

# Port navigates into 21st Century

## Port Everglades harbor improvement plans continue through 2017

Our country's economic prosperity depends on trade with other nations. About 25 percent of America's gross domestic product comes from international trade with 95 percent of that cargo getting shipped through our seaports. The nation's harbors and waterways are critical to economic development. Just like transportation highways and airports, the nation's ports need improvement over time.

Congress authorized the Port Everglades navigation improvement project in the December 2016 Water Infrastructure Improvements for the Nation Act.

The project will bring the port into 21<sup>st</sup> Century shipping by accommodating existing and future vessel movement, and resolving navigation restriction problems. It also presents opportunities for economic development.

The Corps continued consultation with state and federal agencies since release of the draft feasibility study in June 2013. The Port Everglades Final

Feasibility Report, dated March 2015, and the May 2015 Environmental Impact Statement, completed with the signed Record of Decision in January 2016, include a number of provisions that reflect information gained from the Port Miami deepening project. Provisions include implementation of up-front mitigation for indirect impacts to non-Endangered Species Act (ESA) listed corals and reef structure, and, refined measures to avoid and minimize impacts to threatened and endangered coral species and their critical habitats.



The Port Everglades report and Biological Opinion (BO) both included a commitment to have the Corps of Engineers, Florida Department of Environmental Protection, National Marine Fisheries Service (NMFS), Environmental Protection Agency, Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, and Broward County jointly update the environmental monitoring plan. This action represents a shift toward a greater level of interagency cooperation

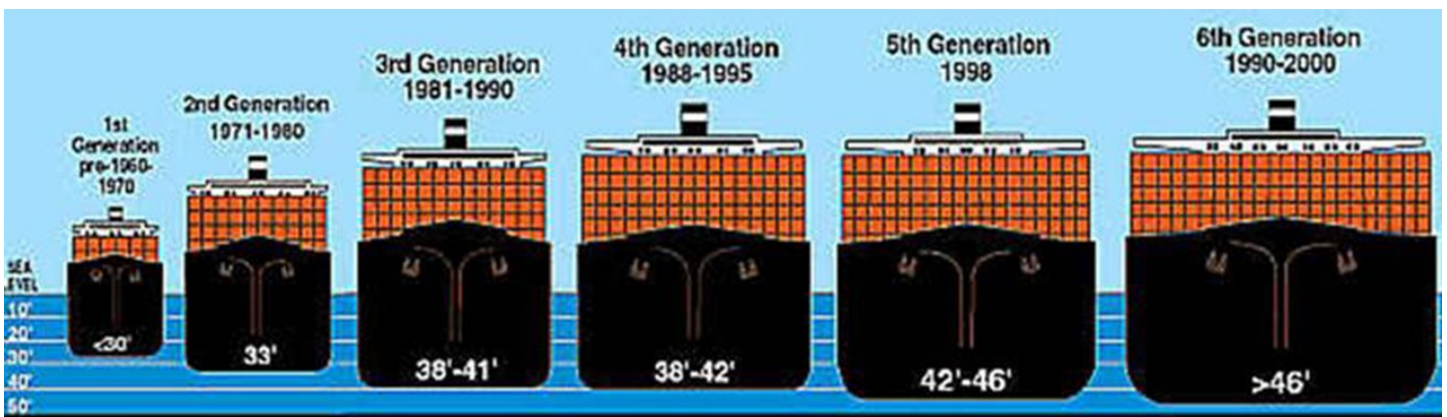
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### Calls at Port Everglades

Today

Light-loaded today

Possible after deepening



**PORT EVERGLADES HARBOR ENVIRONMENT 2013**



Impacts	Mitigation <i>(based on functional analysis conducted jointly with the National Marine Fisheries Service)</i>	Mitigation Costs	Threatened and Endangered Species
<ul style="list-style-type: none"> <li>◆ Direct removal of ~ 14.62 acres of hardbottom/reef habitat</li> <li>◆ Below dredging depth hardbottom: (10% mitigation upfront) .71 acres</li> <li>◆ Vegetated seagrass habitat: ~4.21 acres</li> <li>◆ Unvegetated seagrass habitat: ~3.20 acres</li> <li>◆ Mangroves: ~1.16 acres</li> </ul>	<ul style="list-style-type: none"> <li>◆ Creation of ~5 acres of artificial reef with relocation of ~ 1,500 corals</li> <li>◆ Out-planting of ~ 103,000 nursery raised corals to existing reef enhancement areas of ~8 acres</li> <li>◆ ~2.4 seagrass functional units (~24 to 29 acres) and ~1 mangrove functional unit (~3-3.6 acres): West Lake Park</li> </ul>	<ul style="list-style-type: none"> <li>◆ Mangrove, Seagrasses, Artificial Reef: \$35.6 M</li> <li>◆ Construction Monitoring: \$900 K</li> <li>◆ Coral Propagation: \$16.3 M</li> </ul>	<p>Continue to use successful protective measures currently employed during operations for species such as manatee, sea turtles and smalltooth sawfish.</p>

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among the Corps and state and federal resource agencies in development of environmental monitoring measures. The interagency working group is making strides as new information becomes available.

The Corps re-initiated consultation with NMFS to amend the existing BO for the Port Everglades project. Factors that contributed to this decision include:

- In the March 7, 2014 BO, NMFS assessed the potential effects of the Port Everglades project. This BO showed that the project may affect listed species that included staghorn (*Acropora spp.*) corals, as well as six additional coral species that were proposed for listing at the time of the opinion. Five of the original six species were listed as threatened under the ESA. (The BO determined the project's direct and indirect effects on those corals species will not likely jeopardize the continued existence of the coral species.)

- The Corps is developing a sedimentation transport model for Port Everglades, designed to analyze the sedimentation associated with different dredging techniques. The environmental scientists conducted the majority of fieldwork and will move

into the modeling effort once the required data is collected.

- The Corps is also working with its partners to conduct post-construction monitoring for the Miami Harbor project. Results of this study will demonstrate how dredging sedimentation has changed over the one year period since project completion and determine if there is a long-term effect of the sedimentation on the coral species. This information is valuable for the Port Everglades project, as Port Everglades and Miami Harbor share similar resources.

- The project will also include underwater benthic habitat reconnaissance surveying along with ESA coral surveys to assess the current state of the habitat.

The listing of the five additional coral

species, results of the modeling, information derived from the Miami Harbor project, and underwater surveys constitute "new information" in assessing effects to listed species. New information requires the Corps to re-initiate consultation with NMFS and request an amended BO.

The Port Everglades navigation project is in the preconstruction engineering and design phase, which will continue through 2018. The Corps and its partners continue efforts to provide the best science available to inform decision-makers and prepare for project implementation.

As part of this process, Jacksonville District will release any new information to the public as part of the National Environmental Policy Act process. Look for quarterly updates in the future. The Corps appreciates your feedback!

### Group strives to balance environmental needs

A Port Everglades Interagency Working Group (IWG) was established in July 2016 to promote transparency and cooperation amongst federal, state and local agencies during the plans and specifications development and permit application development process. The IWG meets every two months and consists of representatives from the Corps, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, National Marine Fisheries Service, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission and Broward County.

## Port Everglades Frequently Asked Questions

### Why is the improvement project needed at Port Everglades?

The project will bring the port into 21<sup>st</sup> century shipping by accommodating existing and future vessel movement, and resolving navigation restriction problems. It also presents opportunities for economic development. As a result of increased traffic and overall growth in vessel size, improvements including deepening and widening will help alleviate vessel congestion and improve transit efficiency and maneuverability.

### Why is the Corps deepening the channel?

The existing Federal Channel depth of 42-feet does not provide adequate, safe depth for large tankers and container ships currently visiting the harbor. Today's container ships and oil tankers require significantly more channel depth to operate efficiently.

### Is it true the Corps is starting the Port Everglades environmental process from square one and it's causing a two-year delay?

No, it's not true. The Corps will supplement previously completed environmental information with new data gained since 2015. This new information requires the Corps to reinitiate consultation under the Endangered Species Act and for NMFS to issue a new or amended Biological Opinion (BO) under the Act. Environmental information collection and analysis is ongoing during the Corps' preconstruction, engineering and design phase, a three-year phase that we are currently in. The Corps anticipates working in this phase

throughout 2017 and into 2018. We cannot complete a final design without the BO.

### I'm concerned about environmental damage caused during the Miami Harbor Deepening Project; will it also occur at Port Everglades?

The Corps carried out the Miami Harbor project according to the terms of the biological opinion (BO) issued by the National Marine Fisheries Services (NMFS). The Corps, together with NMFS, Florida Department of Environmental Protection (FDEP) and the Port of Miami, is currently conducting a definitive survey of the affected area. Using a protocol to which USACE, NMFS, FDEP and the Port of Miami have agreed upon, the survey will determine the permanent, as opposed to transient, effects of the deepening project, the success of mitigation efforts to date, and the need, if any, for additional mitigation. The survey

is ongoing. The Corps is committed to protecting marine resources of South Florida and is working with our partner federal, state and local resource agencies at every stage of the Port Everglades project.

### Did the Miami Harbor Deepening Project cause excessive coral or coral reef damage?

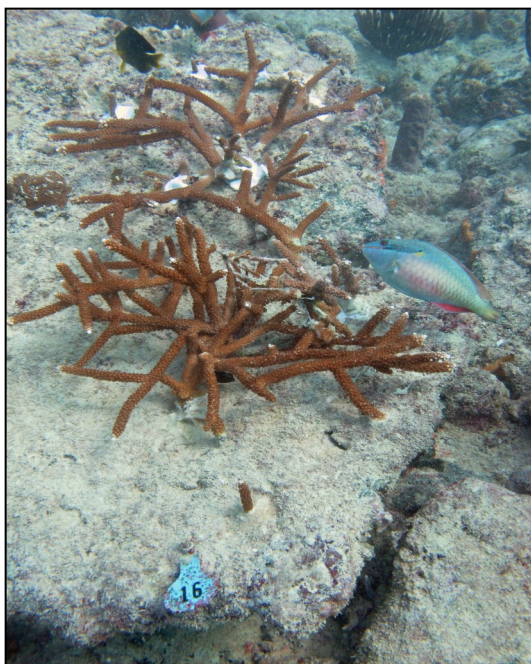
No. Critics of the Miami deepening have made numerous statements that overstate the extent and degree of the project's effects. The extent of the affected area in the worst case is about 0.4 square miles. The Florida Reef Tract is 150 miles long and four miles wide; equivalent to 600 square miles. The effects of project dredging in no way threatened the overall viability of the reef tract or Endangered Species Act listed corals.

The Corps conducted dredging in compliance with all applicable permits, state and federal laws and have conducted extensive mitigation to date, including constructing an artificial reef, restoring 17 acres of seagrass, and moving corals to coral nurseries where they have flourished. The scientific dive team that conducted environmental monitoring for the Corps performed over 9,600 dives to date – no other organization conducted as many dives or spent as much time in the project area assessing the effects of the project as the Corps' monitoring team.

### Why didn't the Corps know about sediment impacts during the Miami Deepening Project?

The Corps' Final Environmental Impact Statement (FEIS) for Miami

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*Healthy relocated Acropora cervicornis colonies recorded in November 2015 following construction at Miami Harbor. (Photo courtesy of CSI)*

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Harbor predicted sedimentation impacts to the habitat surrounding the entrance channel, however, the data did not exist to estimate an exact acreage of impact. Surveys conducted during and immediately after construction documented the same types of effects as those predicted in the FEIS. Subsequent surveys conducted by various organizations are inconclusive and the full extent of the project affects are not yet fully known. We do know that changes occurred on the sea bottom due to storms, natural ocean currents and dredge operations. Conclusive information will be released to the public after the one-year post-construction surveys are completed and the data is analyzed.

#### What types of environmental monitoring will occur at the port?

The Corps and Port Everglades are committed to examining traditional methods and innovative means to make timely, informed management decisions. These traditional methods include sending divers to observe and collect data on the adjacent benthic habitat before, during and

after construction. This type of monitoring logs in tens of thousands of hours in collecting underwater data. To supplement this traditional data, the project will also use new technology, including installing camera systems on the ocean floor to view near real-time conditions throughout the deepening effort. Installed devices will monitor the benthic environment and relate information to where project work is occurring. The collected information will aid the Corps and the port in determining if work should stop, be postponed, or otherwise modified to help assure the natural environment is not adversely affected. The Corps will deploy this camera system in advance of construction to also record the ambient conditions of the area.

#### How will you protect the coral environment?

The FEIS recognizes that there are unavoidable impacts associated with construction of the project, including direct impacts associated with channel deepening and expansion, as well as with indirect

impacts associated with sedimentation. To offset these unavoidable impacts, upfront mitigation including raising more than 103,000 nursery corals, relocating thousands of corals located within the project footprint to a newly constructed artificial reef, all of which is designed to minimize impacts and ensure survival of the corals species found in near the Port Everglades inlet. Refined measures to avoid and minimize impacts to Endangered Species Act (ESA) listed threatened and endangered coral species and their critical habitats was also included, and an inter-agency working group is currently reviewing the measures.

#### I'm concerned about transparency; how will we know what's going on with this project?

As the Corps and the port represent and serve the people, we believe that transparency is a critical requirement and part of our public service mandate to Florida and United States citizens. The project is using new technology to provide the public with real-time monitoring during construction. We will also publish all final scientific reports on our website along with our management plan, and our actions taken at Port Everglades. In addition, we commit to hold periodic public meetings throughout the design process, as well as teleconference calls that are open to the public. We welcome feedback!

## March 27, 2017 comment deadline

### Send written comments to:

**CESAJ-PortEverglades@usace.army.mil or**

**Jacksonville District Corps of Engineers**

**Attn: Planning Division - Terri Jordan Sellers**

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