



Emergency Beach Nourishment Project a.k.a. Controlled Chaos

FY 2025-2026

Outline

Zach Westfall- Will Discuss Design, Permitting

John Bishop- Will Discuss the easements

Jacob Rice – Will Discuss the Construction



2024 Hurricane Season for Pinellas County



1. Hurricane Debby-Cat 1-August 5, 2024
2. Hurricane Helene-Cat 4-September 26, 2024
3. Hurricane Milton-Cat 3-October 9, 2024

Debby



52 Days

Helene



13 Days

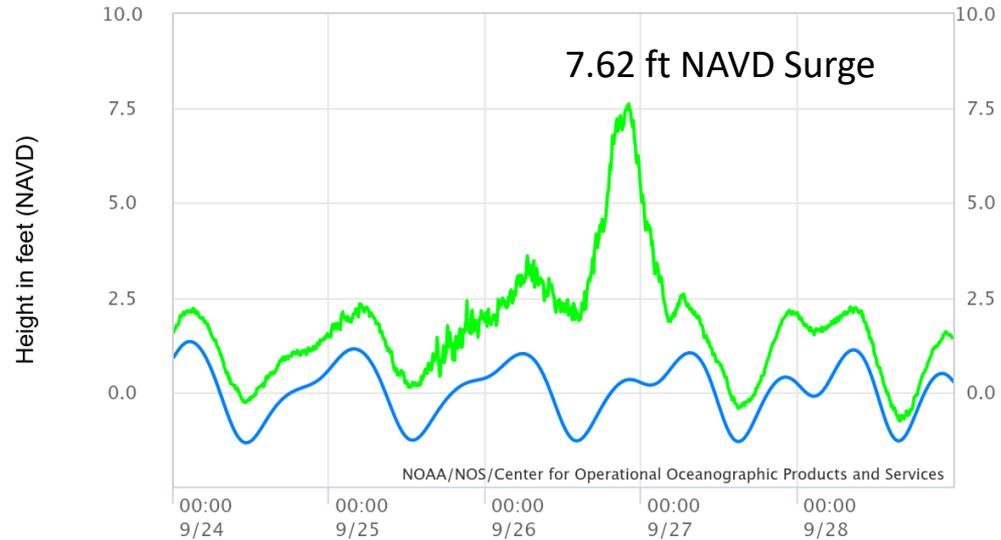
Milton



Hurricane Helene



NOAA/NOS/CO-OPS
Water Levels at 8726724, Clearwater Beach FL
2024/09/24 00:00 LST to 2024/09/28 23:59 LST



— Predictions — Verified — Preliminary — (Observed - Predicted)



R-60 9/24-28/2024



R-64 9/24-28/2024



R-72 9/24-28/2024



R-84 9/24-28/2024



R-107 9/24/2024-10/01/2024



R-140 9/24/2024-10/01/2024



Too Much Sand.....



~2 to 5 feet of overwash sand on roads and in buildings





Non-Compliant Material

Post-Processed Sand

Washover sand placed back on the beach

Identified areas to stockpile excess sand (County Parks)-educated staff

Used a sand spec of $\frac{3}{4}$ inches for sieving after consultation with CEGG

Did not place sand that did not comply with sand rule

Put back a portion of the dune project that was destroyed

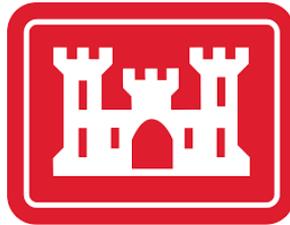




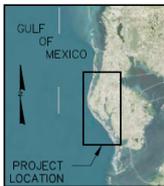
Meanwhile

Permitting

- Awarded Design Contract previous Spring 2024
- 10/1/2024 fast tracked design and permitting
- 11/2024 Submitted permit application
- 3/06/2025 Received Army Corp Permit
- 06/2025 Received FDEP permits

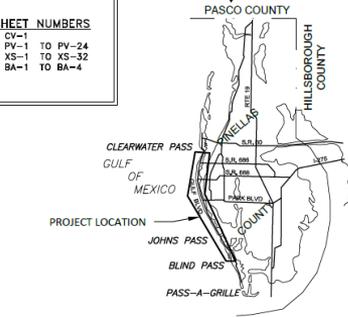


SAND KEY, TREASURE ISLAND, AND LONG KEY BEACH RENOURISHMENT PROJECT, PINELLAS COUNTY, FLORIDA

| SHEET TITLE | SHEET NUMBERS |
|----------------|---------------|
| COVER SHEET | CV-1 |
| PLAN VIEWS | PV-1 TO PV-24 |
| CROSS SECTIONS | XS-1 TO XS-32 |
| BORROW AREAS | BA-1 TO BA-4 |





NOT FOR CONSTRUCTION FOR REGULATORY REVIEW ONLY

JACOB BROOKS RICE P.E. NO. 98529

| DATE | BY | REVISIONS | DESCRIPTION |
|------|----|-----------|-------------|
| | | | |
| | | | |
| | | | |

DATE: 11/01/24

BY: JCB

PROJ. NO.: 240304048

SHEET: 1 OF 61

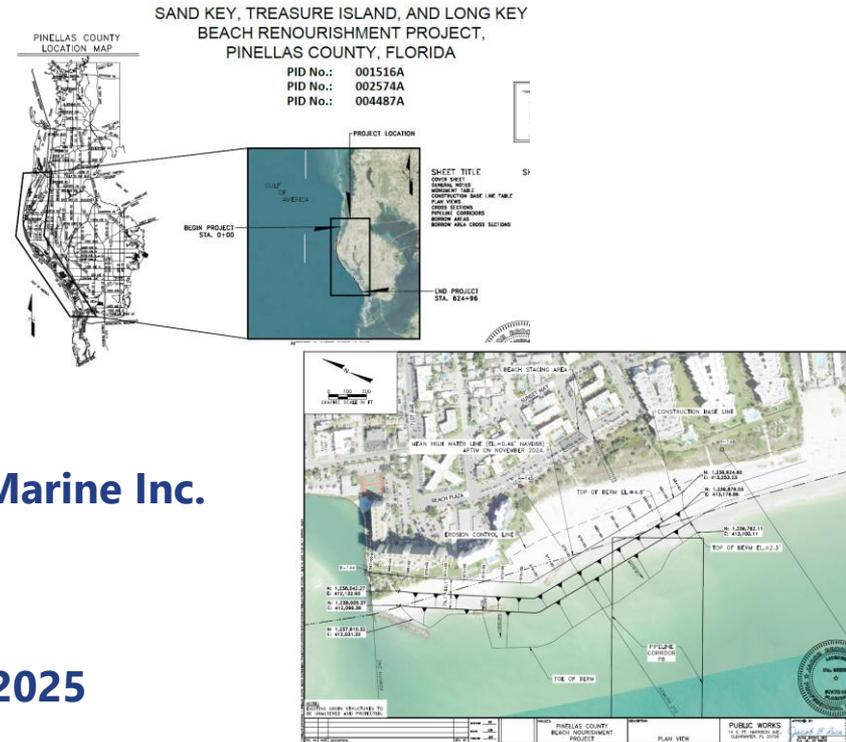
PINELLAS COUNTY BEACH RENOURISHMENT PROJECT TITLE SHEET

Pinellas Environmental & Infrastructure, LLC
 14000 13th Avenue S.W. #100
 Palm Bay, FL 32909
 888.333.3333



Design

- 10/2024 30% plans and specs received
- 02/2025 60% plans and specs received
- 03/2025 90% plans and specs received
- 04/2025 100% plans and specs received
- 04/16/2025 Bid advertised
- 05/22/2025 Opened bid results
- 06/17/2025 Awarded Contract to Weeks Marine Inc. for \$125,724,905.71
- NTP issued 06/27/2025
- Fill placement began 09/10/2025 -12/26/2025

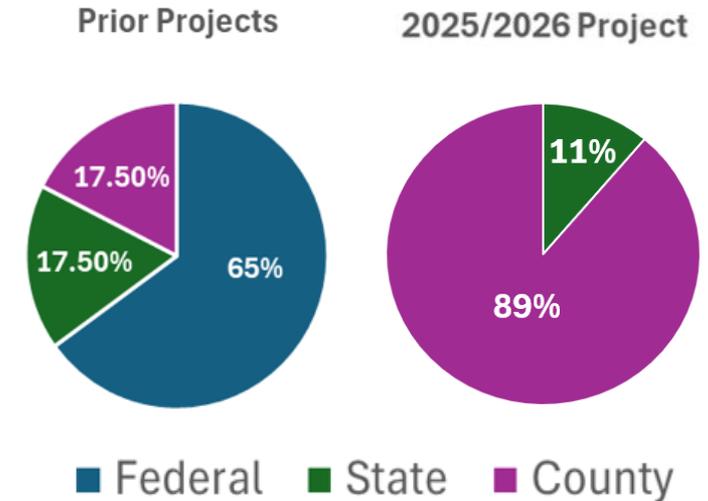


Funding

Since 2015, Pinellas County has worked to get USACE-compliant easements for Sand Key while at the same time coordinating with the USACE and members of Congress on changes to the easement language.

In 2023, USACE determined that the Treasure Island and Upham Beach segments were also missing compliant easements and cancelled the scheduled nourishment.

Traditionally, the federal cost share has covered ~65% of the project costs leaving the county to only pay 17.5% after State grants.





Communications

With help from our dedicated Pinellas County
Communications staff.

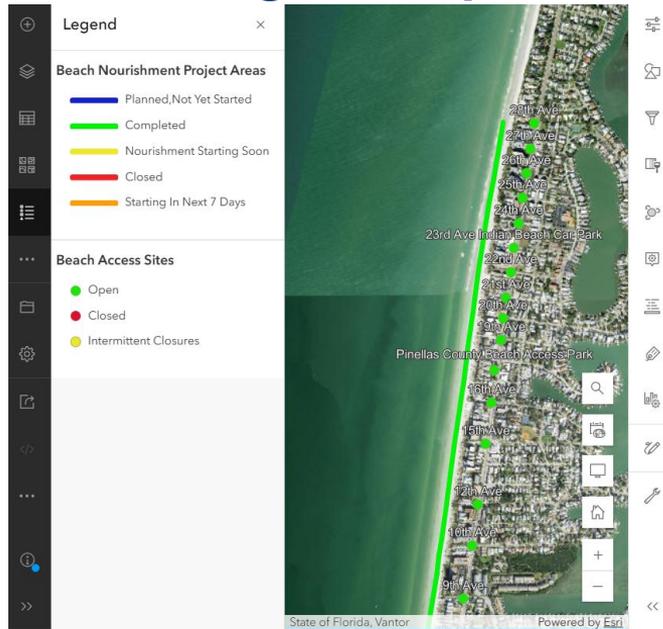
Communications and Outreach

- **Up-to-date website with project updates**
- **Nextdoor posts**
- **Opt-in NIXLE text alert**
- **Hosted 3 information events (two in-person, one virtual)**
- **Held in-person easement signing events**
- **Mailer to residents**
- **Fielded numerous call from residents, visitors and wedding planners**

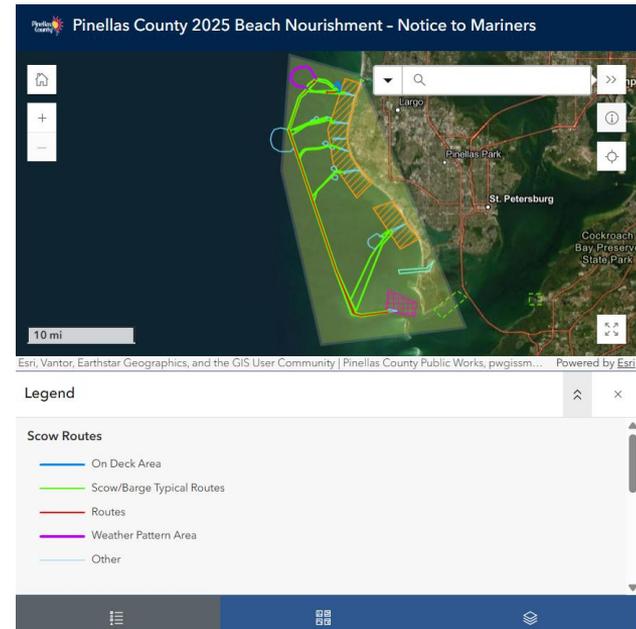


Communications and Outreach

Progress Map



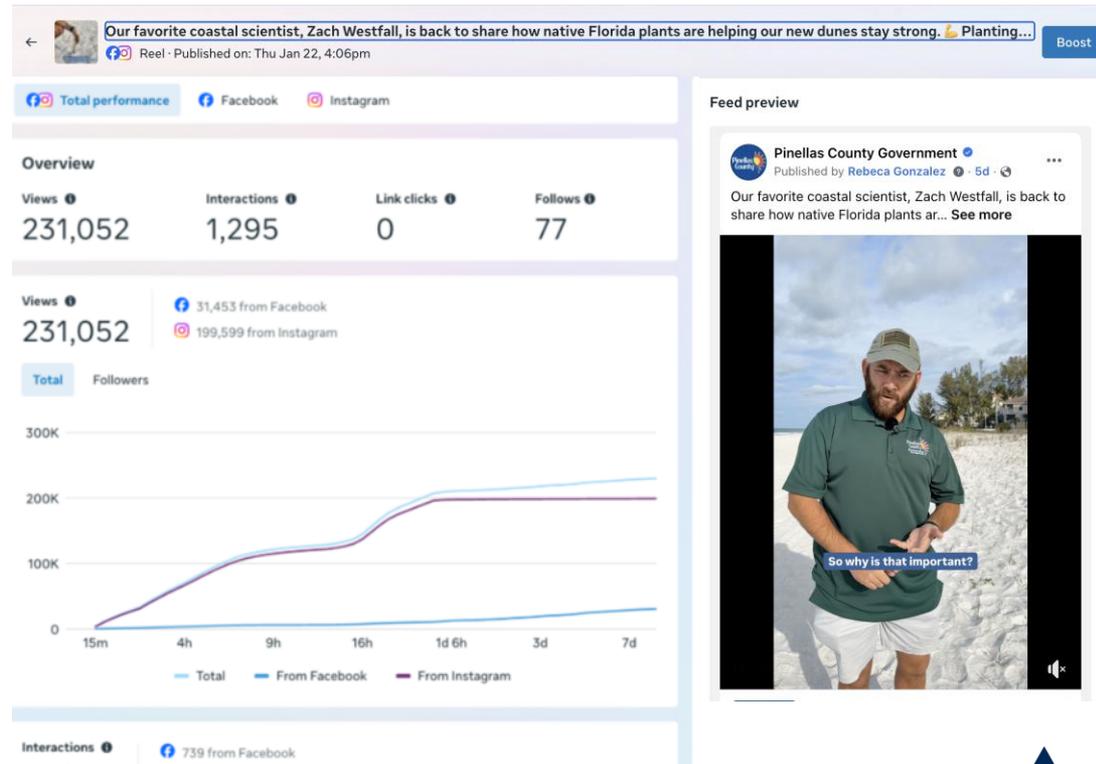
Scow Routes



Video Shorts by famous Zach Westfall

Created post project video shorts to celebrate the completion of the project and educate the public about what we are doing.

One video garnered over 231,000 views



A large yellow circle is partially visible on the left side of the slide.

Easements

With help from our dedicated Pinellas County Real Property Division staff.



Temporary Construction Easements

Army Corp

Perpetual Easement

- **Public access and use**
- **Construct a beach and optional dune system**
- **Doesn't Expires**

Pinellas County

Perpetual Easement

- **No public access and use**
- **Construct a beach and optional dune system**
- **Doesn't Expires**

Pinellas County

Temporary Easement

- **No public access and use**
- **Construct a beach and optional dune system**
- **Expires Dec. 31, 2029**

To ensure constructability it was decided all beaches seaward of the ECL would be filled. The easements only influenced the landward extend of the fill.



Missing Sand Key Easements

Indian Rocks Beach:

- 48 easements needed

Indian Shores:

- 47 easements needed

Redington Shores:

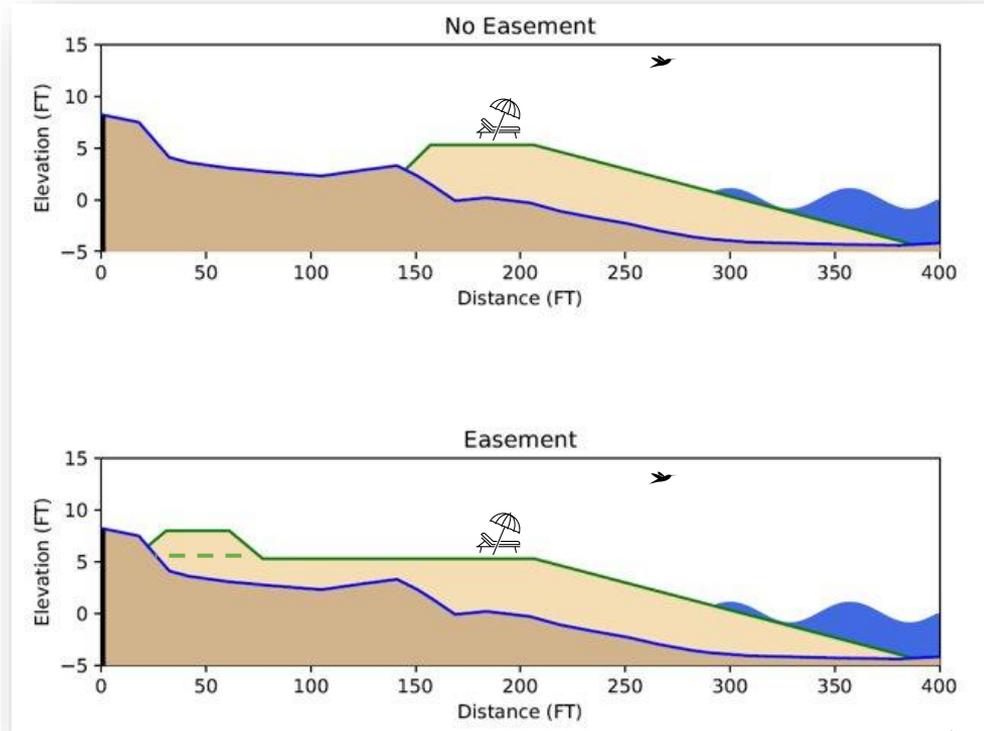
- 30 easements needed



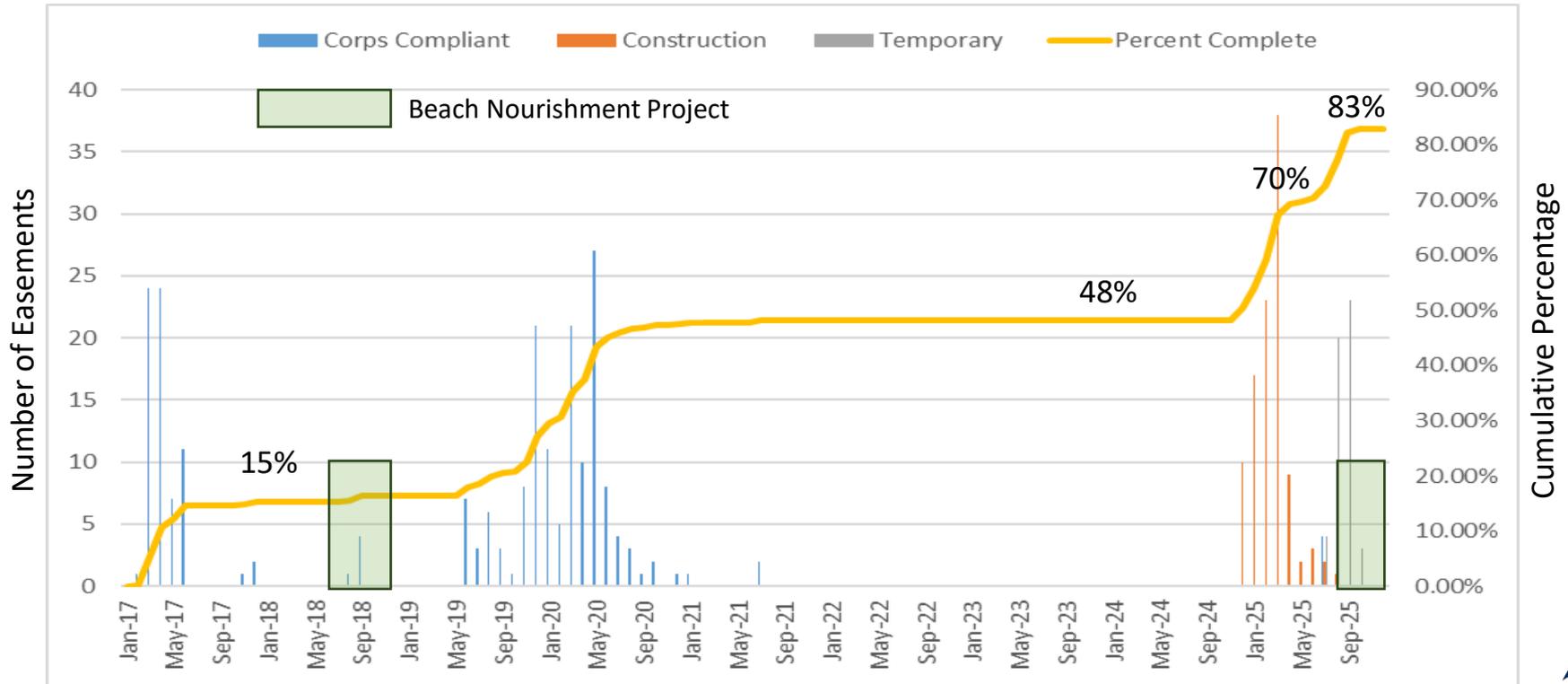
Missing easements create a weaker project that provides less protection!



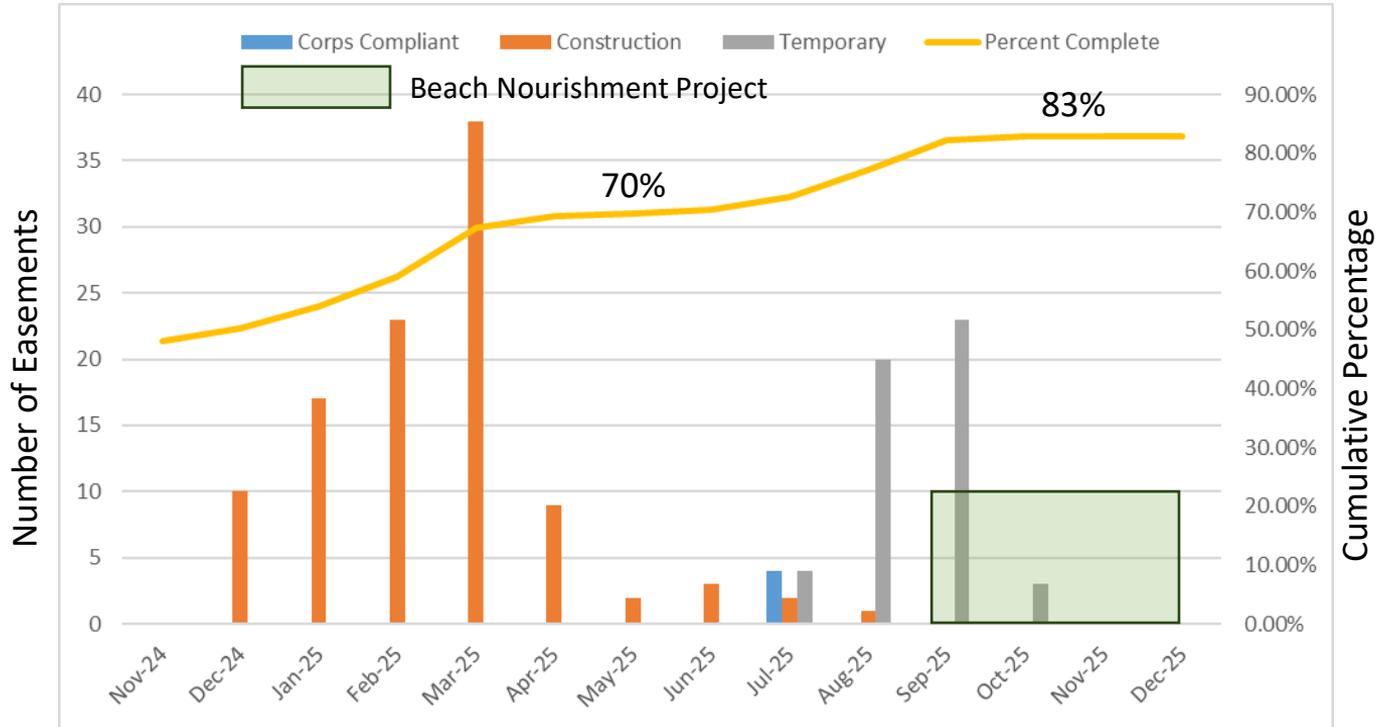
Example With Missing Easement



Easements

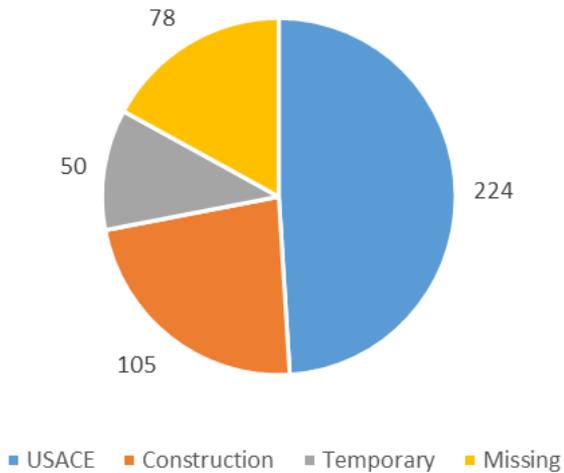


Easements

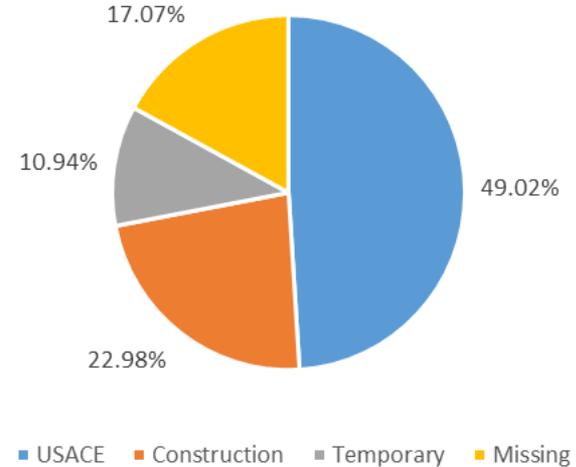


Breakdown of Easement Types

Number of Easements



Percent of Easements





Construction

Meanwhile

Project Area



USACE Emergency Permit

- **Applied November 2, 2024; after Hurricane Milton**
- **Issued March 6, 2025**
- **One-time, one-year permits**
 - **Expires March 7, 2026**
 - **Split into four permits**
- **Left one year for FDEP permit mods, final design, bidding, contracting, and construction**



Design Considerations

- **Utilize USACE design – full template and permitting speed**
- **Incorporate dunes**
 - **Dependent on easements**
- **Constructable with permit time constraint?**



Design

- **Placement in Sand Key, Treasure Island, and Upham Beach**
- **2.2 million cubic yards**
- **Along about 11 miles**
- **Assume full template with field changes from easements**
- **Field fit dunes**



Award

- Weeks Marine
 - Gator Dredging as sub-contractor
- \$125,724,905.71

Dredge Clearwater

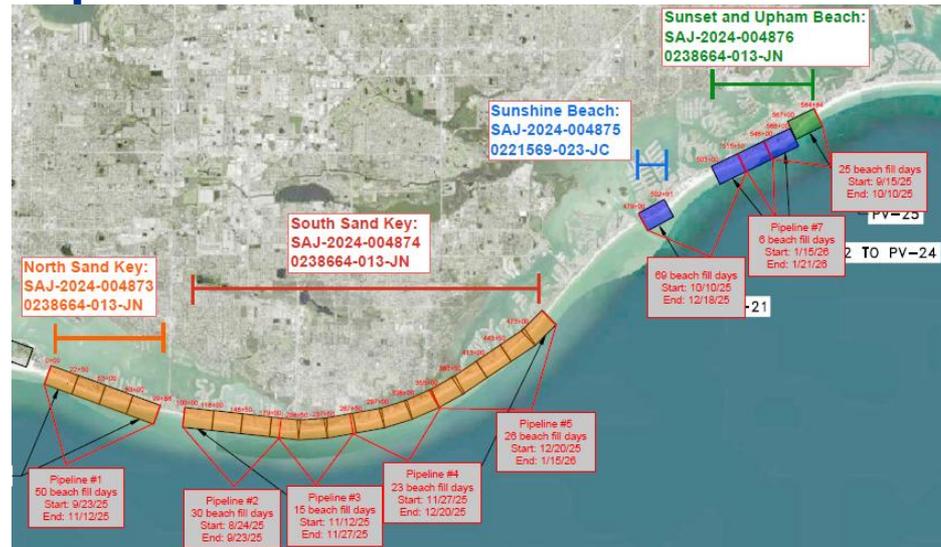


C.R. McCaskill Cutter Suction Dredge

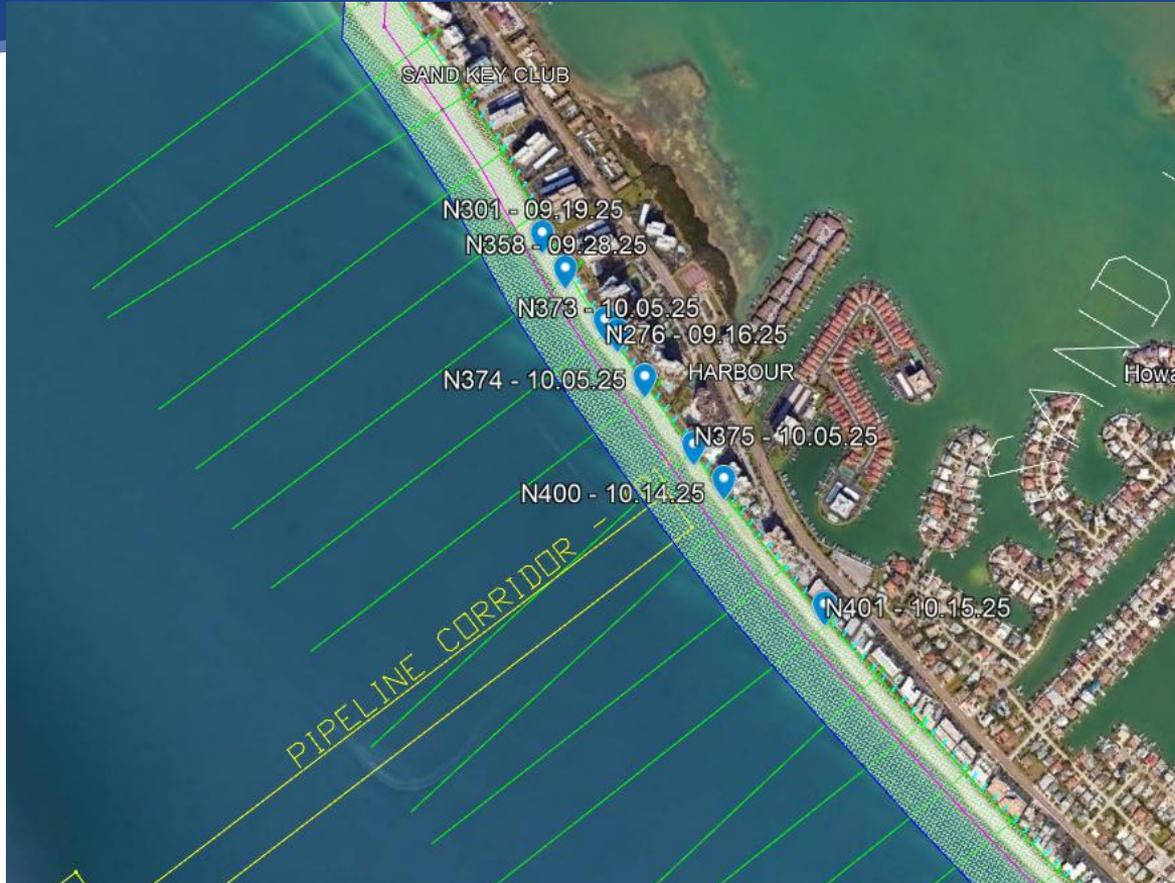


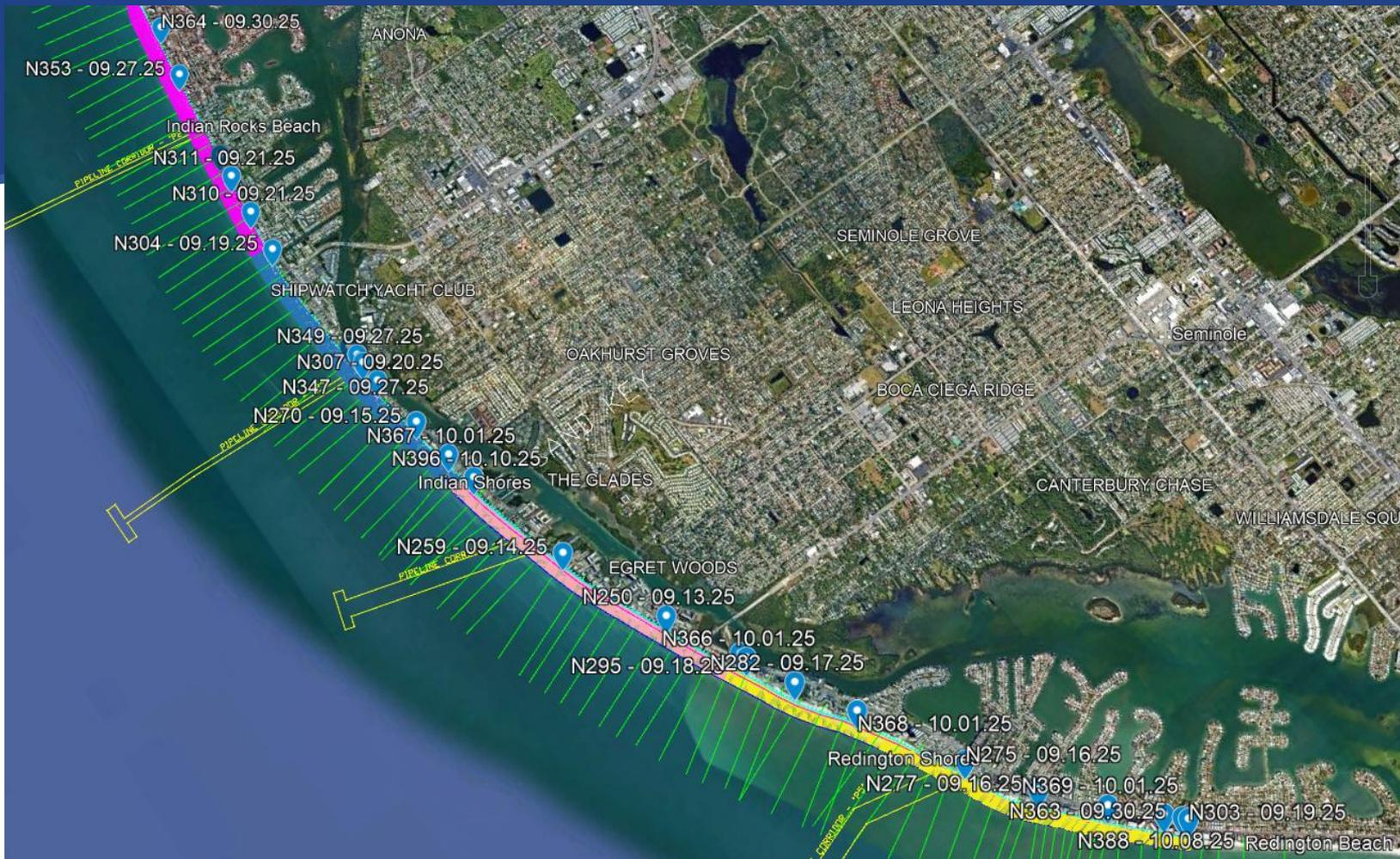
Plan of Attack

- **Divide and conquer**
 - **Egmont Shoals -> Sand Key and Partial Treasure Island**
 - **John's and Blind Passes -> Upham Beach and Partial Treasure Island**
- **Simultaneous work**
- **Commence September 23, 2025**
- **March 6, 2026, deadline**



DELAY – Turtle Nests





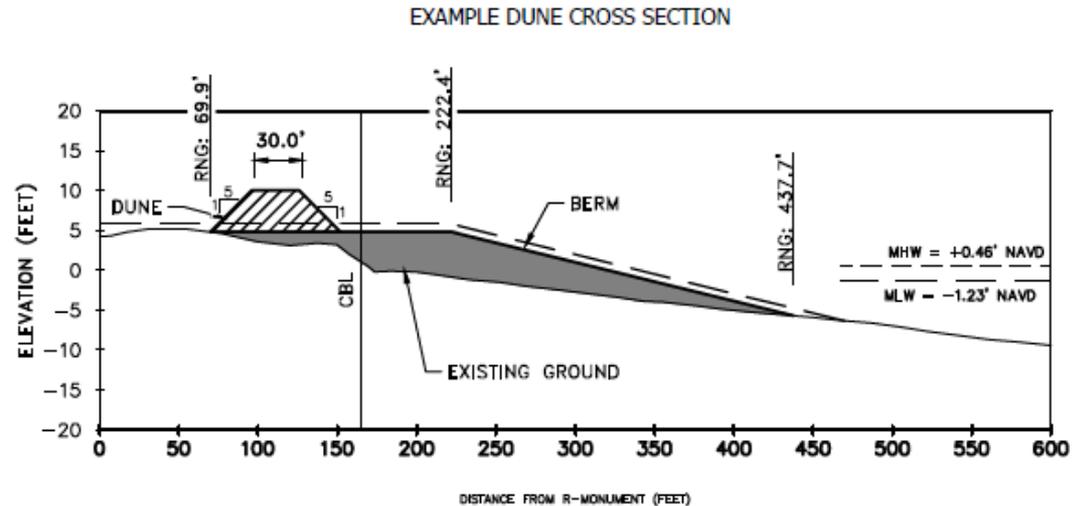
Construction



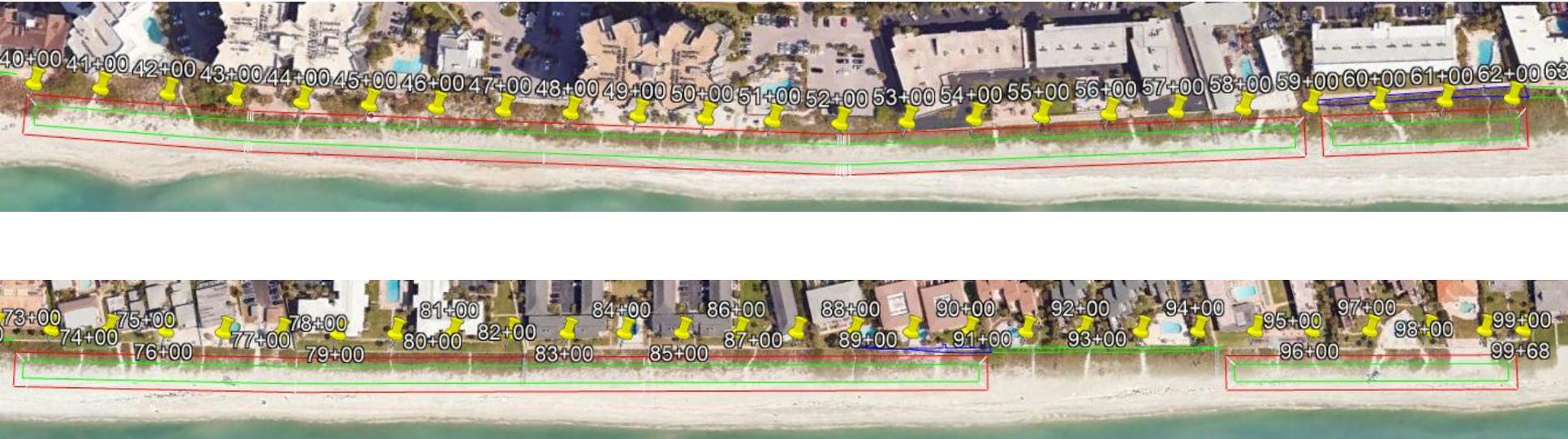


Dunes

- Template dune design
- Field Fit
- Line work for construction
- Field walkthroughs to confirm placement areas



Dunes



- Utilized Google Earth to confirm placement area of dunes with Pinellas County

Dunes



Example of each type of dune easement on short stretch of Project

Completion



- Final work on 12/26/2025
- Estimate 1.9-2.0M cubic yards placed
 - About 75,000 cubic yards for dunes
- Dunes being planted by Pinellas County

Completion



Completion



Completion



Next Steps

- **Yearly monitoring**
 - **Physical**
 - **Sea turtle**
 - **Shorebird**
- **Preparing for the next project**
 - **Obtaining easements so the next project is Corps compliant**



Questions?

But before you raise your hand ask yourself...



Contact Us



John E. Bishop, Ph.D.

jbishop@pinellas.gov

Zach Westfall, GIT
zwestfall@pinellas.gov

Jacob Rice, PE
jacob.rice@aptim.com

