



TAYLOR ENGINEERING, INC.

**Estuarine Island Creation
with Intracoastal Waterway
Maintenance Dredged
Material In Lake Worth
Lagoon**

Palm Beach County, Florida



WEDA Virtual Dredging Summit 2021



Yehya S. Siddiqui, P.E.



Presentation Outline

1. Overview

- a) Location
- b) Design & Permitting

2. Project Components

- a) Dredging
- b) Placement Area

3. Project Challenges

- a) Environmental
- b) Boat Show
- c) El Cid Historic District

4. Project Update

5. Summary





Overview – Design & Permitting

1. Project Objective

- a) Maintenance dredge to -10 ft MLLW
- b) Provide safe navigational waterway
- c) Beneficially use dredged material

2. USACE Detailed Project Report, 2011

- a) Section 107 Small Navigation Project
- b) Recommended -18 ft MLW over 5.2 miles

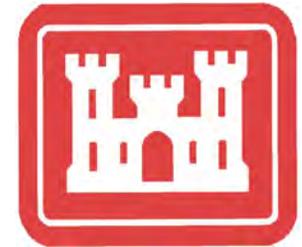


Overview – Design & Permitting



3. Permitting Timeline

- a) Permit application: February 2017
- b) Final permits & licenses received: March 2017 (FDEP) and October 2017 (USACE)
- c) Permit modifications: 1



4. Utility Coordination

- a) 2016 Morgan & Eklund – Bathymetric Magnetometer, Seismic, and Side Scan Sonar Survey
- b) 2018 Morgan & Eklund and Industrial Divers – Diver Investigation Survey of Potential Buried Utilities

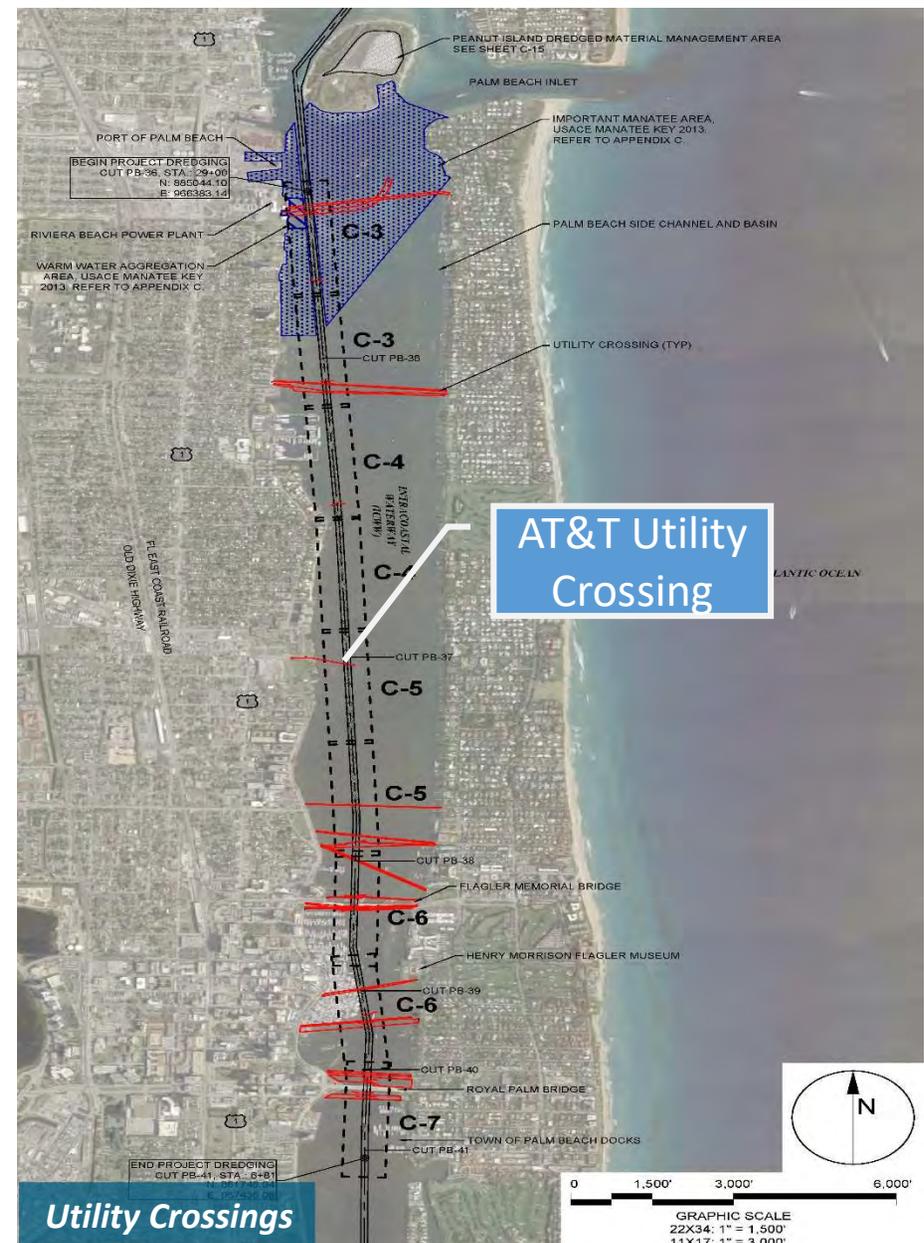


Overview – Design & Permitting



1. Utility Coordination

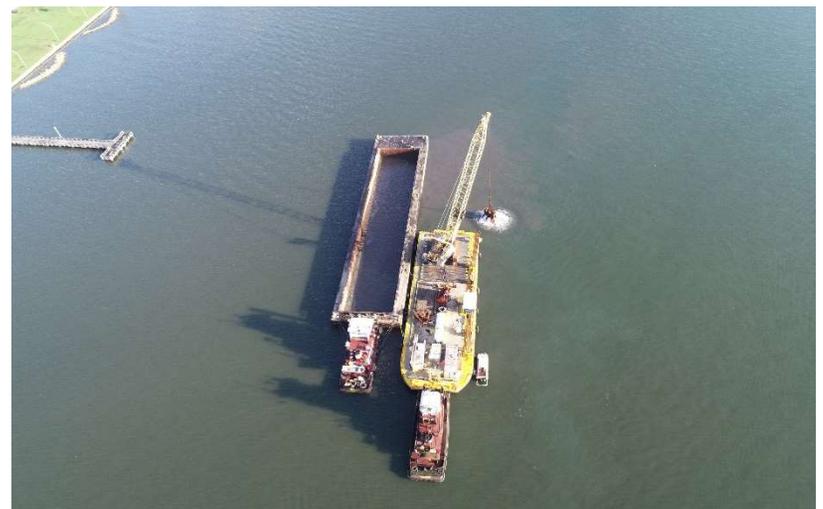
- a) 32 identified submerged utility crossings
- b) 1 utility crossing within maintenance dredging template
- c) AT&T utility line
 - FIND-AT&T Removal Agreement, August 2018
 - Decommissioned, November 2018
 - Removed, December 2018





Project Components – Dredging

1. **Contractor:** Orion Marine Construction
2. **Contracted Price:** \$4,294,500
3. **Schedule:**
 - a) Contract award: 10/19/2018
 - b) NTP: 11/22/2018
 - c) Utilities cleared: 12/2018
 - d) Contract time: 270 days from NTP, 24-7 Operation
 - Dredging: May – March 2019
 - Required contract completion: July -2019





Project Components – Dredging

3. **Dredge Volume:** 85,000 cubic yards to -12 feet MLLW (project depth plus two feet overdepth dredging)

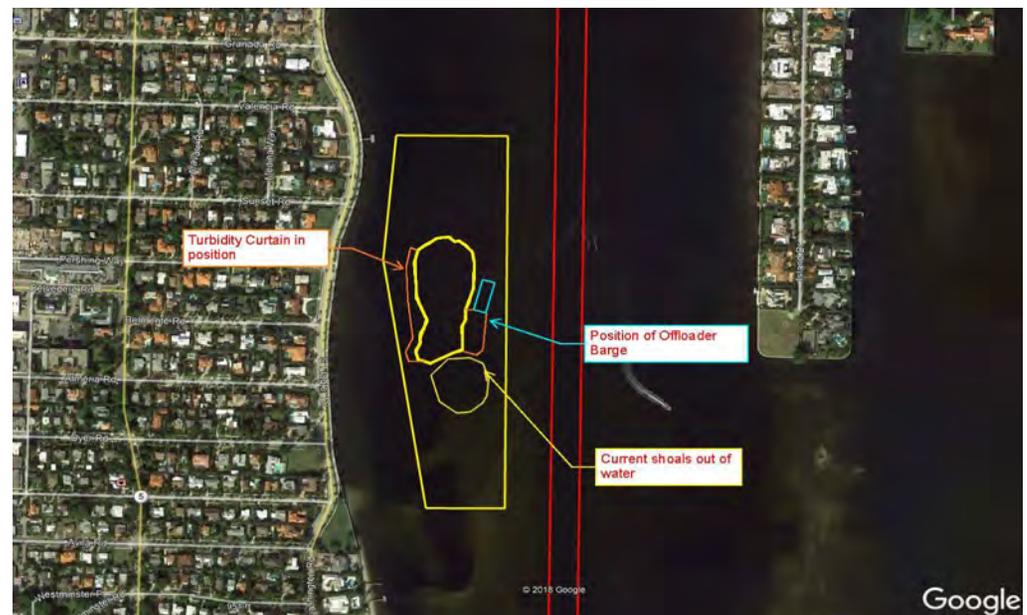
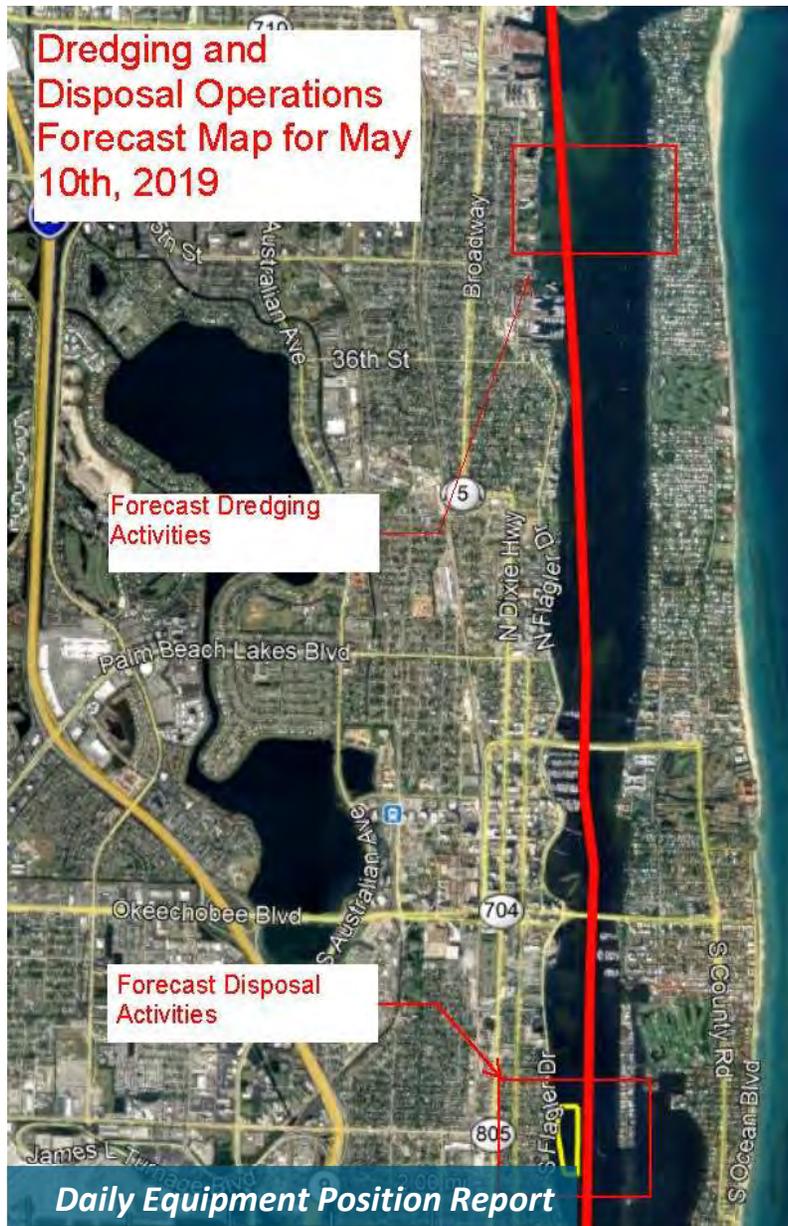
4.

Plant	Specifics	Dimensions (l x w x draft) ft
Dredge 1702	Non propelled barge	170 x 52 x 6
2508	Tender Pushboat	25 x 10 x 4
Royal Engineer	Tugboat	60'6" x 22'2" x 8'3" (max)
Island Fox	Tugboat	56'6" x 22' x 8'
Scow 1	Non propelled barge	260 x 52.5 x variable
Scow 2	Non propelled barge	260 x 52.5 x variable
Barge 1250	Deck Barge Offloader	160 x 52 x 4
Ramp barge	Ramp Barge	60 x 30 x 2.5
Dr. Hook	Survey/Crew boat	24 x 8 x 2.5

5. **Production:**

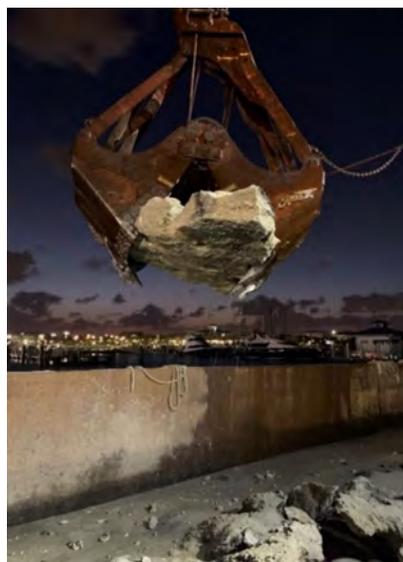
a) 1,300 cubic yards/day

Project Components – Dredging



Project Components – Dredging

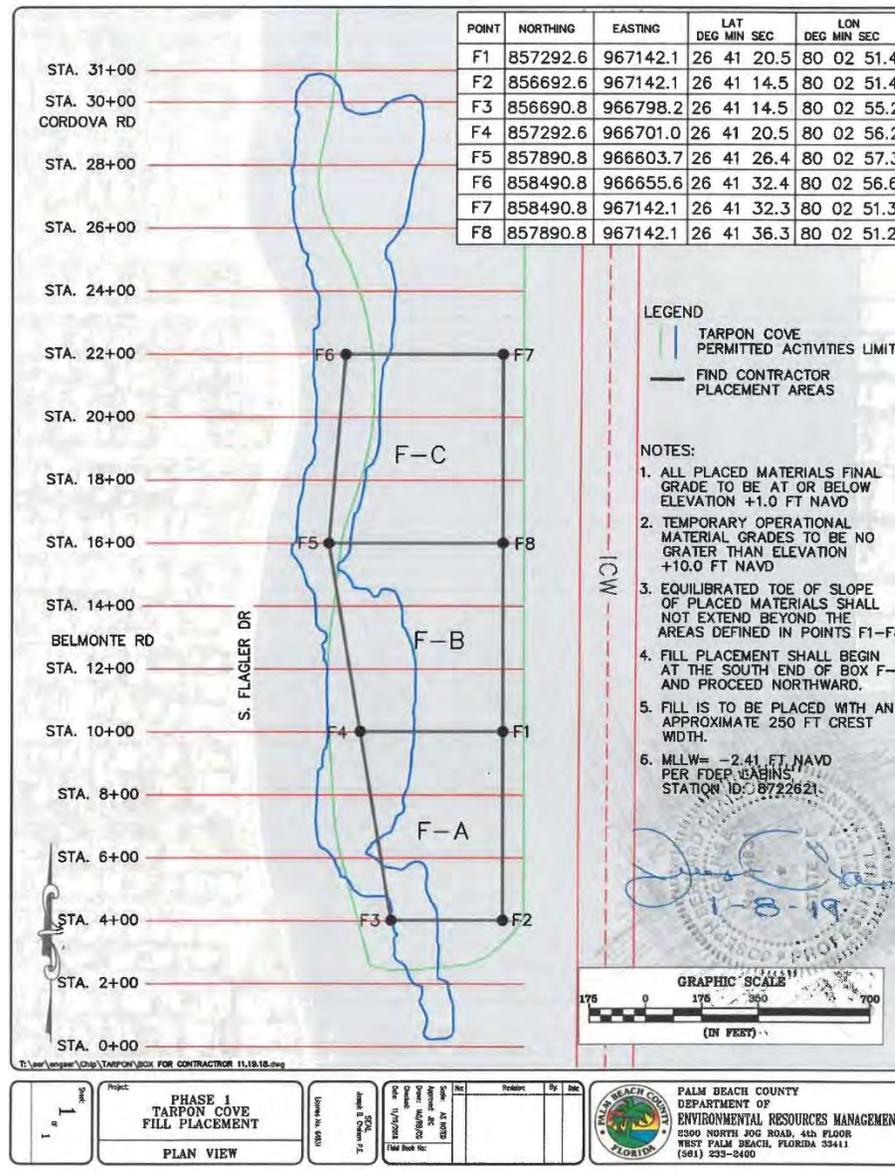
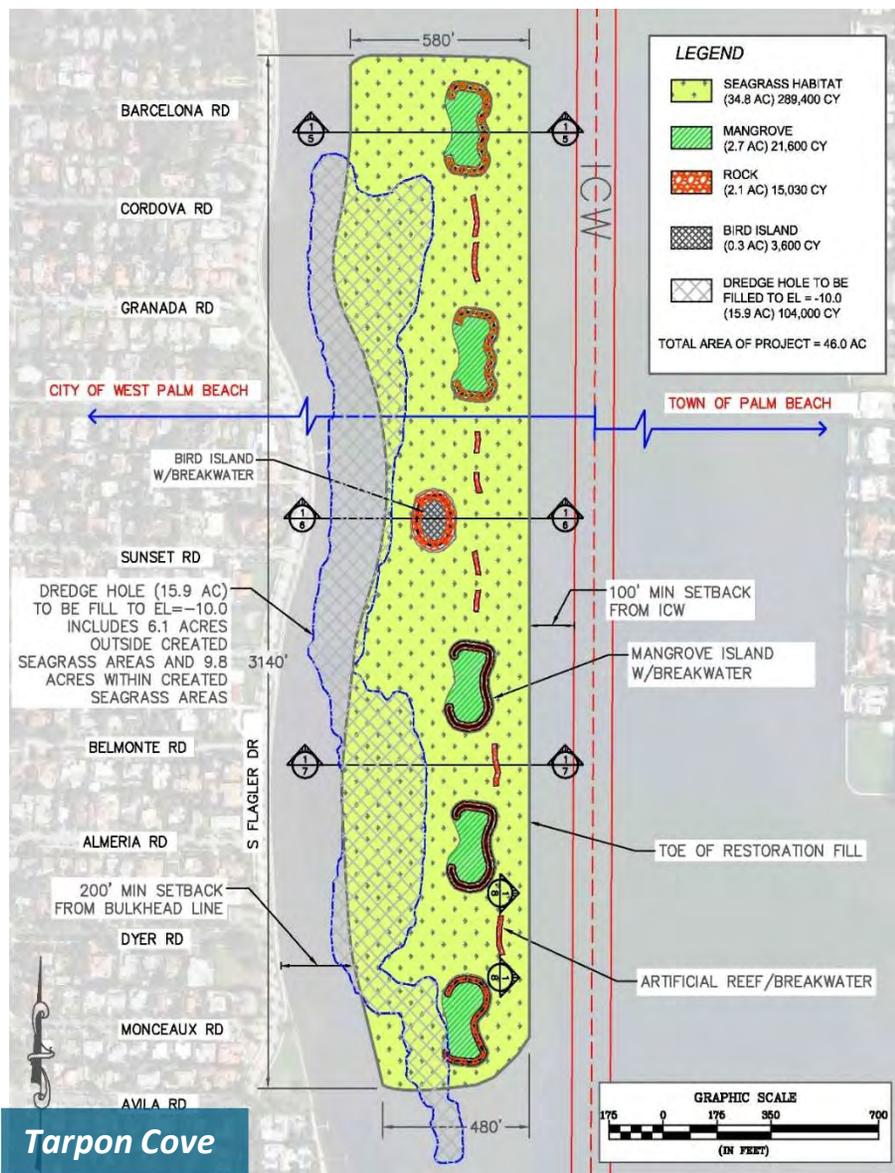
5. Weathered limestone



Weathered Limestone



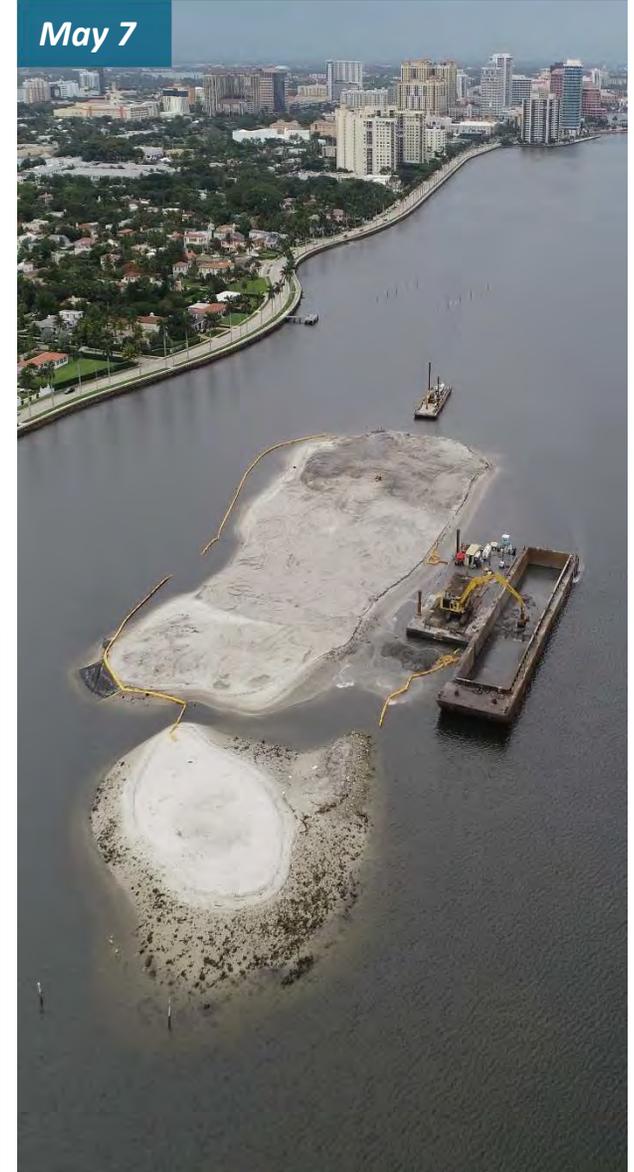
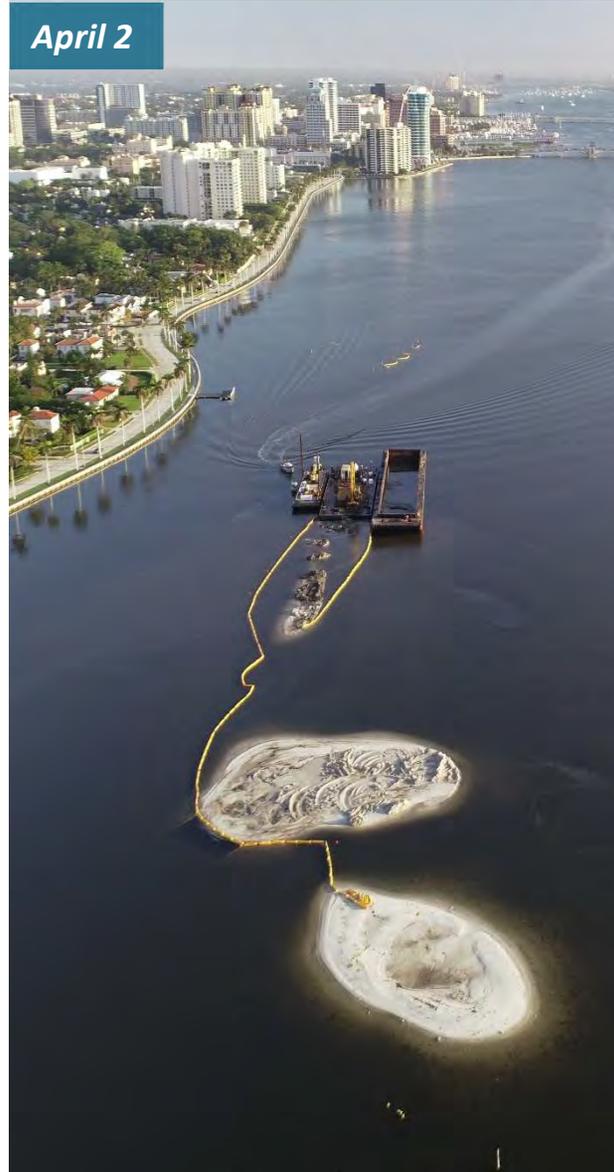
Project Components – Placement Area



Project Components – Placement Area



Project Components – Placement Area





Project Challenges

1. Environmental

- a) IMA
- b) WWAA
- c) November 15 – March 31

2. Boat Show

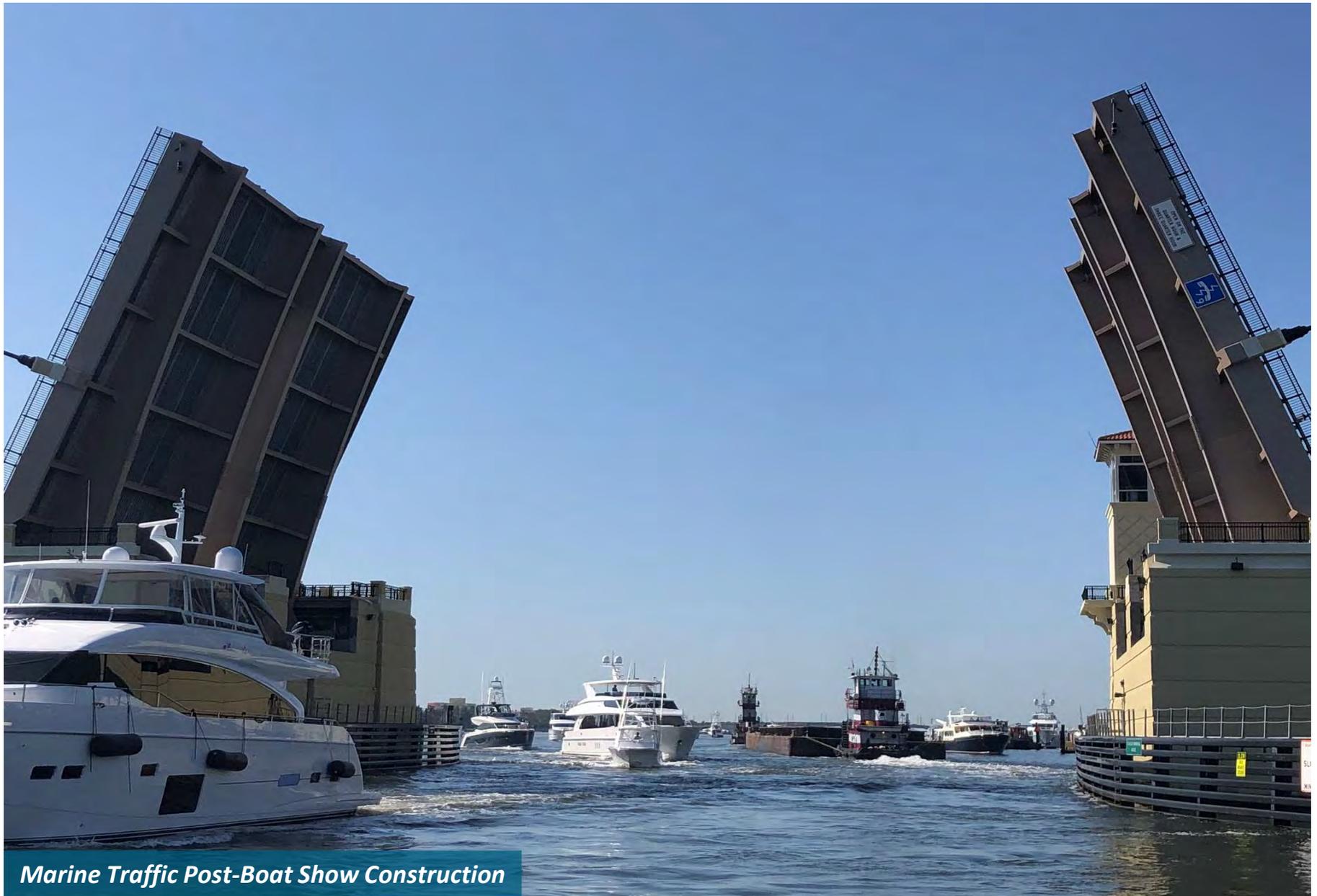
- a) March 15 – April 12
- b) Maintenance of Marine Traffic

3. El Cid Historic District

- a) Noise
- b) Lighting
- c) Parking



Project Challenges – Boat Show



Marine Traffic Post-Boat Show Construction

Project Challenges – El Cid Historic District



El Cid Historic District – Resident Photograph, South Flagler Drive



El Cid Historic District – Resident Photograph, South Flagler Drive

Project Challenges – El Cid Historic District



Palm Beach County
Board of County Commissioners
Department of Environmental Resources Management
2300 North Jog Road-4th Floor
West Palm Beach, FL 33411

PRSRT STD
ECRWSS
US POSTAGE
PAID
PERMIT #685
WEST PALM BEACH, FL
EDDM

To: Residential Customers



lake worth
LAGOON

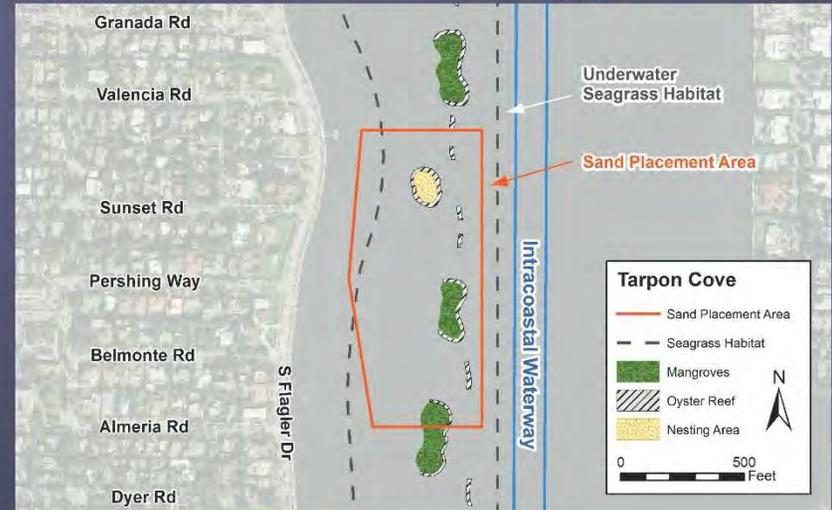
RESTORATION IN PROGRESS



PARDON OUR SAND...



lake worth
LAGOON



TARPON COVE

Restoration efforts are underway for the newest habitat project within the Lake Worth Lagoon. Current construction activities are expected to continue with 24/7 sand placement operations through May 1, 2019. Through coordination with the community and contractor, measures are in place to minimize any potential issues with either lighting or noise. We apologize for any inconvenience and are working to complete this phase in a timely manner.

*Questions?? Please contact the Palm Beach County Department of Environmental Resources Management at (561)233-2400.

*For the status of operations please subscribe to FIND_ICWW_Dredging@orionmarinegroup.onmicrosoft.com for daily updates.

*For additional project information please visit: <http://discover.pb.gov/erm/Publications/TarponCoveFactSheet.pdf>



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Project Update



March 2021



Project Update



December 2020



Summary – Teamwork!



PALM BEACH COUNTY
*Discover the Palm Beaches...
the Best of Everything*



Marine Industries Association
OF PALM BEACH COUNTY, INC.

