



**UNITED STATES DEPARTMENT OF COMMERCE**

National Oceanic and Atmospheric Administration

**NATIONAL MARINE FISHERIES SERVICE**

Southeast Regional Office

263 13th Avenue South

St. Petersburg, Florida 33701-5505

<http://sero.nmfs.noaa.gov>

December 8, 2014

F/SER47:JK/pw

(Sent via Electronic Mail)

Colonel Alan Dodd, Commander  
U.S. Army Corps of Engineers, Jacksonville District  
Palm Beach Gardens Regulatory Office  
4400 PGA Boulevard, Suite 500  
Palm Beach Gardens, Florida 33140

Attention: Linda Knoeck

Dear Colonel Dodd:

NOAA's National Marine Fisheries Service (NMFS) reviewed Jacksonville District public notice SAJ-2008-02034 (SP-LCK) dated November 7, 2014. Broward County requests authorization to modify Port Everglades Inlet to facilitate collection, temporary storage, and transfer of sand to beaches south of the inlet. Based on surveys performed by Nova Southeastern University in August 2007 and March 2014, the project would directly impact approximately 26.77 acres from dredging and clearing of rubble substrate, including 10.12 acres of unconsolidated sand habitat and 16.65 acres of hardbottom. The hardbottom includes rubble/sand (10.08 acres), shoal crest (6.08 acres), limestone boulders (0.44 acres), granite boulders (0.01 acres), and channel wall (0.02 acres). Indirect impacts are expected within a temporary 300-meter-wide mixing zone around the direct impact area during project construction; the total indirect impact area contains 72.08 acres of unconsolidated sand, rubble/sand, colonized pavement, rubble/colonized pavements, shoal crest, ridge, channel wall, and boulders. The District determines the impacts to coral, coral reef, and hardbottom, designated Habitat Areas of Particular Concern (HAPC) by the South Atlantic Fishery Management Council (SAFMC), would have an adverse impact on Essential Fish Habitat (EFH) or federally managed fishery species. As the nation's federal trustee for the conservation and management of marine, estuarine, and anadromous fishery resources, the following comments and recommendations are made pursuant to authorities of the Fish and Wildlife Coordination Act and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

*Detailed Project Description*

Specifically, the applicant proposes to:

1. Create a sediment deposition basin (also referred to as a sand trap), on the northern side of the Port Everglades Inlet channel;
2. Improve and extend the existing north jetty;
3. Excavate large granite boulders within the western area of the proposed sand trap to be used for improvements to the north jetty;
4. Remove the westernmost portion of a submerged rubble spoil shoal located approximately 800 feet north of the inlet;
5. Construct a submerged rock rubble barrier at the eastern extent of the rubble shoal removal area;
6. Construct a small groin on the western end of the north jetty "notch";



7. Place of up to 30,000 cubic yards of available beach-compatible sand produced from sand trap construction along the shoreline immediately north of the inlet between Florida Department of Environmental Protection (FDEP) monument R-83.7 and the northern jetty;
8. Place available beach-compatible sand deposited in the sand trap along the shoreline immediately south of the inlet between the southern jetty and FDEP monument R-92;
9. Construct a small pipeline furrow below the limits of the federal navigation channel at Port Everglades Inlet to accommodate the temporary placement of hydraulic dredge pipeline between the sand trap and the beach south of the inlet during future maintenance events;
10. Conduct regular maintenance dredging of the sand trap and bypassing of sand of the Inlet to John U. Lloyd Beach State Park shoreline, south of the inlet;
11. Transfer and dispose dredged material to the Port Everglades Offshore Dredge Material Disposal Site (ODMDS).

Coral relocation is proposed as an impact minimization measure, however, a coral relocation plan has not been provided to NMFS. As compensatory mitigation, the applicant requests credit for re-exposing consolidated hardbottom (i.e. colonized pavement habitat) from partial removal of the rubble spoil, expanding the existing Broward County Coral Nursery Program with harvest and reattachment of “corals of opportunity,” and using limestone boulders to create new coral nursery habitat in sand bottom areas at least 45 feet from existing exposed hardbottom. The public notice states the exact location of the limestone boulders is still to be determined.

#### *Project History and Revisions to the Project Design*

By letter dated September 5, 2008, NMFS provided the Jacksonville District with EFH recommendations on a similar project coordinated via public notice dated August 6, 2008, under the same permit application number. It appears the most substantive differences between the current public notice and the project design NMFS previously reviewed is underwater blasting is no longer proposed, direct impacts have risen to 26.77 acres, and indirect impacts are now predicted to occur over a much larger area. The larger indirect impact area (72.08 acres) stems from a 300-meter-wide mixing zone, whereas the previous public notice had a 150-meter-wide mixing zone (44.45 acres). Other differences include reducing by approximately 6,000 cubic yards the amount of material to be placed at John U. Lloyd Beach State Park (item number 7 above) and decreasing the duration of the permit from 25 years to five years for construction and ten years for sand bypassing.

#### *EFH in the Project Area*

The summary description of EFH in the project area that NMFS provided in the letter dated September 5, 2008, does not require amendment to characterize the coral, coral reef, and hardbottom habitats located in direct impact areas. This summary was largely based on information contained the *Broward County Port Everglades Sand Bypass Project: Benthic Habitat Mapping and Assessment*, dated April 2008 and prepared by Nova Southeastern University. While the notice refers to an update and verification of the benthic habitat map in that occurred in 2014, NMFS has not received this additional information. Based on a review of aerial images, the coral, coral reef, and hardbottom habitats north of the federal channel within the extended indirect impact area are likely higher in quality than in other parts of the indirect impact area.

#### *Impacts to EFH*

NMFS expects the indirect impacts would result from dredge-induced sedimentation and turbidity. Additional information is needed on the expected indirect impacts (i.e., impact type, location, duration, and severity) for NMFS to evaluate them further. While the notice states the current project design reduces the amount of direct impacts to hardbottom habitats compared to the original project design, NMFS is unable to verify this without reviewing Nova’s March 2014 survey report. The overall direct impacts have increased by 0.65 acres, from 26.12 acres in the original public notice to 26.77 acres.

### *Beach Placement and Long-term Operation*

NMFS supports placement of sand along the beach at John U. Lloyd Beach State Park so long as the material is compatible and does not exceed the design template used for beach nourishment during 2005 and 2006. Any request to place more than 180,000 cubic yards of material per disposal event should be coordinated with NMFS and other resource agencies. The applicant requests the permit duration be five years for construction and ten years for sand bypassing. NMFS can support this duration provided the applicant monitors effects of sand placement along the beach at John U. Lloyd Beach State Park to ensure hardbottom and coral habitat near the park are not impacted from the frequent placement of sand.

### *Biological Monitoring*

The habitat assessment estimates several tens of thousands of stony corals and octocorals occur within the impact areas. A plan for pre-construction, during, and post-construction biological monitoring of the coral resources within the indirect impact area is needed. This plan should employ specific measures to monitor for sedimentation impacts. NMFS recommends use of standing sediment observations in lieu of sedimentation plates. In addition, corrective actions should be identified in the plan should monitoring show corals, coral reef, or hardbottom are impacted above the anticipated levels.

### *Compensatory Mitigation Plan*

In general, NMFS finds the proposed compensatory mitigation acceptable; however, more detail is needed describing results from a functional assessment and how plan components target direct and indirect impacts. NMFS also recommends the plan include a restoration action or other beneficial use of the “corals of opportunity” if the functional assessment shows additional mitigation is needed. The final plan should include objectives of the mitigation, locations of boulder deployment, performance standards, monitoring protocols, and a monitoring schedule.

## **Conservation Recommendations**

NMFS concludes the proposed dredging of coral, coral reef, and hardbottom to create a sand trap would adversely impact EFH. Section 305(b)(4)(A) of the Magnuson-Stevens Act requires NMFS to provide EFH conservation recommendations when an activity is expected to adversely impact EFH. In consideration of this requirement, NMFS provides the following:

1. The results of the updated habitat mapping and assessment of all impact areas, including indirect impacts, shall be provided to NMFS. For each impact type, the assessment shall include impact location, duration, and severity.
2. A biological monitoring plan is needed that gauges actual impacts relative to pre-construction baseline conditions and includes sedimentation monitoring and triggers for corrective actions and additional compensatory mitigation when appropriate.
3. The permit shall include a coral relocation. At a minimum, the plan shall describe relocation of scleractinian corals greater than or equal to 10 centimeters in diameter and octocorals from the genera *Gorgonia*, *Eunicea*, *Plexaura*, *Plexaurella*, *Muricea*, and *Pterogorgia*.
4. Placement of sand along the beach at John U. Lloyd State Park shall not exceed 180,000 cubic yards of material per disposal event without further coordination with NMFS.

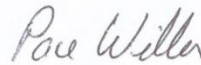
Section 305(b)(4)(B) of the Magnuson-Stevens Act and implementing regulation at 50 CFR Section 600.920(k) require the Jacksonville District to provide a written response to this letter within 30 days of its receipt. If it is not possible to provide a substantive response within 30 days, in accordance with the “findings” with the Jacksonville District, an interim response should be provided to NMFS. A detailed response then must be provided prior to final approval of the action. The detailed response must include a description of measures proposed by the Jacksonville District to avoid, mitigate, or offset the adverse

impacts of the activity. If the response is inconsistent with the EFH conservation recommendations, the Jacksonville District must provide a substantive discussion justifying the reasons for not following the recommendations.

*Closing*

Thank you for the opportunity to provide comments. Related correspondence should be directed to the attention of Ms. Jocelyn Karazsia at our West Palm Beach office, 400 North Congress Avenue, Suite 120, West Palm Beach, Florida, 33401. She may be reached by telephone at (561) 249-1925, or by e-mail at [Jocelyn.Karazsia@noaa.gov](mailto:Jocelyn.Karazsia@noaa.gov).

Sincerely,



/ for

Virginia M. Fay  
Assistant Regional Administrator  
Habitat Conservation Division

cc:

COE, [Linda.C.Knoeck@usace.army.mil](mailto:Linda.C.Knoeck@usace.army.mil)  
FWS, [Ashleigh\\_Blackford@fws.gov](mailto:Ashleigh_Blackford@fws.gov)  
FWCC, [Lisa.Gregg@MyFWC.com](mailto:Lisa.Gregg@MyFWC.com), [Erin.McDevitt@MyFWC.com](mailto:Erin.McDevitt@MyFWC.com), [Robbin.Trindell@MyFWC.com](mailto:Robbin.Trindell@MyFWC.com)  
FDEP, [Vladimir.Kosmynin@dep.state.fl.us](mailto:Vladimir.Kosmynin@dep.state.fl.us), [Lai`nie.Edwards@dep.state.fl.us](mailto:Lai`nie.Edwards@dep.state.fl.us)  
EPA, [Miedema.Ron@epa.gov](mailto:Miedema.Ron@epa.gov)  
SAFMC, [Roger.Pugliese@safmc.net](mailto:Roger.Pugliese@safmc.net)  
F/SER4, [David.Dale@noaa.gov](mailto:David.Dale@noaa.gov)  
F/SER47, [Jocelyn.Karazsia@noaa.gov](mailto:Jocelyn.Karazsia@noaa.gov)