



**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>

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Colonel Alan Dodd, Commander  
U.S. Army Corps of Engineers, Jacksonville District  
P.O. Box 4970  
Jacksonville, Florida 32232

**APR 17 2015**

Dear Colonel Dodd:

NOAA's National Marine Fisheries Service (NMFS) reviewed the *Final Environmental Impact Statement, Port Everglades Harbor Navigation Study, Broward County, Florida* (EIS) dated March 6, 2015. The Final EIS recommends deepening the outer entrance channel (OEC) to -57 feet mean lower low water (MLLW), widening the OEC to 800 feet, and extending the OEC seaward 2,200 feet; deepening the main turning basin to -50 feet MLLW and extending the southeastern boundary of the turning basin 300 feet; widening and deepening the south access channel; and deepening the turning notch to -50 feet MLLW after the local sponsor dredges the same area to -42 feet MLLW.<sup>1</sup> Blasting may be required to remove rock substrate. Dredged material disposal would occur at an expanded Port Everglades Harbor Ocean Dredged Material Disposal Site (ODMDS).<sup>2</sup>

During the past two years, the Jacksonville District and NMFS worked diligently to complete consultations for this project under the Endangered Species Act (ESA) and Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), including face-to-face meetings with senior leadership from both agencies on September 5 and 6, 2013; November 18, 2013; and April 17 and 18, 2014. These consultations were completed during 2014, and their primary focus was offsetting impacts to coral reef and hardbottom, which are designated critical habitat for corals under the ESA and a Habitat Area of Particular Concern for the snapper-grouper fishery under the Magnuson-Stevens Act. Appendix E-3 of the Final EIS describes this mitigation plan.

### **Comments on the Final EIS**

By letter dated August 13, 2013, NMFS provided the Jacksonville District with 14 essential fish habitat (EFH) recommendations after reviewing the Draft EIS. The Jacksonville District provided its response to those EFH conservation recommendations in Appendix H of the Final EIS, dated August 14, 2014. NMFS will use the EFH conservation recommendations and the District's response as a framework for commenting on the Final EIS. The responses provided for EFH conservation recommendations No. 5 (monitoring of blasting), No. 9 (evaluation of the OEC as a sink for larval corals), No. 13 (updates to cumulative impact assessment), and No. 14

<sup>1</sup> By letter dated April 2, 2014, NMFS responded to public notice SAJ-1984-04146 for the dredging by the local sponsor.

<sup>2</sup> The U.S. Environmental Protection Agency is the lead federal agency for expanding the Port Everglades Harbor ODMDS and developed an Environmental Assessment for the expansion separate from this Final EIS for the Port Everglades Harbor Navigation Study.



(best management practices to avoid and minimize impacts) require no further comment from NMFS.

### *Biological Monitoring*

EFH conservation recommendations No. 1 (mitigation for indirect impacts to coral reef below the dredging depth) and No. 3 (environmental monitoring plan) and Terms and Conditions Nos. 5, 6, and 7 of the Biological Opinion issued by NMFS on March 7, 2014, address monitoring for impacts beyond those anticipated in the Final EIS. Two of the potential causes of those impacts are rubble rolling down slope from the dredge cut colliding with coral colonies and sediments suspended by the dredge or spilled from transfer barges smothering coral colonies. As the project moves forward, the Jacksonville District will work with NMFS, the U.S. Environmental Protection Agency, and State of Florida natural resource agencies to finalize an environmental monitoring plan. Section 2.7.2 of the Final EIS indicates continued development and refinement of the plan will occur during the Preconstruction Engineering and Design (PED) phase after the U.S. Congress authorizes the Port Everglades expansion project.

Given the high importance of the monitoring and adaptive management to successful implementation of the agreements NMFS and the Jacksonville District reached during the ESA and Magnuson-Stevens Act consultations, NMFS offers to lead the interagency coordination needed to finalize the environmental monitoring plan. Both NMFS and the Jacksonville District have committed to having the Port Everglades monitoring reflect lessons learned from recent monitoring of the Port of Miami expansion project. The environmental monitoring plan in Appendix E-6<sup>3</sup> of the Final EIS largely reflects experiences prior to the Port of Miami expansion. During January 2014, NMFS provided the Jacksonville District with an alternate plan developed in close coordination with the Florida Department of Environmental Protection. On February 13, 2015, NMFS provided the Jacksonville District with a report entitled, *Port of Miami Acropora cervicornis Relocation Report*, which included summaries of observations by NOAA divers examining the severity and spatial extent of impacts to coral colonies from the Port of Miami dredging. These observations include methods for detecting and relocating stressed corals in the field before the colonies succumb to chronic, severe sedimentation. Together, this alternate monitoring plan and relocation report serve as a viable base for incorporating lessons learned regarding the severity and spatial extent of sedimentation from dredging operations in coral reef environments.

### *Compensatory Mitigation for Coral Reef Impacts*

As already noted, the Jacksonville District and NMFS worked diligently to develop a coral reef compensatory mitigation plan. The expected impacts to coral habitat are 17.51 acres, including 10.58 acres of high quality outer reef not impacted from past dredging and 2.90 acres of coral outside the dredging footprint impacted indirectly by sedimentation. To offset these impacts, the Jacksonville District will: (1) create five acres of hardbottom habitat by placing boulders on the seafloor, (2) transplant approximately 11,500 corals rescued from the dredge footprint onto 2.03 acres of those boulders, and (3) enhance approximately 18.93 acres of coral reef with approximately 103,200 nursery raised corals. A majority of the outplanted coral will be ESA-

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<sup>3</sup> While Appendix E-6 of the Final EIS lists NMFS as a co-author of the monitoring plan, NMFS only contributed to Section 4.7 (pages 20 to 23) and the Biological Opinion requires further development and refinement of the environmental monitoring plan. Accordingly, NMFS requests it not be listed as co-author of the current version of the monitoring plan.

protected staghorn corals (*Acropora cervicornis*) because this species performs well in nursery settings and its fast growth and three-dimensional structure promote settlement and growth by other coral reef organisms. This mitigation effort addresses EFH conservation recommendations No. 1 (mitigation for direct impacts to coral reef), No. 2 (mitigation for impacts to coral reef resulting from anchoring), No. 4 (mitigation for indirect impacts to coral reef from sedimentation and turbidity), No. 6 (mitigation amounts are determined using Habitat Equivalency Analysis), and No. 7 (compensatory mitigation for coral, coral reef, and hardbottom impacts). Regarding the Habitat Equivalency Analysis, NMFS appreciates the Jacksonville District noting in Section 4.6.1.4 of Appendix E-3 of the Final EIS that NOAA and U.S. Army Corps of Engineer policies differ on use of discount rates in Habitat Equivalency Analysis and these differences did not require resolution to complete the Port Everglades mitigation plan.

### *Coral Relocation*

EFH conservation recommendation No. 8 addresses relocation of corals from the dredging footprint. While the Final EIS commits the Jacksonville District to relocating approximately 11,500 corals, many times that amount will not be relocated because the District views the relocation to be impracticable. In Section 2.7.2 of the Final EIS, the Jacksonville District indicates development of a final coral relocation plan will occur during the PED phase and that plan will reflect the best information available at that time. NMFS appreciates the District's commitment to consider new information to guide relocation of corals, particularly the numerous smaller colonies in the project area whose relocation would increase the likelihood of the boulder portion of the mitigation succeeding. NMFS also recommends planning during the PED phase closely evaluate potential efficiencies from integrating the coral relocation with operation of the coral nurseries because these project components have similar equipment and personnel needs. NMFS is prepared to work closely with the Jacksonville District on this integration and on development of performance standards, monitoring protocols, and schedules for the coral relocation.

### *Seagrass Impacts and Mitigation*

The Jacksonville District notes in the Final EIS it is unable to address fully at this time the EFH conservation recommendations pertaining to the assessment and mitigation for seagrass impacts; i.e., EFH conservation recommendation No. 10 (direct impacts to seagrass habitat), No. 11 (indirect impacts to seagrass habitat), and No. 12 (compensatory mitigation for seagrass habitat impacts). Appendix E-1 of the Final EIS indicates the project would directly impact 4.21 acres of seagrass and an additional 3.20 acres of seagrass habitat<sup>4</sup> would be mapped prior to construction to determine if mitigation for up to 7.41 acres of seagrass habitat is needed. Section 4.1 of Appendix E-1 describes the District's planned approach for addressing seagrass impacts. While NMFS continues to recommend the Jacksonville District include all previously mapped seagrass habitat in the impact assessment and mitigation planning, NMFS appreciates the District's commitment to consider during PED phase planning additional information on the ecological services of seagrass beds that naturally contract and expand. An important part of the evaluation will be post-construction surveys showing exact locations of past dredging events.

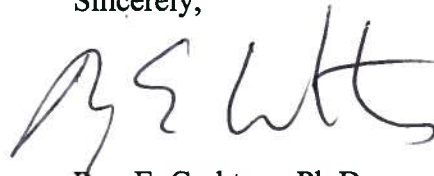
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<sup>4</sup> The seagrass species present (i.e., *Halophila decipiens* and *Halodule wrightii*) exhibit seasonal growth tied to a moveable seed bank. This 3.20-acre area has had seagrass present during some surveys but not during all surveys.

## Closing

Thank you for the opportunity to provide these comments. The NMFS looks forward to further cooperation with the Jacksonville District on the Port Everglades project to ensure the conservation of the nation's marine resources. Please direct related questions or comments regarding the ESA consultation to the attention of Ms. Kelly Logan at 727-460-9258 or Kel.Logan@noaa.gov. Please direct related questions or comments regarding the EFH consultation to the attention of Ms. Jocelyn Karazsia at 561-249-1925 or Jocelyn.Karazsia@noaa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'R E Crabtree', written in a cursive style.

Roy E. Crabtree, Ph.D.  
Regional Administrator

cc: USACE - Jason Spinning  
USFWS - Jeffrey Howe  
FWCC - Lisa Gregg  
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