and reporting within the work area, as well as follow up meetings during construction.
14. Beach nourishment shall be started after October 31 and be completed before May 1.
15. Construction-related activities are authorized to occur on the nesting beach (seaward of existing coastal armoring structures or the dune crest) at the beginning and end of the sea turtle nesting season (March 1 through April 30 and November 1 through November 30) under the following conditions:
 - a. A daily marine turtle nest survey of the nesting beach in the vicinity of the project (including areas of beach access) shall be conducted starting March 1 and continue through November 30 during the year of construction. In other years, daily surveys shall begin March 1 and continue through October 15. Surveys shall be conducted daily between sunrise and 9 a.m. and shall continue until the last marked nest has hatched to assess hatching success.
 - b. For sand placement projects that occur during the period from March 1 through April 30 or November 1 through November 30, daily early morning surveys (before 9 a.m.) shall be conducted for sea turtle nests and eggs shall be relocated per the following requirements:
 - i. Only those nests on the nourished beach that may be affected by the construction activities shall be relocated. Nests requiring relocation shall be moved no later than 9 a.m. the morning following deposition to a nearby self-release beach site in a secure setting, where artificial lighting will not interfere with hatchling orientation and that has been approved by FWC. Relocated nests shall not be placed in organized groupings. Relocated nests shall be randomly staggered along the length and width of the beach, in settings that are not expected to experience daily inundation by high tides or known to routinely experience severe erosion and egg loss, or that are subject to artificial lighting. Nest relocations in association with construction activities shall cease when sand placement activities no longer threaten nests.

- ii. Nests deposited within areas where construction activities have ceased or will not occur for 65 days, or nests laid in the nourished berm prior to tilling, shall be marked and left in place unless other factors threaten the success of the nest. The turtle permit holder shall install an on-beach marker at the nest site and/or a secondary marker at a point as far landward as possible to assure that future location of the nest will be possible should the on-beach marker be lost. No activity shall occur within this area, nor shall any activities occur that could result in impacts to the nest. Nest sites shall be inspected daily to assure nest markers remain in place and the nest has not been disturbed by the project activity.
 - c. No construction activity may commence until completion of the marine turtle survey each day.
- 16. It is the responsibility of the Permittee to ensure that the project area and access sites are surveyed for marine turtle nesting activity. Nesting surveys and egg relocations shall only be conducted by persons with prior experience and training in these activities and who are duly authorized to conduct such activities through a valid permit issued by FWC, pursuant to F.A.C 68E-1. Please contact FWC's Marine Turtle Management Program in Tequesta at MTP@myfwc.com for information on the permit holder in the project area.
- 17. During the sea turtle nesting season, the contractor shall not extend the beach fill more than 500 feet along the shoreline between dusk and the following day until the daily nesting survey has been completed and the beach cleared for fill advancement. An exception to this may occur if there is permitted sea turtle surveyor present on-site to ensure no nesting and hatching sea turtles are present within the extended work area. If the 500 feet is not feasible for the project, the Permittee may submit a request for an alternate distance to FWC, and FWC will decide if that distance is acceptable during the preconstruction meeting. Once the beach has been cleared and the necessary nest relocations have been completed, the contractor will be allowed to proceed with the placement of fill during daylight hours until dusk, at which time the 500-foot length limitation shall apply.
- 18. During the period from March 1 through April 30, daytime surveys shall be conducted for leatherback sea turtle nests beginning March 1. Nighttime surveys for leatherback sea turtles shall begin when the first leatherback crawl is recorded within the project or adjacent beach area through April 30, or until completion of the project (whichever is earliest). Nightly nesting surveys shall be conducted from 9 p.m. until 6 a.m. The project area shall be surveyed at 1-hour intervals (since leatherbacks require at least 1.5 hours to complete nesting, this will ensure all nesting leatherbacks are encountered) and eggs shall be relocated per the preceding requirements.
- 19. Sand compaction shall be monitored in the area of sand placement immediately after completion of the project, and prior to April 15th, for three (3) subsequent years.

Compaction shall be monitored in accordance with a protocol agreed to by the FWS, FWC and the Permittee. The requirement for compaction monitoring can be eliminated if the decision is made to till regardless of post-construction compaction levels. Out-year compaction monitoring and remediation are not required if placed material no longer remains on the beach.

At a minimum, the protocol below shall be followed. If the average value for any depth exceeds 500 pounds per square inch (psi) for any two or more adjacent stations, then that area shall be tilled immediately prior to the following date listed above. If values exceeding 500 psi are distributed throughout the project area, but in no case do those values exist at two adjacent stations at the same depth, then consultation with the FWC or FWS will be required to determine if tilling is required. If a few values exceeding 500 psi are present randomly within the project area, tilling will not be required.

- a. Compaction sampling stations shall be located at 500-foot intervals along the project area. One station shall be at the seaward edge of the dune/bulkhead line (when material is placed in this area), and one station shall be midway between the dune line and the high water line (normal wrack line).
 - b. At each station, the cone penetrometer shall be pushed to a depth of 6, 12 and 18 inches, three times at each depth (three replicates). Material may be removed from the hole if necessary to ensure accurate readings of successive levels of sediment. The penetrometer may need to be reset between pushes, especially if sediment layering exists. Layers of highly compact material may lie over less compact layers. Replicates shall be located as close to each other as possible, without interacting with the previous hole and/or disturbed sediments. The three replicate compaction values for each depth shall be averaged to produce final values for each depth at each station. Reports shall include all 18 values for each transect line, and the final 6 averaged compaction values.
 - c. No compaction sampling shall occur within 300 feet of any shorebird nest.
 - d. Any vehicles operated on the beach in association with compaction surveys shall operate in accordance with the FWC's Best Management Practices for Operating Vehicles on the Beach (<http://myfwc.com/conservation/you-protect/conservation/wildlife/beach-driving/>).
20. If tilling is required as specified above, the area shall be tilled to a depth of 36 inches. All tilling activity shall be completed prior to the marine turtle nesting season. If tilling occurs during shorebird nesting season, shorebird surveys prior to tilling shall be required per the Shorebird Conditions included within this document. It is the responsibility of the contractors to avoid tilling, scarp removal, or dune vegetation planting in areas where nesting birds are present. Each pass of the tilling equipment shall be overlapped to allow thorough and even tilling. If the project is completed during the marine turtle nesting

season, tilling shall not be performed in areas where nests have been left in place or relocated. If compaction measurements are taken, a report on the results of the compaction monitoring shall be submitted electronically to FWC at marineturtle@myfwc.com prior to any tilling actions being taken.

- a. No tilling shall occur within 300 feet of any shorebird nest.
 - b. If flightless shorebird young are observed within the work zone or equipment travel corridor, a Shorebird Monitor shall be present during the operation to ensure that equipment does not operate within 300 feet of the flightless young.
 - c. A relatively even surface, with no deep ruts or furrows, shall be created during tilling. To do this, chain-linked fencing or other material shall be dragged over those areas as necessary after tilling.
 - d. Tilling shall occur landward of the wrack line and avoid all vegetated areas 3 square feet or greater with a 3-foot buffer around the vegetated areas. The slope between the mean high water line and the mean low water line shall be maintained in such a manner as to approximate natural slopes.
 - e. Any vehicles operated on the beach in association with tilling shall operate in accordance with the FWC's Best Management Practices for Operating Vehicles on the Beach (<http://myfwc.com/conservation/you- conserve/wildlife/beach-driving/>).
 - f. Weekly visual surveys for escarpments along the project area shall be made immediately after completion of the sand placement project during sea turtle nesting season, and during March 15 to April 15, for three (3) subsequent years if sand from the project still remains on the beach. Weekly reports shall be submitted by Friday each week to marineturtle@myfwc.com.
21. Escarpments that interfere with sea turtle nesting or that exceed 18 inches in height for a distance of at least 100 feet shall be leveled and the beach profile shall be reconfigured to minimize scarp formation by April 15. Any escarpment removal shall be reported by location to FWC. If the project is completed during the sea turtle nesting and hatching season, escarpments may be required to be leveled immediately, while protecting nests that have been relocated or left in place. If, during the nesting and hatching season, there is any subsequent reformation of escarpments that interfere with sea turtle nesting or that exceed 18 inches in height for a distance of 100 feet, the Permittee shall immediately contact FWC to determine the appropriate action to be taken. If it is determined that escarpment leveling is required during the nesting or hatching season, the FWS or FWC will provide a brief written authorization that describes methods to be used to reduce the likelihood of impacting existing nests. An annual summary of escarpment surveys and actions taken shall be submitted electronically to marineturtle@myfwc.com along with

the annual summary as described below. If escarpment removal occurs during shorebird breeding season, shorebirds surveys shall be required prior to removal per the *Shorebird Conditions* included within this document. (NOTE: Out-year escarpment monitoring and remediation are not required if placed material no longer remains on the dry beach).

- a. No heavy equipment shall operate within 300 feet of any shorebird nest.
- b. If flightless shorebird young are observed within the work zone or equipment travel corridor, a Shorebird Monitor shall be present during the operation to ensure that equipment does not operate within 300 feet of the flightless young.
- c. Any vehicles operated on the beach in association with escarpment surveys or removal shall operate in accordance with the FWC's Best Management Practices for Operating Vehicles on the Beach (<http://myfwc.com/conservation/you-conserve/wildlife/beach-driving/>).
- d. All Terms and Conditions in the FWS Programmatic Piping Plover Biological Opinion, dated May 22, 2013, shall be met as required in that document.
- e. Staging areas for construction equipment shall be located off the beach from March 1 through April 30 and November 1 through November 30, if off-beach staging areas are available. Nighttime storage of construction equipment not in use shall be off the beach to minimize disturbance to sea turtle nesting and hatching activities. In addition, all construction pipes that are placed on the beach shall be located as far landward as possible without compromising the integrity of the existing or reconstructed dune system. Pipes placed parallel to the dune shall be 5 to 10 feet away from the toe of the dune. Temporary storage of pipes shall be off the beach to the maximum extent possible. If the pipes shall be on the beach, they shall be placed in a manner that will minimize the impact to nesting habitat and shall not compromise the integrity of the dune systems.

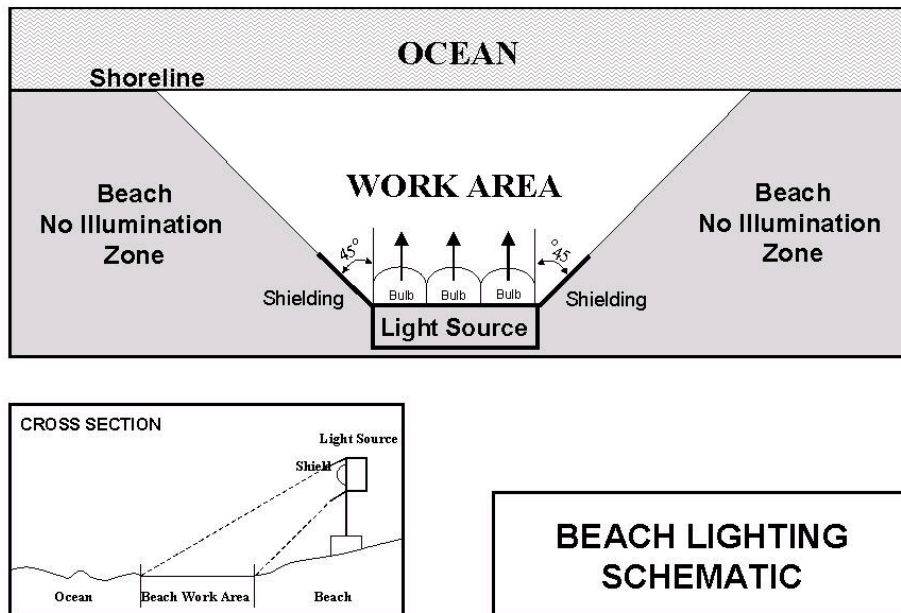


Figure 1.

Direct lighting of the beach and nearshore waters shall be limited to the immediate construction area from March 1 through April 30 and November 1 through November 30, and shall comply with safety requirements. Lighting on offshore or onshore equipment shall be minimized through reduction, shielding, lowering, and appropriate placement to avoid excessive illumination of the water's surface and nesting beach while meeting all Coast Guard, EM 385-1-1, and OSHA requirements. Light intensity of lighting equipment shall be reduced to the minimum standard required by OSHA for General Construction areas, in order not to misdirect sea turtles. Shields shall be affixed to the light housing and be large enough to block light from all lamps from being transmitted outside the construction area (see **Figure 1**).

22. In the event a sea turtle nest is excavated during construction activities, the permitted person responsible for egg relocation for the project shall be notified immediately so the eggs can be moved to a suitable relocation site.
23. Upon locating a dead or injured sea turtle adult, hatchling, or egg that may have been harmed or destroyed as a direct or indirect result of the project, the Permittee shall be responsible for notifying the Sea Turtle Stranding and Salvage Network (STSSN) at SeaTurtleStranding@myfwc.com. Care shall be taken in handling injured sea turtles or

eggs to ensure effective treatment or disposition, and in handling dead specimens to preserve biological materials in the best possible state for later analysis.

Nesting Seabird and Shorebird Protection Conditions

22. Nesting seabird and shorebird (i.e. shorebird) surveys should be conducted by trained, dedicated individuals (Bird Monitor) with proven shorebird identification skills and avian survey experience. A list of candidate Bird Monitors, with their contact information, summary of qualifications, including bird identification skills, and avian survey experience, shall be provided to FWC. This information shall be submitted to the FWC Regional Species Conservation Biologist (**Figure 2**) prior to any construction or hiring for shorebird surveys for revision and consultation. Bird Monitors shall use the following survey protocols:

- a. Bird Monitors shall review and become familiar with the general information, employ the data collection protocol, and implement data entry procedures outlined on the FWC’s Florida Shorebird Database (FSD) website (www.FLShorebirdDatabase.org). An outline of data to be collected, including downloadable field data sheets, is available on the website.
- b. Breeding season varies by species. Most species have completed the breeding cycle by September 1, but flightless young may be present through September. The following dates are based on the best available information regarding ranges and habitat use by species around the state:

Palm Beach County spoil islands & esuaries	15 March -1September
Palm Beach County coastal beaches	1 April-1 September

Breeding season surveys shall begin on the first day of the breeding season, or 10 days prior to project commencement (including surveying activities and other pre-construction presence on the beach), whichever is later. Surveys shall be conducted through August 31st or until all breeding activity has concluded, whichever is later.

- c. Breeding season surveys shall be conducted in all potential beach-nesting bird habitats within the project boundaries that may be impacted by construction or pre-construction activities. Areas that do not include project-related activities may be excluded from surveys. One or more shorebird survey routes shall be established in the FSD website to cover these areas.
- d. During the pre-construction and construction phases of the project, surveys for detecting breeding activity and the presence of flightless chicks shall be completed on a daily basis prior to movement of equipment, operation of vehicles,

or other activities that could potentially disrupt breeding behavior or cause harm to the birds or their eggs or young.

- e. Surveys shall be conducted by walking the length of the project area and visually surveying for the presence of shorebirds exhibiting breeding behavior, shorebird/seabird chicks or shorebird/seabird juveniles, as outlined in the FSD *Breeding Bird Protocol for Shorebirds and Seabirds*. Use of binoculars is required.

If an ATV or other vehicle is needed to cover large project areas, operators shall adhere to the FWC's Best Management Practices for Operating Vehicles on the Beach (<http://myfwc.com/conservation/you- conserve/wildlife/beach-driving/>). Specifically, the vehicle shall be operated at a speed <6 mph and run at or below the high-tide line. The Bird Monitor shall stop at no greater than 200 meter intervals to visually inspect for breeding activity.

- f. Once breeding is confirmed by the presence of a scrape, eggs or young, the Bird Monitor shall notify the FWC Regional Species Conservation Biologist (**Figure 2**) within 24 hours. All breeding activity shall be reported to the FSD website within one week of data collection.

23. **Seabird and Shorebird Buffer Zones and Travel Corridors:** Within the project area, the Permittee shall establish a disturbance-free buffer zone around any location where shorebirds have been engaged in breeding behavior, including territory defense. A 300-foot-wide buffer is considered adequate based on published studies. However, a smaller, site-specific buffer may be implemented upon approval by the FWC Regional Species Conservation Biologist (**Figure 2**) as needed. All sources of human disturbance (including pedestrians, pets and vehicles) shall be prohibited in the buffer zone.

- a. The Bird Monitor shall keep breeding sites under sufficient surveillance to determine if birds appear agitated or disturbed by construction or other activities in adjacent areas. If birds do appear to be agitated or disturbed by these activities, then the width of the buffer zone shall be increased immediately to a sufficient size to protect breeding birds.
- b. Reasonable and traditional pedestrian access should not be blocked where breeding birds will tolerate pedestrian traffic. This is generally the case with lateral movement of beach-goers walking parallel to the beach at or below the highest tide line. Pedestrian traffic may also be tolerated when breeding was initiated within 300 feet of an established beach access pathway. The Permittee shall work with the FWC Regional Species Biologist to determine if pedestrian access can be accommodated without compromising nesting success.

- c. Designated buffer zones shall be marked with posts, twine and signs stating “Do Not Enter, Important Nesting Area” or similar language around the perimeter that includes the name and a phone number of the entity responsible for posting. Posts should not exceed 3 feet in height once installed. Symbolic fencing (twine, string or rope) should be placed between all posts at least 2.5 feet above the ground and rendered clearly visible to pedestrians. If pedestrian pathways are approved by the FWC Regional Species Conservation Biologist within the 300-foot buffer zone, these should be clearly marked. The posting shall be maintained in good repair until breeding is completed or terminated. Although solitary nesters may leave the buffer zone with their chicks, the posted area continues to provide a potential refuge for the family until breeding is complete. Breeding is not considered to be completed until all chicks have fledged.
 - d. No construction activities, pedestrians, movement of vehicles or stockpiling of equipment shall be allowed within the buffer area.
 - e. Travel corridors shall be designated and marked outside the buffer areas so as not to cause disturbance to breeding birds. Heavy equipment, other vehicles or pedestrians may transit past breeding areas in these corridors. However, other activities such as stopping or turning shall be prohibited within the designated travel corridors adjacent to the breeding site. When flightless chicks are present within or adjacent to travel corridors, movement of vehicles shall be accompanied by the Bird Monitor who will ensure no chicks are in the path of the moving vehicle and no tracks capable of trapping flightless chicks result.
 - e. To discourage nesting within the travel corridor, it is recommended that the Permittee should maintain some activity within these corridors on a daily basis, without disturbing any nesting shorebirds documented on site or interfering with sea turtle nesting, especially when those corridors are established prior to commencement of construction.
24. **Notification.** If shorebird breeding occurs within the project area, a bulletin board shall be placed and maintained in the construction staging area with the location map of the construction site showing the bird breeding areas and a warning, clearly visible, stating that “NESTING BIRDS ARE PROTECTED BY LAW INCLUDING THE FLORIDA ENDANGERED AND THREATENED SPECIES ACT AND THE STATE and FEDERAL MIGRATORY BIRD ACTS”.

Post-construction Shorebird Protection Conditions:

If beach cleaning will occur on the nourished beach, a minimum of 30% of the biotic material within the wrack line will be left on the beach post-cleaning at the strand line in a natural configuration to ensure that the nourished beach re-establishes its function as foraging habitat for shorebirds. This shall occur for as long as placed sand remains on the beach.

Post-construction Monitoring and Reporting Marine Turtle Protection Conditions:

25. Reports on all marine turtle nesting activity shall be provided for the initial marine turtle nesting (*May 1 through September 15*) and hatching (*through October 31*) season and for up to three additional nesting seasons as follows:
- a. For the initial nesting season and the following year, the number and type of emergences (nests or false crawls) shall be reported per species in accordance with the **Table 2**. An additional year of nesting surveys may be required if nesting success for any species on the nourished beach is less than 40%.
 - b. For the initial nesting season, reproductive success shall be reported per species in accordance with the **Table 2**. Reproductive success shall be reported for all sea turtle nests if possible. Otherwise a statistically significant number of nests for each species shall be reported.
 - c. In the event that the reproductive success documented by species meets or exceeds required criteria in accordance with **Table 2**, monitoring for reproductive success shall be recommended, but not required for the second year post-construction.
 - d. Monitoring of nesting activity in the seasons following construction shall include daily surveys and any additional measures authorized by the FWC. Summaries shall include all crawl activity, nesting success rates, hatching success of all relocated nests, hatching success of a representative sampling of nests left in place (if any) by species, project name, applicable project permit numbers and dates of construction.

Data shall be reported for the nourished areas and shall include number of nests lost to erosion or washed out. Summaries of nesting activity shall be submitted in electronic format (Excel spreadsheets) to the FWC Imperiled Species Management section at MTP@myfwc.com. All summaries shall be submitted by January 15 of the following year. The FWC Excel spreadsheet is available upon request from MTP@myfwc.com.

26. Two lighting surveys shall be conducted of all artificial lighting visible from the nourished berm. The first survey shall be conducted prior to construction, with a second survey conducted immediately post-construction. The survey shall be conducted to include a landward view from the seaward most extent of the new beach profile. The survey should follow standard techniques for such a survey and include number and type of visible lights, location of lights and photo documentation. For each light source visible, it must be documented that the property owner(s) have been notified of the problem light, with recommendations for correcting the light. Recommendations shall be in accordance with the Florida Model Lighting Ordinance for Marine Turtle

Protection (Chapter 62B-55, F.A.C.) and local lighting restrictions. In addition to local code enforcement, actions shall be taken by the Permittee to ensure that no lights or light sources are visible from the newly elevated beach within their respective areas. A report summarizing all lights visible shall be submitted to FWC Imperiled Species Management Section at marineturtle@myfwc.com by the 1st of the month following the survey. A summary report shall be provided, documenting what corrective actions have been taken, and all compliance and enforcement actions shall also be submitted by December 15 of that year. After the annual report is completed, a meeting shall be set up with the Permittee, FWC and the FWS to discuss the survey report, as well as any documented sea turtle disorientations in or adjacent to the project area.

Table 1. Marine Turtle Monitoring:

Metric	Duration	Variable	Criterion
Nesting Success	Year of construction, one year to two or three years post construction if placed sand remains on beach and variable does not meet criterion based on previous year	Number of nests and non-nesting emergences by day by species	40% or greater
Hatching Success	Year of construction and one to three years post construction if placed sand remains on beach and variable does not meet criterion based on previous year	Number of hatchlings by species to completely escape egg	Average of 60% or greater (data must include washed out nests)
Emergence Success	Year of construction and one to three years post construction if placed sand remains on beach and variable does not meet success criterion based on previous year	Number of hatchlings by species to emerge from nest onto beach	Average must not be significantly different than the average hatching success
Disorientation	Year of construction and one to three years post construction if placed sand remains on beach	Number of nests and individuals that misorient or disorient	
Lighting Surveys	Two surveys the year following construction , one survey between May 1 and May 15 and second survey between July 15 and August 1	Number, location and photographs of lights visible from nourished berm, corrective actions and notifications made	100% reduction in lights visible from nourished berm within one to two month period
Compaction	Not required if the beach is tilled prior to nesting season each year placed sand remains on beach	Shear resistance	Less than 500 psi
Escarpment Surveys	Weekly during nesting season for up to three years each year placed sand remains on the beach	Number of scarps 18 inches or greater extending for more than 100 feet that persist for more than 2 weeks	Successful remediation of all persistent scarps as needed

Figure 2.
Florida Fish and Wildlife Conservation Commission
Regional Species Biologist - Contacts for Shorebird Issues

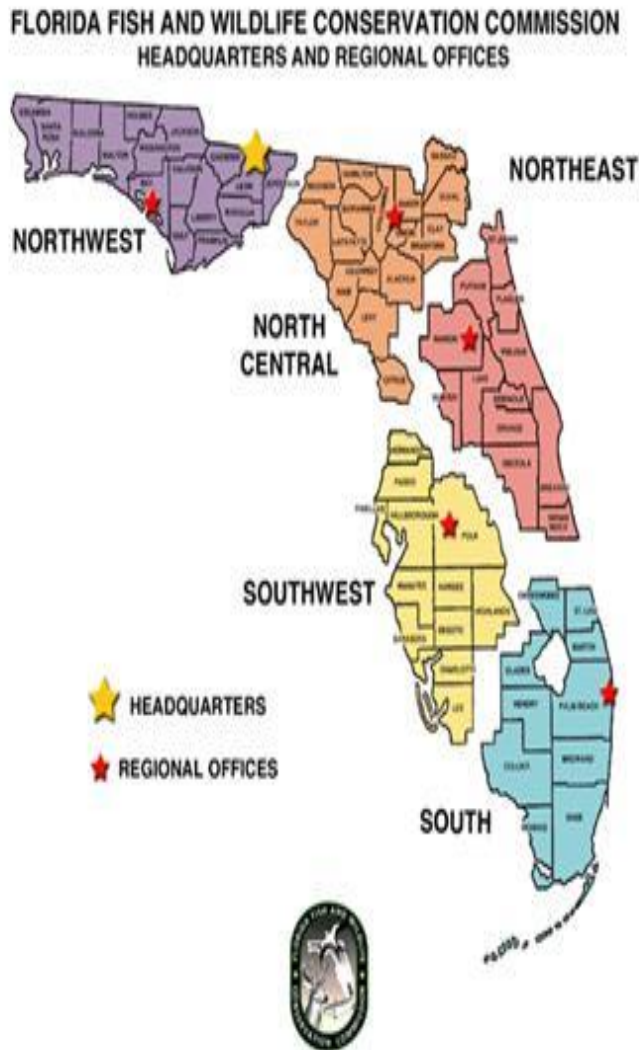
Northwest Region
Dr. John Himes
FL Fish and Wildlife
Conservation Commission
3911 Highway 2321
Panama City, FL 32409-1658
(850) 265-3676

North Central Region
Dr. Terry Doonan
FL Fish and Wildlife
Conservation Commission
P.O. Box 177
OluStee, FL 32072
(386) 758-0525

Northeast Region
Mr. Alex Kropp
FL Fish and Wildlife
Conservation Commission
1239 S.W. 10th Street
Ocala, FL 34474-2797
(352) 732-1225

Southwest Region
Ms. Nancy Douglass
FL Fish and Wildlife
Conservation Commission
3900 Drane Field Road
Lakeland, FL 33811-1299
(863) 648-3205

South Region
Mr. Ricardo Zambrano
FL Fish and Wildlife
Conservation Commission
8535 Northlake Boulevard
West Palm Beach, FL 33412
(561) 625-5122



27. When discharging slurried sand onto the beach from a pipeline, the Permittee shall employ best management practices (BMPs) to reduce turbidity. At a minimum, these BMPs shall include the following:
- a. Use of shore-parallel sand dike to promote settlement of suspended sediment on the beach before return water from the dredged discharge reenters the Atlantic Ocean; and
 - b. A minimum set-back of 50 feet from open water, or at the landward end of the beach berm, whichever is less, for the pipeline discharge location.

28. Water Quality - Turbidity shall be monitored as follows:

Units: Nephelometric Turbidity Units (NTUs).

Frequency: Three (3) times per day, at least 4 hours apart, during all dredging and filling operations. Sampling shall be conducted **while the highest project-related turbidity levels are crossing the edge of the mixing zone**. Since turbidity levels can be related to pumping rates, the dredge pumping rates shall be recorded, and provided to the Department upon request. The compliance samples and the corresponding background samples shall be collected at approximately the same time, i.e., one shall immediately follow the other.

Location: Background: At surface, mid-depth, and (for sites with depths greater than 25 feet) 2 meters above the bottom, clearly outside the influence of any artificially generated turbidity plume or the influence of an outgoing inlet plume.

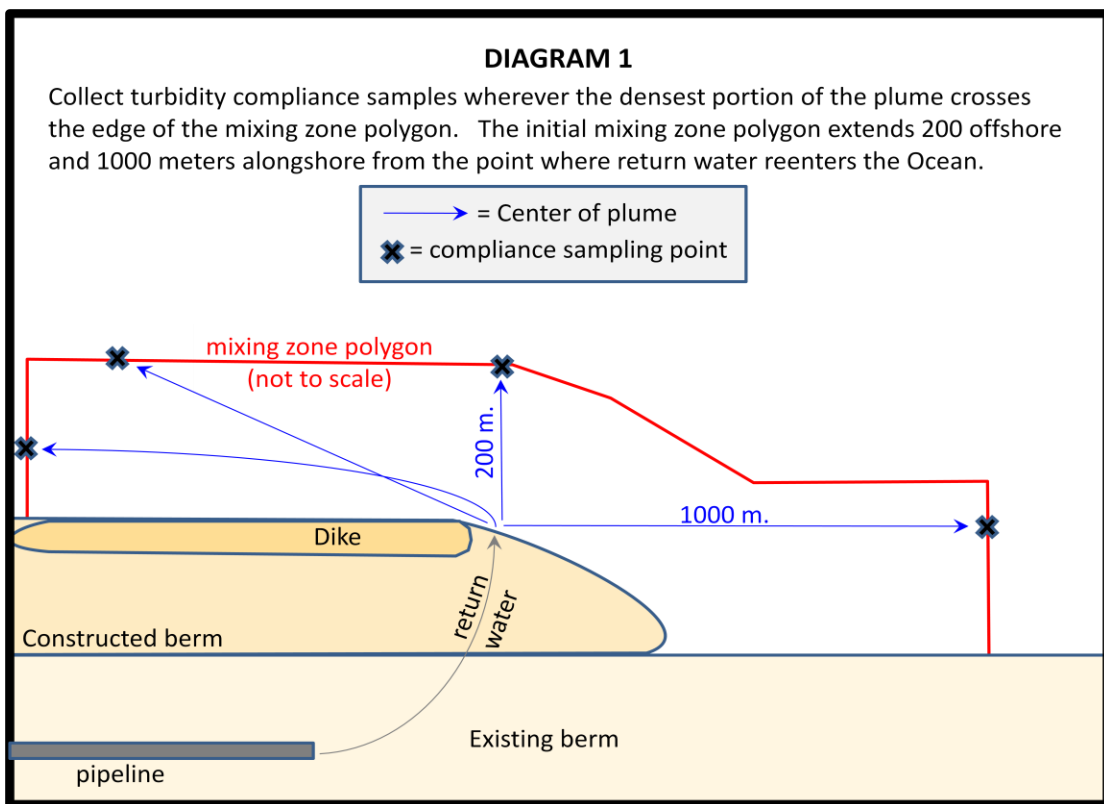
Borrow Site: Samples shall be collected at least 300 meters up-current from the source of turbidity at the dredge site.

Beach Site: Samples shall be collected at least 300 meters up-current from any portion of the beach that has been, or is being, filled during the current construction event, at the same distances offshore as the associated compliance samples.

Compliance: At surface, mid-depth, and (for sites with depths greater than 25 feet) 2 meters above the bottom.

Borrow Site: Samples shall be collected 150 meters down-current from the dredge head, **and** from any other source of turbidity generated by the dredge, in the densest portion of any visible turbidity plume. If no plume is visible, follow the likely direction of flow.

Beach Site: Samples shall be collected where the densest portion of the turbidity plume crosses the edge of the mixing zone polygon, which measures up to 200 meters offshore and up to 1,000 meters alongshore from the point where the return water from the dredged discharge reenters the Atlantic Ocean. *Note: If the plume flows parallel to the shoreline, the densest portion of the plume may be close to shore, in shallow water. In that case, it may be necessary to access the sampling location from the shore, in water that is too shallow for a boat. See Diagram 1.*



Intermediate Monitoring (required when using a mixing zone that exceeds 150 meters in size): At surface, mid-depth, and (for sites with depths greater than 25 feet) 2 meters above bottom. At points approximately 150, 500, and 750 meters downcurrent from the point where the return water from the dredged discharge reenters the Atlantic Ocean (if those points are located inside the mixing zone), within the densest portion of any visible turbidity plume generated by this project. These measurements will be used to calibrate the size of the mixing zone for future events.

Calibration: The instruments used to measure turbidity shall be fully calibrated with primary standards within one month of the commencement of the project, and at least once a month throughout the project. Calibration with secondary standards shall be verified each morning prior to use, after each time the instrument is turned on, and after field sampling using two secondary turbidity “standards” that bracket the anticipated turbidity samples. If the post-sampling calibration value deviates more than 8% from the previous calibration value, results shall be reported as estimated and a description of the problem shall be included in the field notes.

Analysis of turbidity samples shall be performed in compliance with DEP-SOP-001/01 FT 1600 Field Measurement of Turbidity:

<http://publicfiles.dep.state.fl.us/dear/sas/sopdoc/2008sops/ft1600.pdf>

If the turbidity monitoring protocol specified above prevents the collection of accurate data, the person in charge of the turbidity monitoring shall contact the JCP Compliance Officer to establish a more appropriate protocol. Once approved in writing by the Department, the new protocol shall be attached to the permit and shall be implemented without the need for a formal permit modification.

29. The **compliance** locations given above shall be considered the limits of the temporary mixing zone for turbidity allowed during construction. If monitoring reveals turbidity levels at the **compliance** sites that are greater than 29 NTUs above the corresponding background turbidity levels, construction activities shall **cease immediately** and not resume until corrective measures have been taken and turbidity has returned to acceptable levels. Any such occurrence shall also be immediately reported to the JCP Compliance Officer via email at JCP.Compliance@dep.state.fl.us and include in the subject line, “TURBIDITY EXCEEDANCE”, and the Project Name and Permit Number. Also notify the Department’s Southeast District office.

Any project-associated turbidity source other than dredging or fill placement for beach nourishment (e.g., scow or pipeline leakage) shall be monitored as close to the source as possible. If the turbidity level exceeds 29 NTUs above background, the construction activities related to the exceedance shall **cease immediately** and not resume until corrective measures have been taken and turbidity has returned to acceptable levels. This turbidity monitoring shall continue every hour until background turbidity levels are restored or until otherwise directed by the Department. The Permittee shall notify the Department, by separate email to the JCP Compliance Officer, of such an event within 24 hours of the time the Permittee first becomes aware of the discharge. The subject line of the email shall state “OTHER PROJECT-ASSOCIATED DISCHARGE, TURBIDITY EXCEEDANCE”.

When reporting a turbidity exceedance, the following information shall also be included:

- a. the Project Name;

- b. the Permit Number;
- c. location and level (NTUs above background) of the turbidity exceedance;
- d. the time and date that the exceedance occurred; and
- e. the time and date that construction ceased.

Prior to re-commencing the construction, a report shall be emailed to the Department with the same information that was included in the “Exceedance Report”, plus the following information:

- a. turbidity monitoring data collected during the shutdown documenting the decline in turbidity levels and achievement of acceptable levels;
- b. corrective measures that were taken; and
- c. cause of the exceedance.

30. **Turbidity Reports:** All turbidity monitoring data shall be submitted within one week of analysis. The data shall be presented in tabular format, indicating the measured turbidity levels at the compliance sites for each depth, the corresponding background levels at each depth and the number of NTUs over background at each depth. Any exceedances of the turbidity standard (29 NTUs above background) shall be highlighted in the table. In addition to the raw and processed data, the reports shall also contain the following information:

- a. time of day samples were taken;
- b. dates of sampling and analysis;
- c. GPS location of sample;
- d. depth of water body;
- e. depth of each sample;
- f. antecedent weather conditions, including wind direction and velocity;
- g. tidal stage and direction of flow;
- h. water temperature;

- i. a map, overlaid on an aerial photograph, indicating the sampling locations, dredging and discharge locations, and direction of flow;
 - j. a statement describing the methods used in collection, handling, storage and analysis of the samples;
 - k. a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection, calibration of the meter, accuracy of the data and precision of the GPS measurements;
 - l. When samples cannot be collected, include an explanation in the report. If unable to collect samples due to severe weather conditions, include a copy of a current report from a reliable, independent source, such as an online weather service.
31. **Physical Monitoring:** Monitoring and reporting of the permitted project shall be conducted in accordance with the Physical Monitoring Plan dated February 2013 and the conditions of this permit.

The approved Monitoring Plan can be revised at any later time by written request of the Permittee and with the written approval of the Department. If, subsequent to approval of the Monitoring Plan, there is a request for modification of the permit, the Department may require revised or additional monitoring requirements as a condition of approval of the permit modification.

- a. Topographic and bathymetric profile surveys of the beach and offshore shall be conducted within 90 days prior to commencement of construction, and within 60 days following completion of construction of the project. Thereafter, monitoring surveys shall be conducted annually for a period of three (3) years, then biennially until the next beach nourishment event or the expiration of the project design life, whichever occurs first. The monitoring surveys shall be conducted during a spring or summer month and repeated as close as practicable during that same month of the year. If the time period between the immediate post-construction survey and the first annual monitoring survey is less than six months, then the Permittee may request a postponement of the first monitoring survey until the following spring/summer. The request should be submitted as part of the cover letter for the post-construction report. A prior design survey of the beach and offshore may be submitted for the pre-construction survey if consistent with the other requirements of this condition.

The monitoring area shall include profile surveys at each of the Department of Environmental Protection's DNR reference monuments within the bounds of the beach fill area and along at least 5,000 feet of the adjacent shoreline, on both sides of the beach fill area. For those project areas that contain erosion control structures, such as groins or breakwaters, additional profile lines shall be surveyed

at a sufficient number of intermediate locations to accurately identify patterns of erosion and accretion within this subarea. All work activities and deliverables shall be conducted in accordance with the latest update of the Department's *Monitoring Standards for Beach Erosion Control Projects, Sections 01000 and 01100*.

- b. Bathymetric surveys of the borrow area(s) shall be conducted within 90 days prior to commencement of construction, and within 60 days following completion of construction of the project concurrently with the beach and offshore surveys required above. A prior design survey of the borrow area may be submitted for the pre-construction survey if consistent with the other requirements of this condition.

Survey grid lines across the borrow area(s) shall be spaced to provide sufficient detail for accurate volumetric calculations, but spaced not more than a maximum of 500 feet apart, and shall extend a minimum of 500 feet beyond the boundaries of the borrow site. For borrow sites located in tidal inlet shoals, bathymetric surveys of the entire shoal complex, including any attachment bars, shall be conducted unless otherwise specified by the Department, based upon the size of the shoal and the potential effects of the dredging on inlet processes. In all other aspects, work activities and deliverables shall be consistent with the Department's *Monitoring Standards for Beach Erosion Control Projects, Section 01200*.

- c. The Permittee shall submit an engineering report and the monitoring data to the JCP Compliance Officer within 90 days following completion of the post-construction survey and each annual or biennial monitoring survey.

The report shall summarize and discuss the data, the performance of the beach fill project, and identify erosion and accretion patterns within the monitored area. In addition, the report shall include a comparative review of project performance to performance expectations and identification of adverse impacts attributable to the project. The report shall specifically state the percentage of volume remaining and the project berm width or shoreline width remaining. Indicate the volume remaining, both above and below the mean high water line.

Appendices shall include plots of survey profiles and graphical representations of volumetric and shoreline position changes for the monitoring area. Results shall be analyzed for patterns, trends or changes between annual surveys and cumulatively since project construction.

- d. One electronic copy of the monitoring report, and one electronic copy of the survey data, shall be submitted to the JCP Compliance Officer. Failure to submit reports and data in a timely manner constitutes grounds for revocation of the

permit. When submitting any monitoring information, 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 Item No. [XX] of the approved Monitoring Plan for Permit No. 0303863-002-JC for the monitoring period [XX]."**

Monitoring reports shall be submitted by email to the JCP Compliance Officer and to the Department's Southeast District office. In the subject line of the reports, include the Project Name, Permit Number and the dates of the monitoring interval. Failure to submit reports in a timely manner constitutes grounds for revocation of the permit. When submitting this information to the Department, on the cover page to the submittal and at the top of each page, please state: "This information is provided in partial fulfillment of the monitoring requirements in Permit No. 0303863-002-JC, for the Jupiter-Carlin Nourishment Project."

32. If the Permittee is unable to complete at least two nourishment events within the 15-year life of this permit, they may request an extension of time to allow a second nourishment event to be completed. The time extension would be implemented through an administrative modification of the permit, with no application fee.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Martin K. Seeling, Administrator
Beaches, Inlets & Ports Program

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.



9/10/13

Deputy Clerk

Date

Attachments: Approved Permit Drawings (23 pages)
Sea Turtle and Smalltooth Sawfish Construction Conditions (March 23, 2006)

QA/QC Plan (dated June 2013)
Physical Monitoring Plan (dated February 2013)