

# North Topsail Beach Coastal Update September 2025

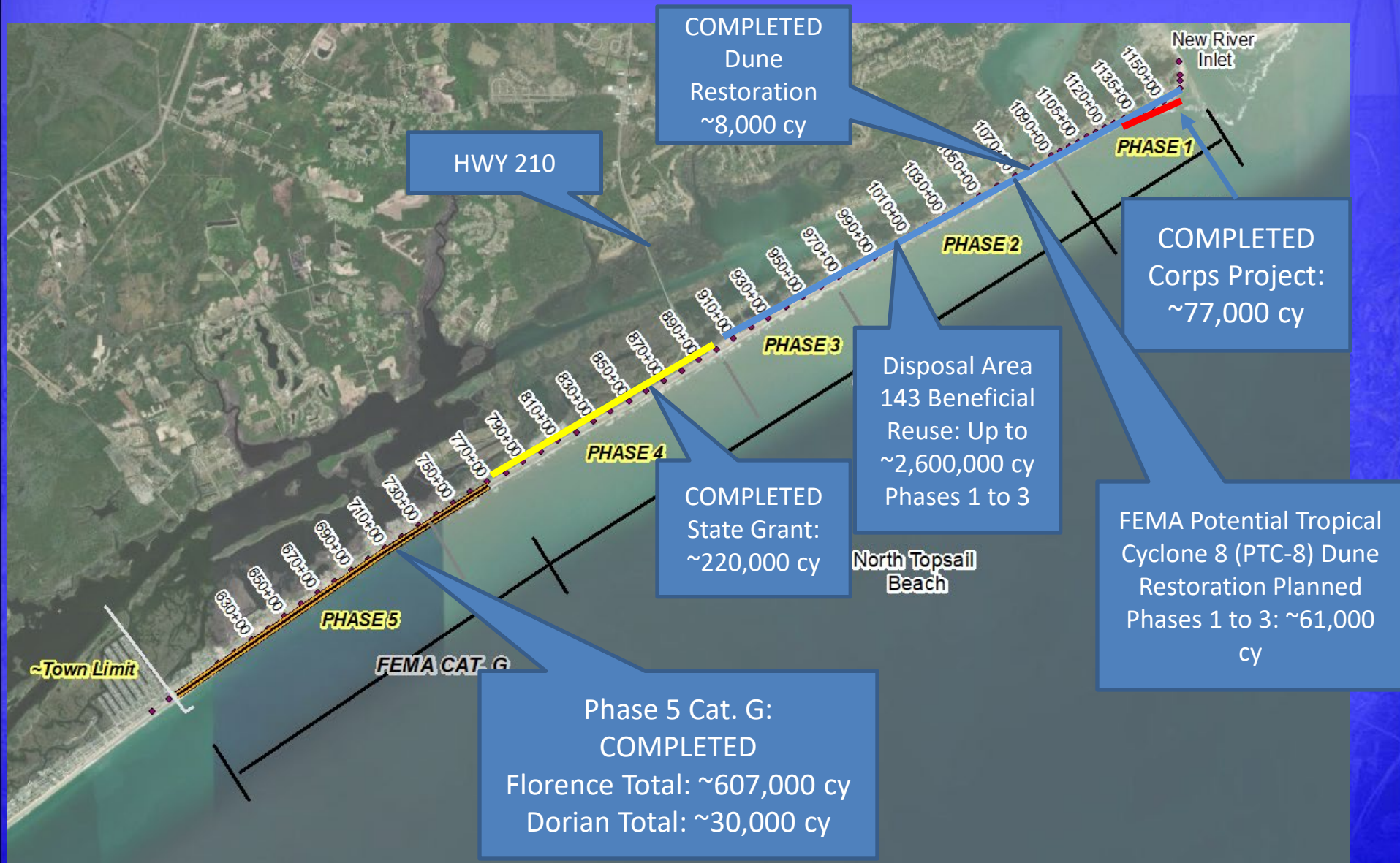


Marina, Coastal, Environmental  
& Water Resources Engineers



# Recent and Upcoming Projects Overview

## State Grant, Beneficial Reuse, FEMA, Corps Projects



# USACE Navigation Dredging and Placement Phase 1 Corps Beneficial Reuse Project



**Dredging**

**Fill Placement**

**Completed at end of February.  
Long pumping distance  
presents a challenge for  
dredgers.**



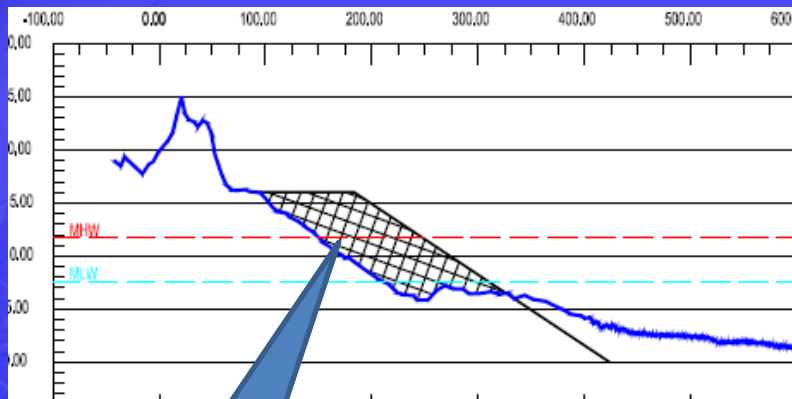
**77,000 cy  
Placement North of Topsail  
Reef Condos**



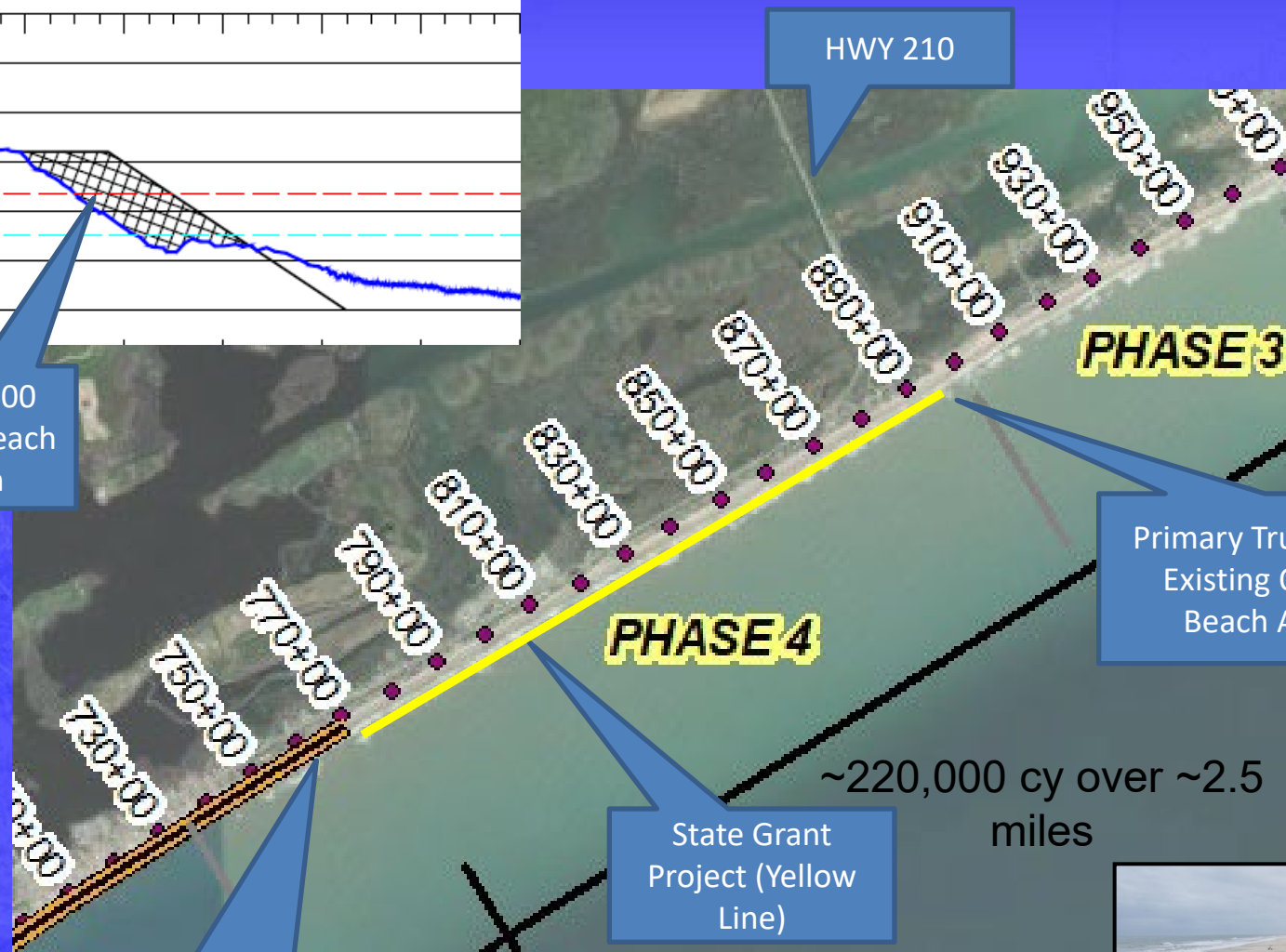
**Completed FEMA Mitigation Nourishment in Phase 5 (and some Phase 4)  
Beach (not Dune) Nourishment. ~3.5 Miles of Restored Beach. Held up well  
to PTC-8 and other recent storms (including Hurricane Erin waves/surge).**



# Completed State Grant in Phase 4. Beach Nourishment



~80 to 100  
Feet of Beach  
Width



Primary Truck Access at  
Existing Opening at  
Beach Access 33

State Grant  
Project (Yellow  
Line)

~220,000 cy over ~2.5  
miles

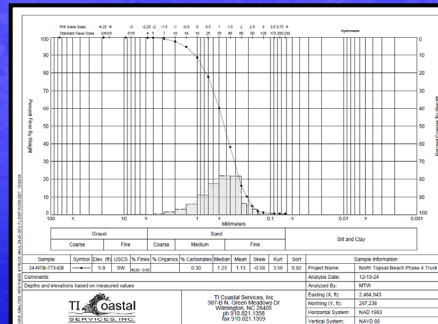
Secondary Truck Access  
at Existing Opening at 2<sup>nd</sup>  
Avenue





# Phase 4 Nourishment

~220,000 cy Placed





# Disposal Area (DA) 143 Beneficial Reuse and Placement in Phases 1, 2, and 3



- Had “One-Stop” Pre-App Meeting with Agencies in June
- Permit Application Finalization.
- Based on Agency Feedback, ~1.9 to 2.6 Million CY at DA 143
- Discussions with Wildlife Resources Commission (WRC)



# Potential Tropical Cyclone (PTC) 8

**DECLARED OCTOBER 19, 2024**

## SUMMARY

STATE: North Carolina  
NUMBER: FEMA-4837-DR  
INCIDENT: Potential Tropical Cyclone Eight  
INCIDENT PERIOD: September 16-20, 2024  
DATE REQUESTED BY GOVERNOR: October 16, 2024  
FEDERAL COORDINATING OFFICER: E. Craig Levy, Sr.  
National FCO Program

## DESIGNATIONS AND TYPES OF ASSISTANCE:

### INDIVIDUAL ASSISTANCE (Assistance to individuals and households):

Not Requested.

PUBLIC ASSISTANCE (Assistance for emergency work and the repair or replacement of disaster-damaged facilities):

Brunswick, Carteret, New Hanover, and Onslow Counties.

# Dune Restoration to Withstand 5-Year Storm

## Public Assistance

### APPLICANT BRIEFING

Potential Tropical Cyclone Eight 2024

## Public Assistance (PA)

Provides grants to eligible state, local governments, EBCL and eligible private non-profits ("Applicants") to assist with the cost of responding to and recovering from disasters

Governing Laws, Regulations, and Policies

Stafford Act

Law

44 CFR

Program Regulations

2 CFR

Procurement Requirements

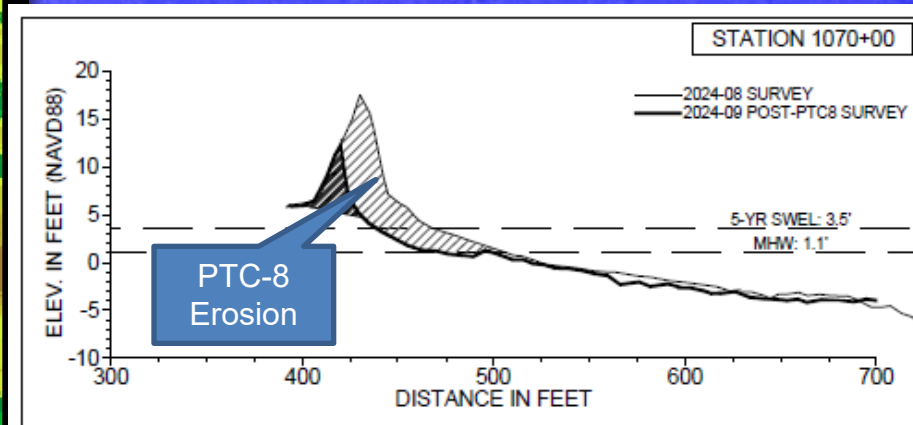
PA Program & Policy Guide (PAPPG)

Policy

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)  
ENVIRONMENTAL PLANNING AND HISTORIC PRESER-  
VATION (EHP) GREENSHEET FOR DR-4837-NC



**PTC 8 Rainfall (Sept. 16, 2024)**





# Potential Tropical Cyclone (PTC) 8

- FEMA Qualified Volume Calculations Based on 5-Year Storm Runup and Erosion Analysis
- FEMA Consolidated Resource Center (CRC) continues to review. Have issued 3 requests for additional information.



**FEMA Category B  
Mitigation Not  
Calculated by Dune  
Losses**

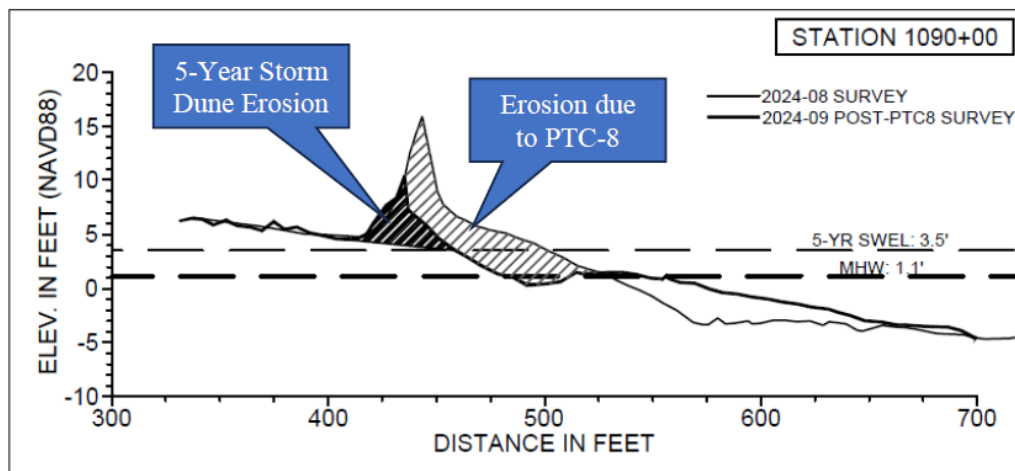


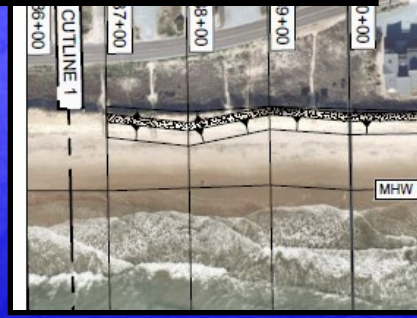
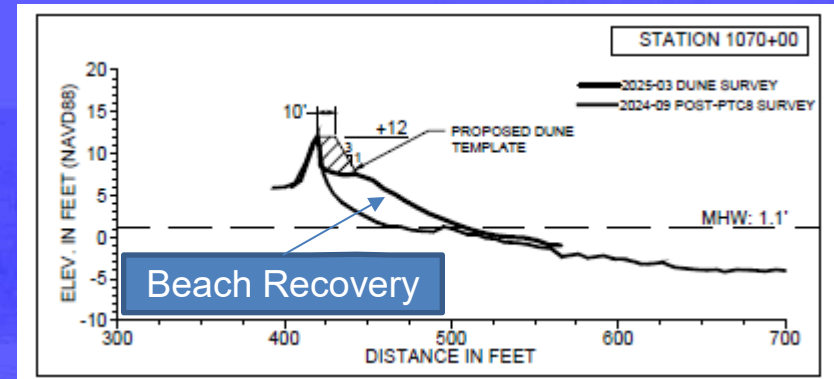
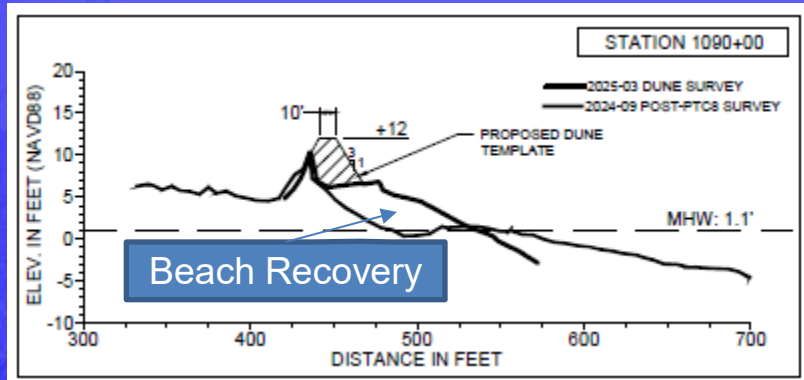
Figure 4: Transect 1090+00 profile showing PTC-8 erosion as well as 5-year storm erosion of 6 cy/ft (as recommended in FEMA mapping guidance).





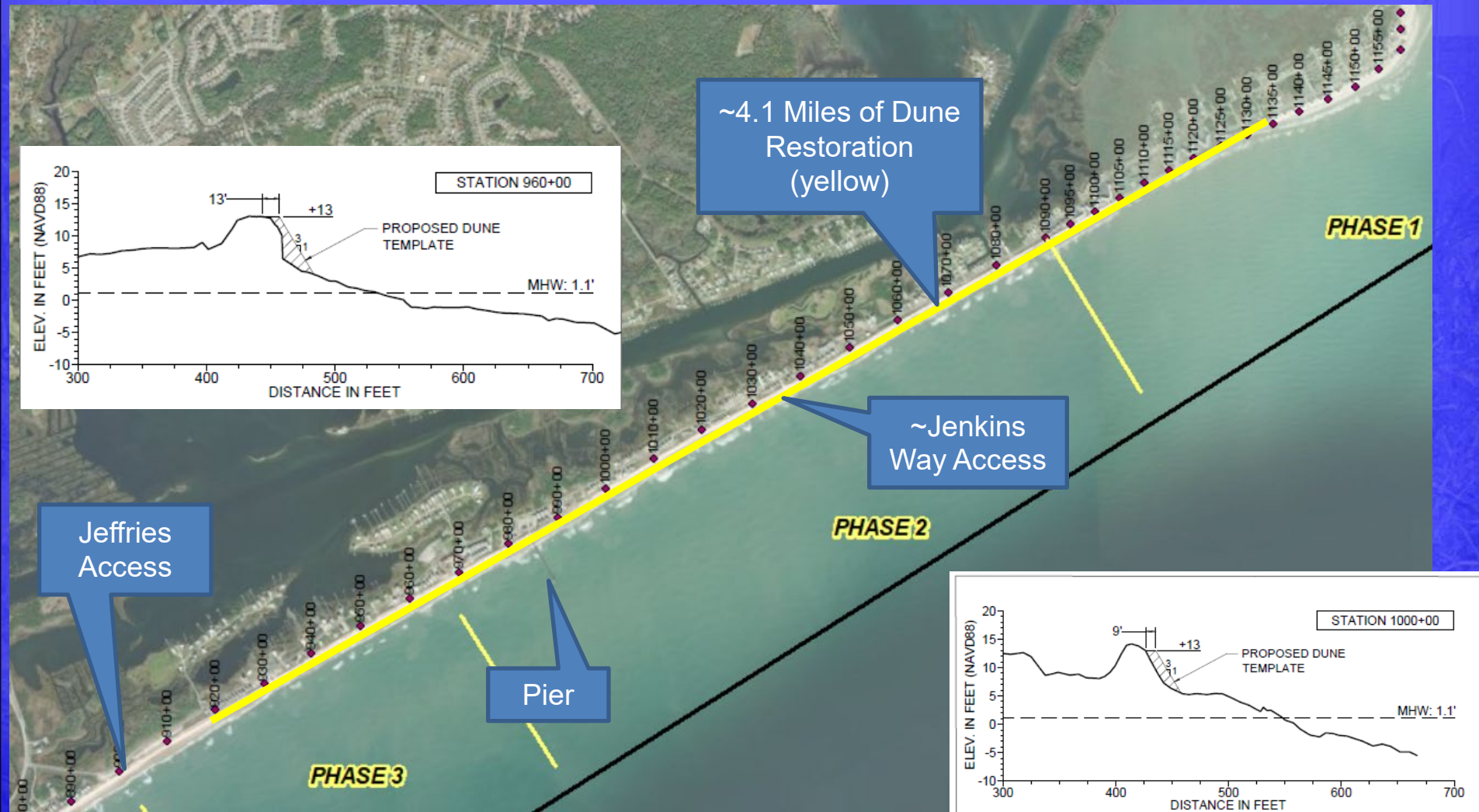
# Critical Dune Restoration: ~8,000 cy in April/May

## ST Wooten – Contractor





# Northern Shoreline Dune Restoration (Phases 1 to 3 for 61,000 cy) Planned to Start This November ST Wooten – Contractor

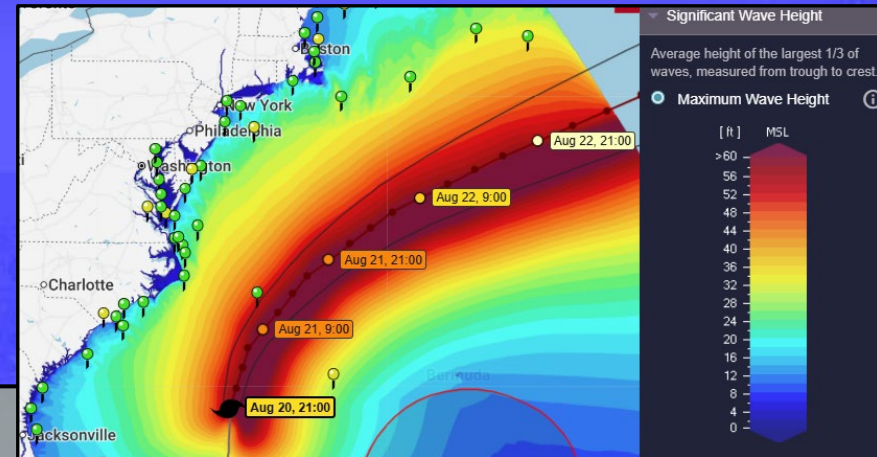




# Hurricane Erin

August 20-21

Phases 4 and 5 held up well. Dune scarping and erosion along Phases 1, 2, and 3



Note: Dune Restoration  
Planned for Phases 1, 2, 3  
Starting November 16

Post-Erin

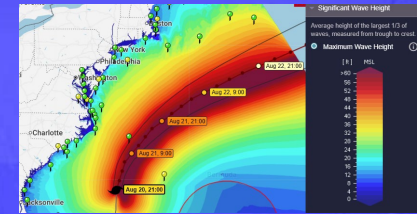




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Post-Erin



Post-Erin at Topsail Dunes Bldg. 3



Post-Erin



Post-Erin

Note: Dune Restoration  
Planned for Phases 1, 2, 3  
Starting November 16



Existing Beach Access



# Town Beach Projects Updates

- New River Inlet Management Master Plan EIS: Final Sections of Draft EIS under several levels of USACE review. Higher level review ongoing.
- Post Tropical Cyclone 8 FEMA/NCEM coordination continues. FEMA have issued 3 requests for Information. 61,000 cy dune restoration in Phases 1,2 and 3 to occur beginning this November 16.
- Disposal Area 143 Beneficial Reuse for Nourishment of Phases 1,2,3 of between ~1.9 and ~2.6 million cubic yards. “One-Stop” pre-permit application held with agencies and final permit application in development. Coordination on DA143 use ongoing with Wildlife Resources Commission (WRC)
- Critical Dune restoration in Phases 1 and 2 COMPLETED.
- State Grant Nourishment - ~220,000 cy in Phase 4 COMPLETED.
- Phase 1 – Corps AIWW Project (~77,000 cy placed north of Topsail Reef condos) COMPLETED.
- Working with NTB Staff regarding funding, accounting and reimbursement for FEMA funded projects
- Permitting Coordination (all projects)

