

# **INTRACOASTAL WATERWAY DEEPENING BROWARD COUNTY, FLORIDA**

**17th Street Bridge to 4,000 Feet North of the  
Las Olas Blvd. Bridge**

## **HARD CORAL RELOCATION SUMMARY REPORT**

Prepared for:



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**MAY 2016**

The Florida Inland Navigational District (FIND) has been permitted to conduct dredging along 14,400 linear feet (ft.) of the Intracoastal Water Way (ICWW) from the 17th Street Causeway Bridge (north of Port Everglades) to approximately 4,000 ft. north of the Las Olas Boulevard Bridge, in Broward County, Florida. Permits from the U.S. Army Corps of Engineers (USACE; Permit No. SAJ-2009-03523), Florida Department of Environmental Protection (FDEP; Permit No. 06-0283683-002), and Broward County (Environmental Resource License No. DF10-1018) have been issued for this project. Permit conditions required a pre-construction hardbottom habitat survey to be conducted to document current habitat conditions, identify hard corals greater than or equal to 10 centimeters (cm) in diameter, and identify octocorals greater than or equal to 15 cm in length within the dredge footprint. Hard corals and octocorals that meet these size criteria are to be relocated. Dredging was scheduled to begin on May 2, 2016.

The pre-construction hardbottom habitat survey was conducted from April 14-19, 2016. A total of eight (8) hard corals were identified within the dredge impact area. These eight (8) corals were identified in the ledge and emergent rock habitat types of the block 28 survey area. See the Pre-Construction Hardbottom Habitat Survey Results Summary Report (2016) for a location and description of the block 28 survey area. The corals include three (3) diffuse ivory brush coral (*Oculina diffusa*) colonies and five (5) starlet coral (*Siderastrea* sp.) colonies. These corals were located along the west limit of the main ICWW channel from just south of channel marker 26 to channel marker 24 in water depths ranging from 8-12 ft. No octocorals greater than or equal to 15 cm were identified within the dredge impact footprint.

Scientific divers, experienced in coral identification and coral relocation protocols, conducted the coral relocation effort on April 29, 2016. The relocation was conducted in accordance with the Florida Keys National Marine Sanctuary Coral Relocation Protocols (FKNMS 2008). The eight (8) hard corals were identified and removed from the sites depicted in **Figure 1**. Two (2) relocation sites were selected. The first site was located approximately 200 meters west of the ICWW channel dredge limits along the southern edge of a navigational channel that is potentially owned by the Fort Lauderdale Yacht Club (**Figure 1**). Water depths were estimated at 8 ft. The habitat consisted of large boulders (typically 0.5-1.5 meters in diameter) surrounded by sand. The boulders were encrusted with dense macroalgae and sponge coverage and existing hard coral colonies. The dive team was confronted by Yacht Club compliance staff while the initial re-attachment efforts were being completed. The Yacht Club expressed its concerns about relocating the corals in its channel. As such, a second relocation site was sought. Two (2) *O. Diffusa* colonies and two (2) *Siderastrea* sp. colonies were successfully re-attached to the boulder substrate at the west site.

The second relocation site was located approximately 110 meters east of the ICWW channel dredge limits (**Figure 1**). It consists of an estimated one (1) meter tall ledge, which is undercut, in ten (10) feet water depth in close proximity to private residence. The ledge is encrusted with dense macroalgae and sponge coverage and existing hard corals. One (1) *O. Diffusa* colony and three (3) *Siderastrea* sp. colonies were successfully re-attached to the ledge at the east site.

The hard corals will remain at both relocation sites temporarily. The permits require that the corals be relocated back to their original locations within the ICWW channel following completion of the dredge activities. The permits do not require any monitoring of the relocated corals. The attached photographs depict typical views of the hard corals pre- and post-relocation.

Date: 05/03/16 Rev: Date: N/A PM: G.J. GIS Analyst: JAG Map Document: 3443\_Coral\_Relocation\_Target\_Map.mxd Project Number: 003443 20 G PDF Document: 3443\_Coral\_Relocation\_Target\_Map\_AP\_JAG\_20160503.pdf Plot Size: 8.5 x 11



## Legend

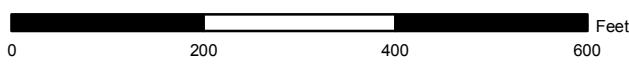
-  Coral Relocation Sites
-  Coral Removal Sites
-  Dredge Limits
-  10 ft Offset Dredge Limits



All data within this map are supplied as is, without warranty. This product has not been prepared for legal, engineering, or survey purposes. Users of this information should review or consult the primary data sources to ascertain the usability of the information.

## Figure 1 - Coral Relocation Map

FIND Intracoastal Waterway (ICWW) Deeping in Broward County  
Submerged Resources Survey  
Broward County, Florida



Data Source:  
- Taylor Engineering  
Imagery Source:  
- 2010 ESRI

Coordinate System:  
NAD 1983 Florida  
State Plane East







Photo 1: Typical view of *Siderastrea siderea* prior to relocation.



Photo 2: Typical view of *Siderastrea radians* prior to relocation.





Photo 3: Typical view of *Oculina diffusa* prior to relocation.

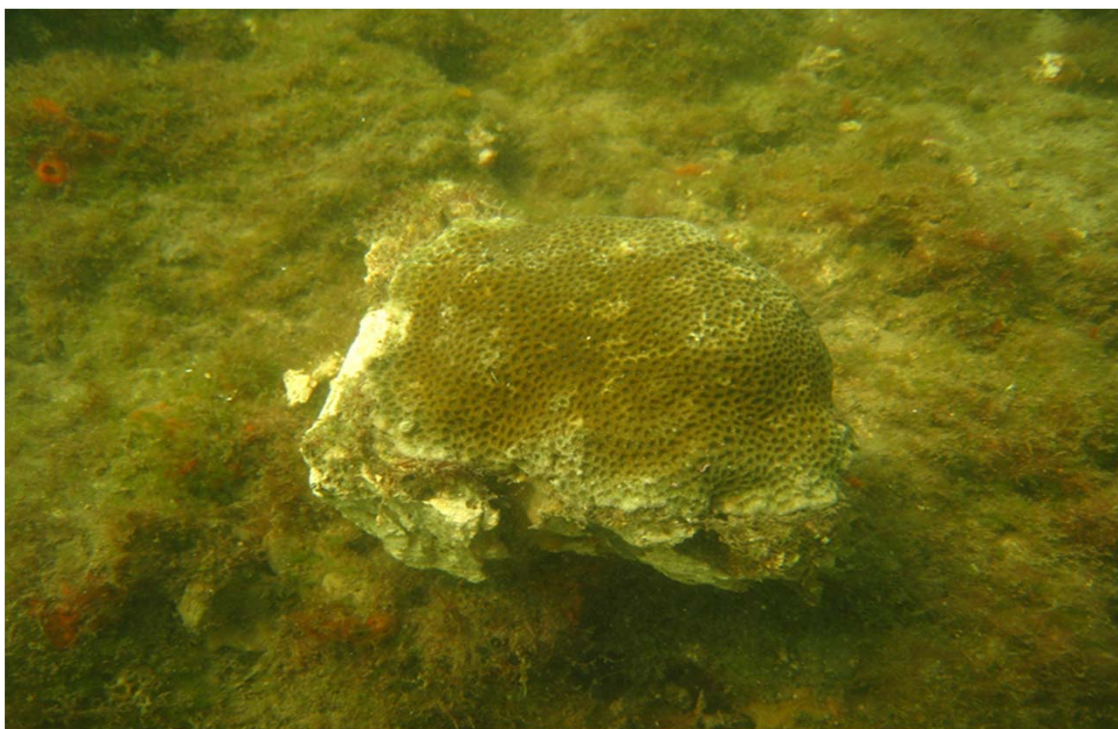


Photo 4: Typical view of relocated *Siderastrea* spp. post relocation.





Photo 5: Typical view of relocated *Oculina diffusa* post relocation.



Photo 6: Typical view of coral relocation removal activities