

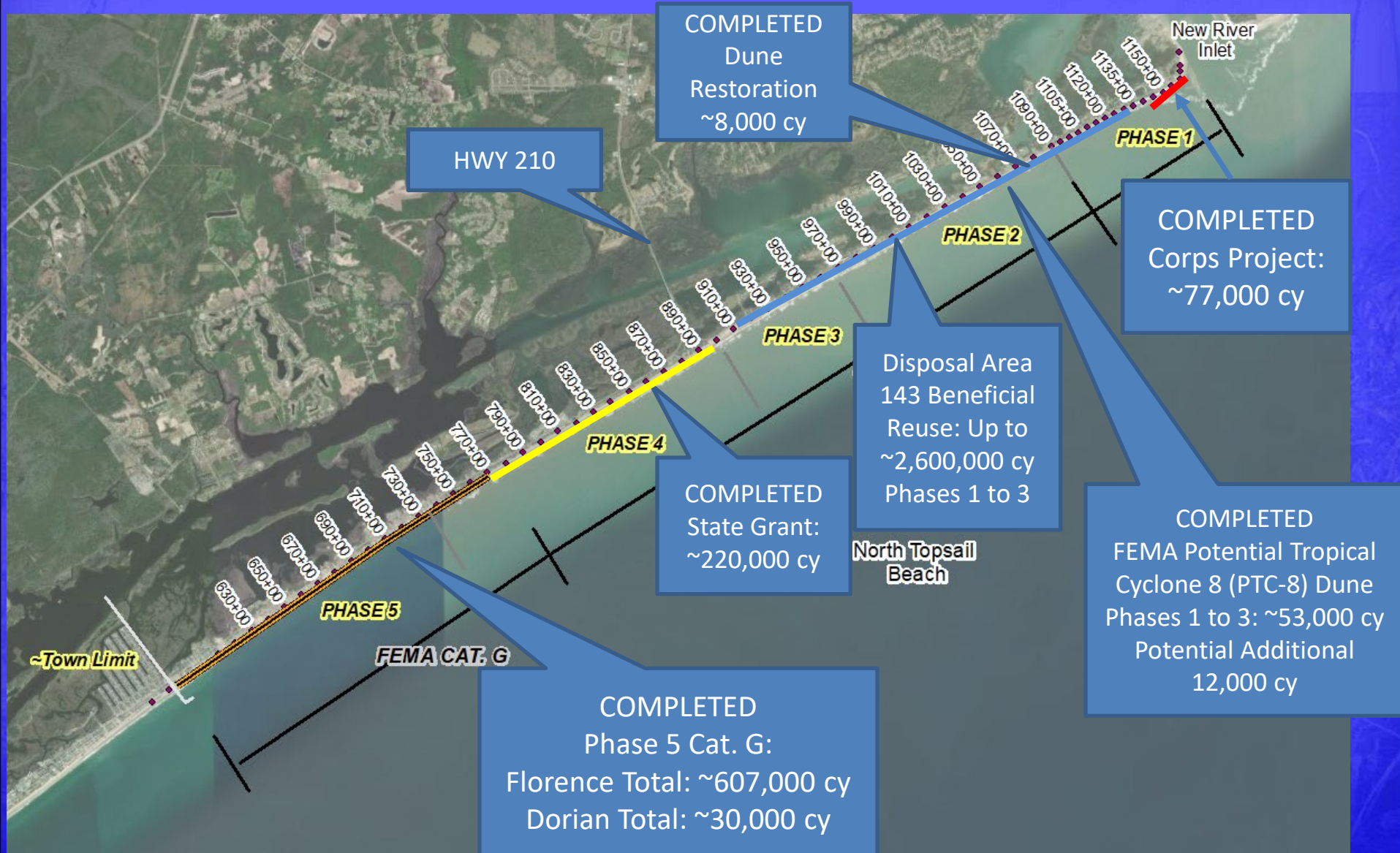
North Topsail Beach Coastal Update May 2026



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



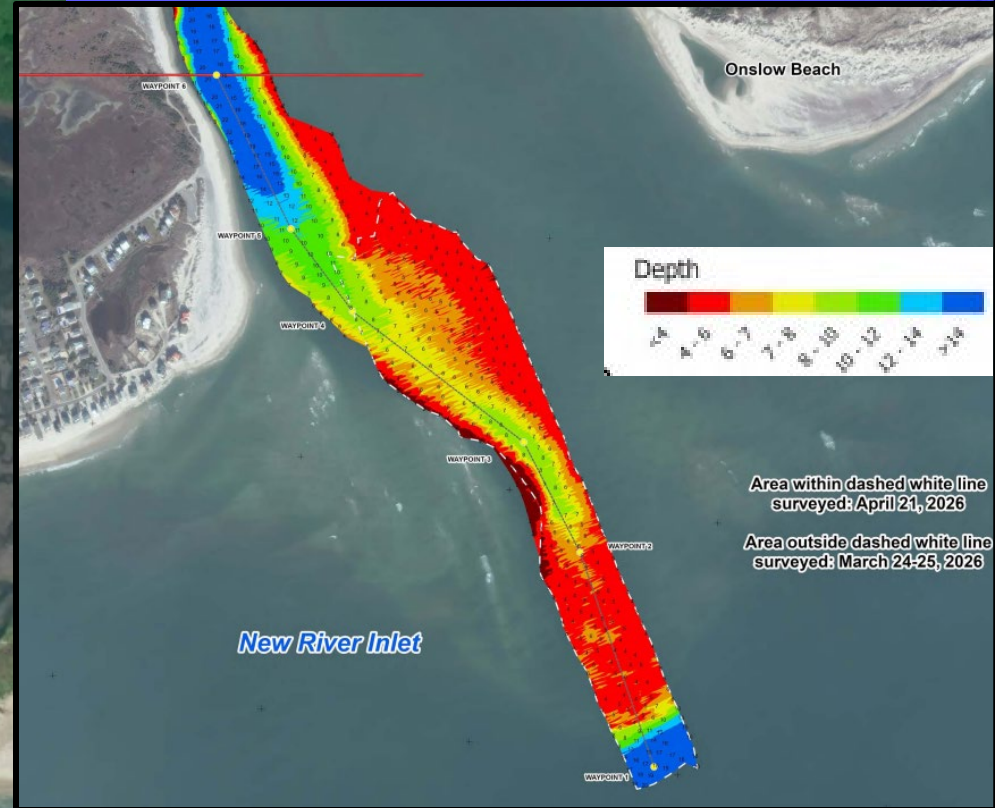
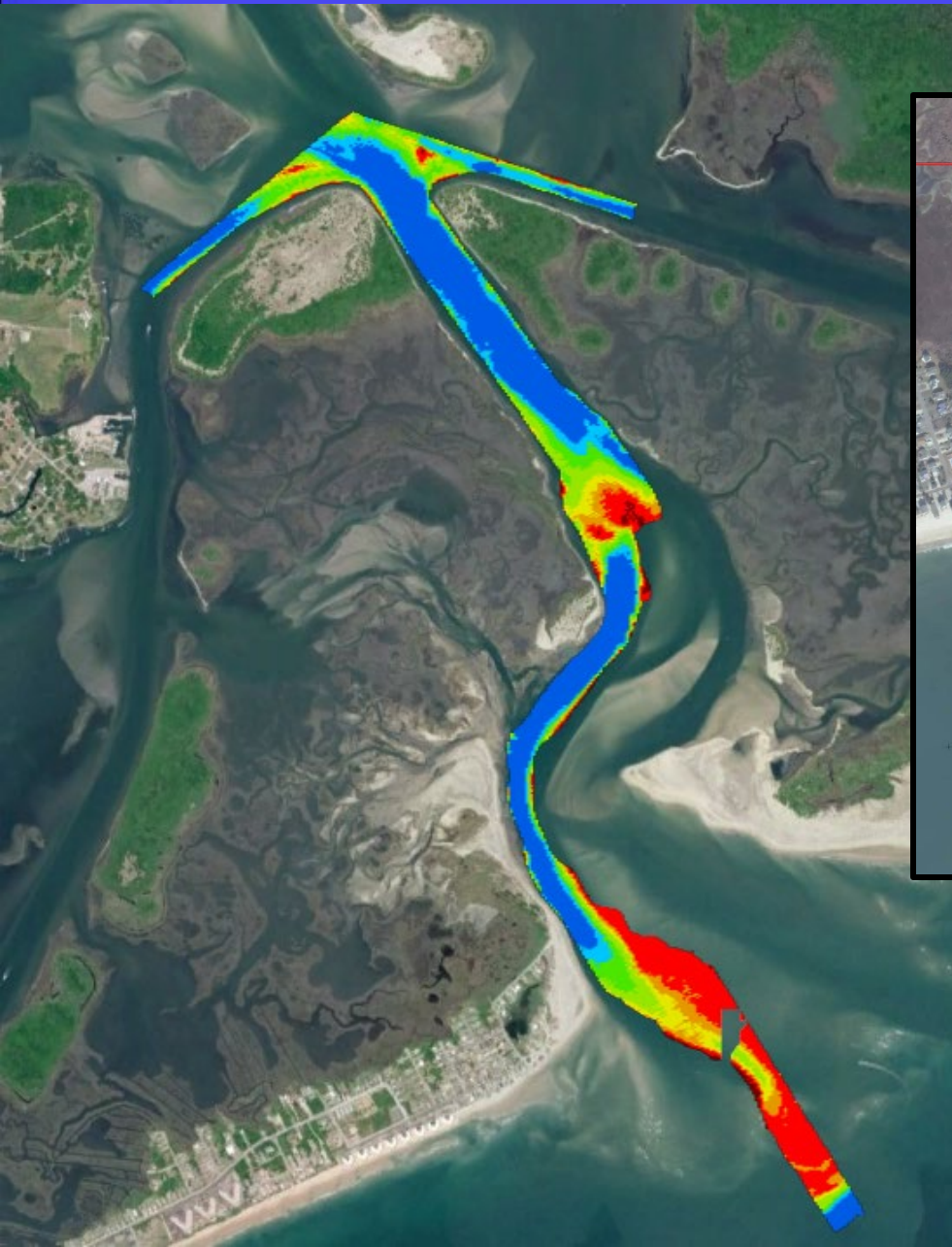
Typically Occurs
Every 2 years

2025: 77,000 cy
2023: 163,000 cy
2021: 101,000 cy

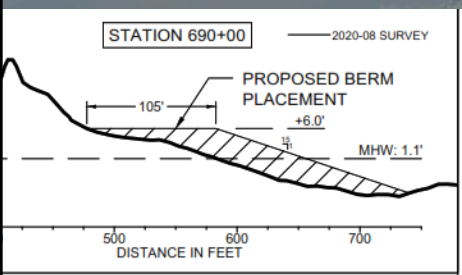


USACE plans for next winter will be announced this spring/summer

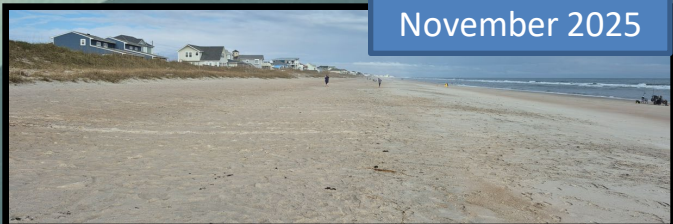
New River Inlet & AIWW Conditions



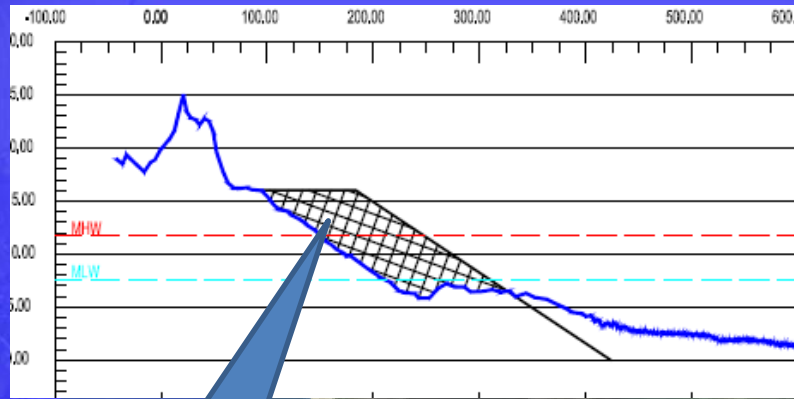
Completed FEMA Mitigation Nourishment in Phase 5 (and some Phase 4) Beach (not Dune) Nourishment. ~3.5 Miles of Restored Beach. Held up well to PTC-8 and other recent storms (including Hurricane Erin and recent wave/surge events).



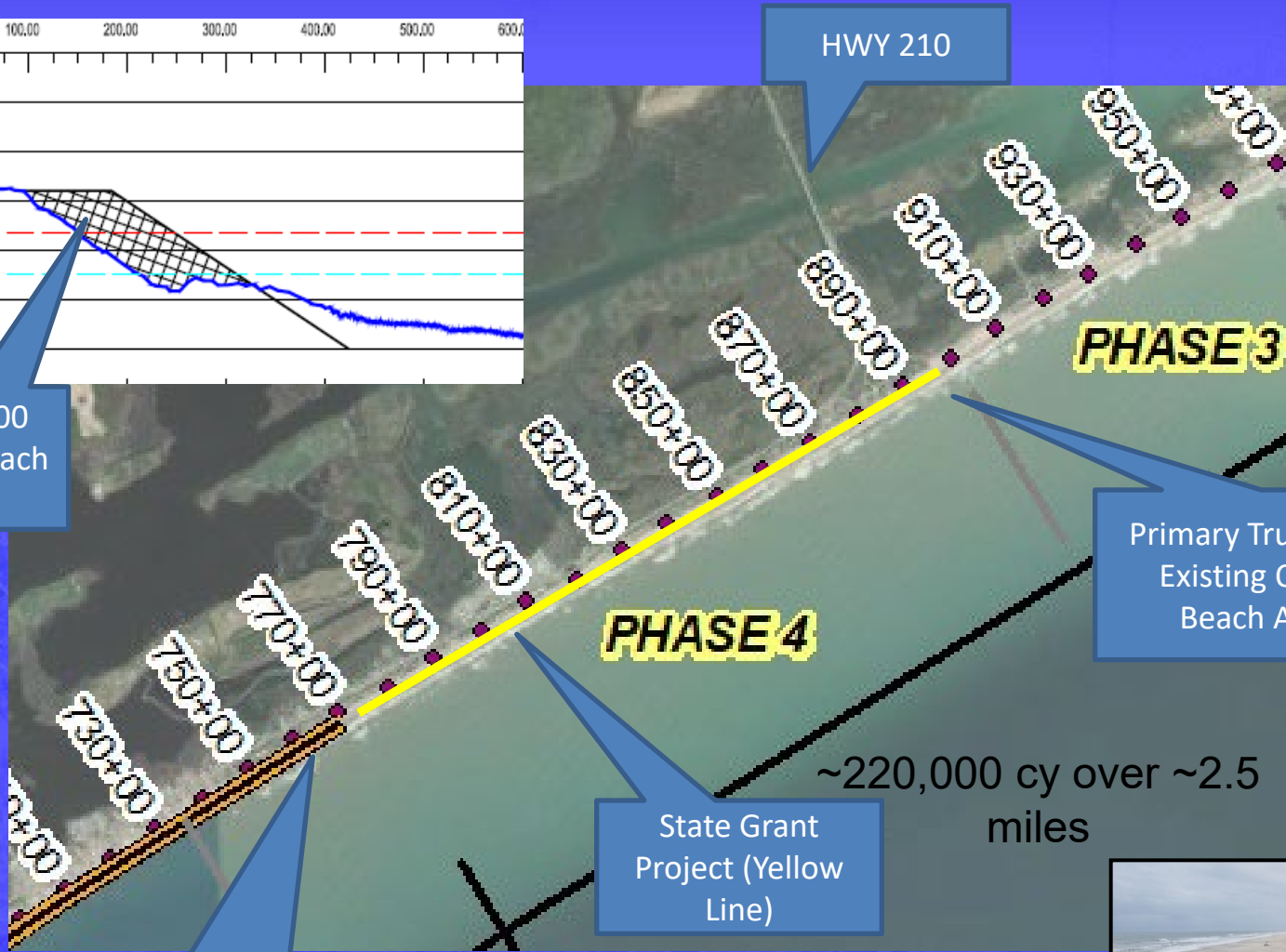
Restored ~3.5 Miles



Completed State Grant Phase 4 Beach Nourishment – Held up well to Hurricane Erin and recent wave/surge events.



~80 to 100 Feet of Beach Width



HWY 210

PHASE 3

PHASE 4

Primary Truck Access at Existing Opening at Beach Access 33

State Grant Project (Yellow Line)

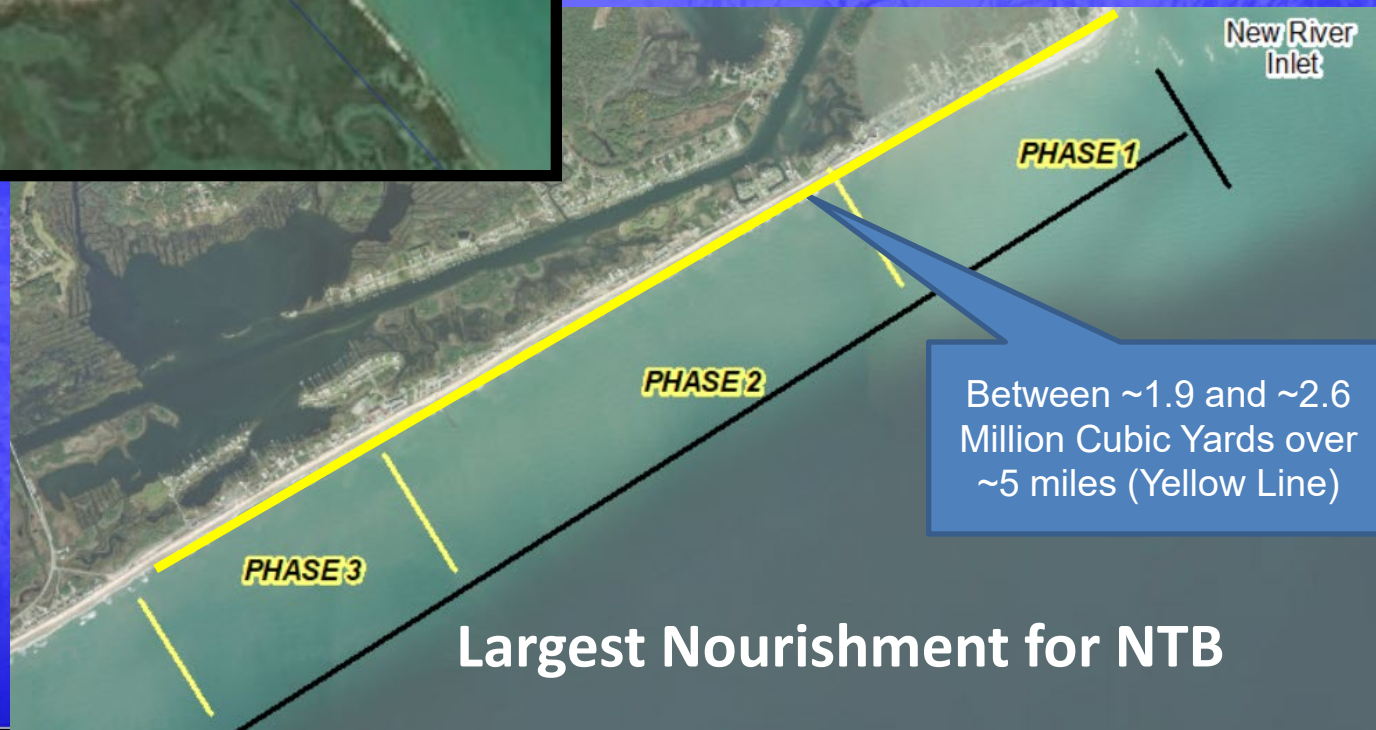
~220,000 cy over ~2.5 miles

Secondary Truck Access at Existing Opening at 2nd Avenue



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

- Based on Agency Feedback, ~1.9 to 2.6 Million CY at DA 143
- Easement coordination continues with state agencies
- Permit Application Submission Follows Easement.
- Funding Research and Coordination Ongoing.



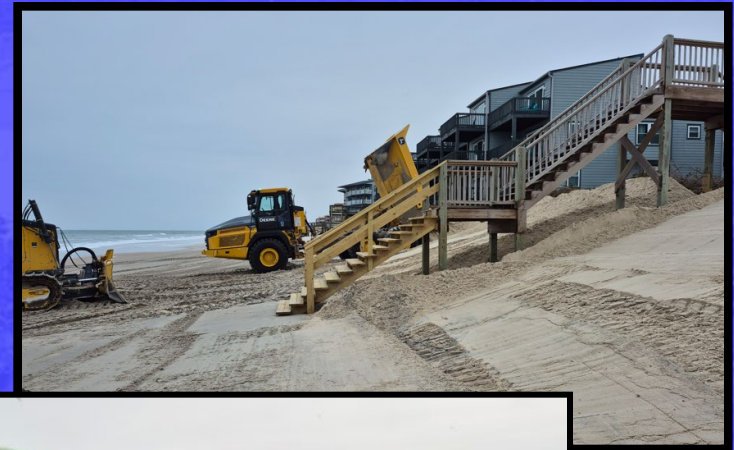
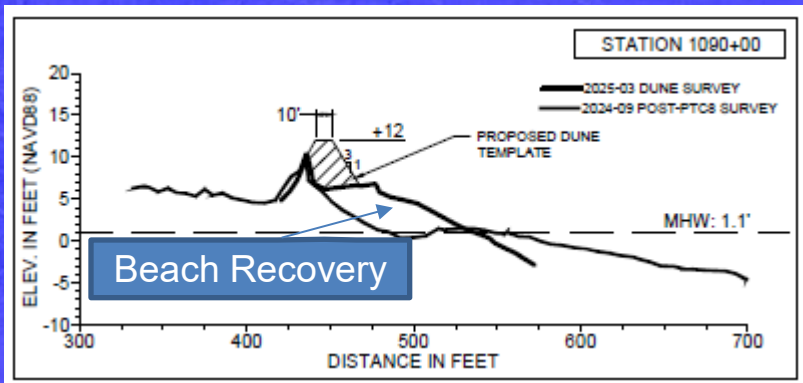
Largest Nourishment for NTB

FEMA PTC-8 Mitigation Includes:

1. Critical Dune Restoration: ~8,000 cy in April/May 2025
2. Phase 1, 2, and 3 Dune Restoration: ~53,000 cy January/February 2026
3. An additional ~12,000 cy that has officially been obligated by FEMA in March

Dune Plant Sprigging Planned for this May/June

ST Wooten – Contractor

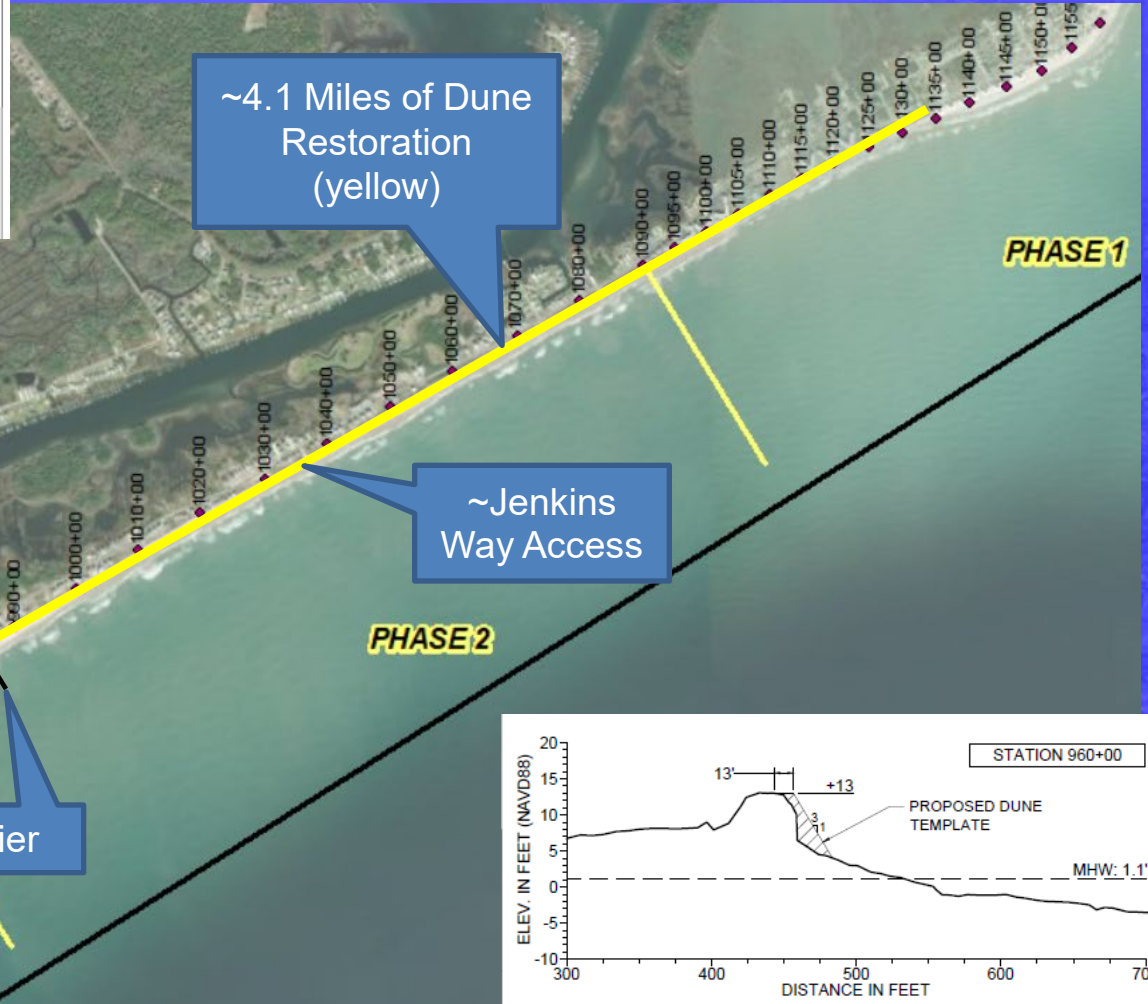
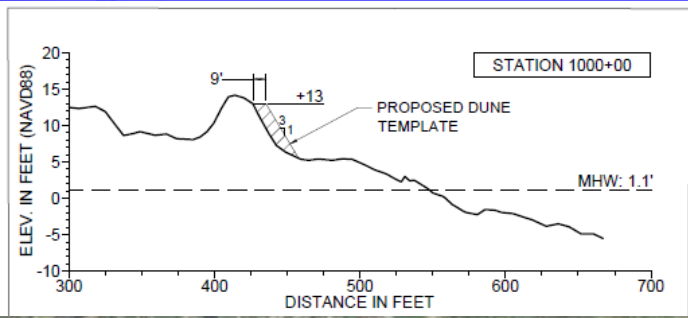


Northern Shoreline Dune Restoration (Phases 1 to 3 for 53,000 cy)

An Additional ~12,000 cy is Potentially Available

Work Completed February 18

FEMA PTC-8 Mitigation

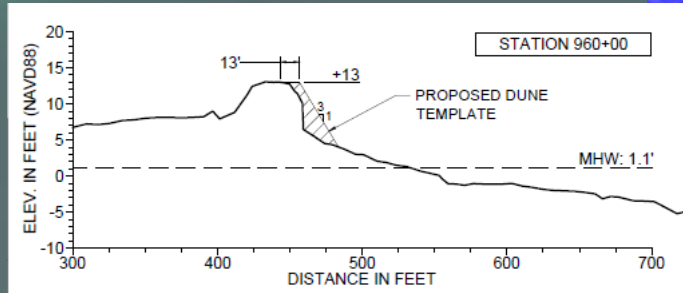


CAMA Permit Restrictions Include Not Placing Sand On Mature, Healthy Vegetation On The Dune Face

Jeffries Access

Pier

~Jenkins Way Access



INLET HAZARD AREA (IHA)

- First Adopted in 1970s
- CAMA/DCM has tried to update ~10 and ~20 years ago
- CRC April 15 Mtg – Update IHAs
 - More Stringent Beachfront Permitting
 - Additional Homes/Parcels Affected (Grandfathering is unchanged). Focused on new construction and rebuilds.

Inlet Hazard Area

Defined in 15A NCAC 07H .0304(2), this AEC includes areas vulnerable to erosion and other impacts caused by proximity to inlets. The boundary extends landward from the mean low water line and encompasses statistically determined inlet migration zones.

Structures Inside Inlet Hazard Areas (Current vs. Updated)

Location	Current IHAs	Updated IHAs	Difference
New River Inlet – North Topsail Beach	84	125	41

Existing:



Proposed:

Area Inside 2025 IHA	2020	2013	2004	1997	1986	1983	1980
SBF = 2	2	2	2	2	2	2	2.5
SBF = 2.5	2	2	2	2	2	2	2.5
SBF = 5	2	2	2	2	2	2	2.5
SBF = 7	2	2	2	2	2	2	2.5
SBF = 6	2	2	2	2	2	2	2.5
SBF = 10	2	2	2	2	2	2	2.5



New River Inlet – North To

15A NCAC 07H .0310 USE STANDARDS FOR INLET HAZARD AREAS

(a) Inlet Hazard Areas of Environmental Concern as are defined by Rule .0304 15A NCAC 07H .0304 (2). of this Section are subject to inlet migration, rapid and severe changes in watercourses, flooding and strong tides. Due to the extremely hazardous nature of the Inlet Hazard Areas, all development within these areas shall be permitted in accordance with 15A NCAC 07H .0306 and the following standards:

- (1) All development in the inlet hazard area shall be set back from the vegetation line a distance equal to the setback required in the adjacent ocean hazard area; The Inlet Hazard Area setback for development shall be determined by the long-term erosion rate as defined in Rule 15A NCAC 07H .0304(2) and measured in a landward direction from the vegetation line as defined in 15A NCAC 07H .0305(5), the pre-project vegetation line as defined in 15A NCAC 07H .0305(6), or the measurement line as defined in 15A NCAC 07H .0305(9), whichever is applicable;
- (2) Permanent structures shall be permitted at a density of no more than one commercial or residential unit per 15,000 square feet of land area on lots subdivided or created after July 23, 1981;
- (3) Only residential structures of four units or less or non-residential structures of less than 5,000 square feet total floor area as defined in Rule 15A NCAC 07H .0306(a)(2) shall be allowed within the inlet hazard area Inlet Hazard Area, except that access roads to those areas and maintenance and replacement of existing bridges shall be allowed;

PROPOSED INLET HAZARD AREA (IHA)

Area Inside 2025 IHA	2020	2013	2004	1997	1986	1983	1980
SBF = 2	2	2	2	2	2	2	2.5
SBF = 2.5	2	2	2	2	2	2	2.5
SBF = 5	2	2	2	2	2	2	2.5
SBF = 7	2	2	2	2	2	2	2.5
SBF = 6	2	2	2	2	2	2	2.5
SBF = 10	2	2	2	2	2	2	2.5

New River Inlet – North Topsail Beach



2025 Inlet Hazard Area Setback Factors
North Topsail Beach at New River Inlet

Legend

- Inlet Hazard Area (2025 Update)
- Inlet Hazard Area (Shoreline Boundary)

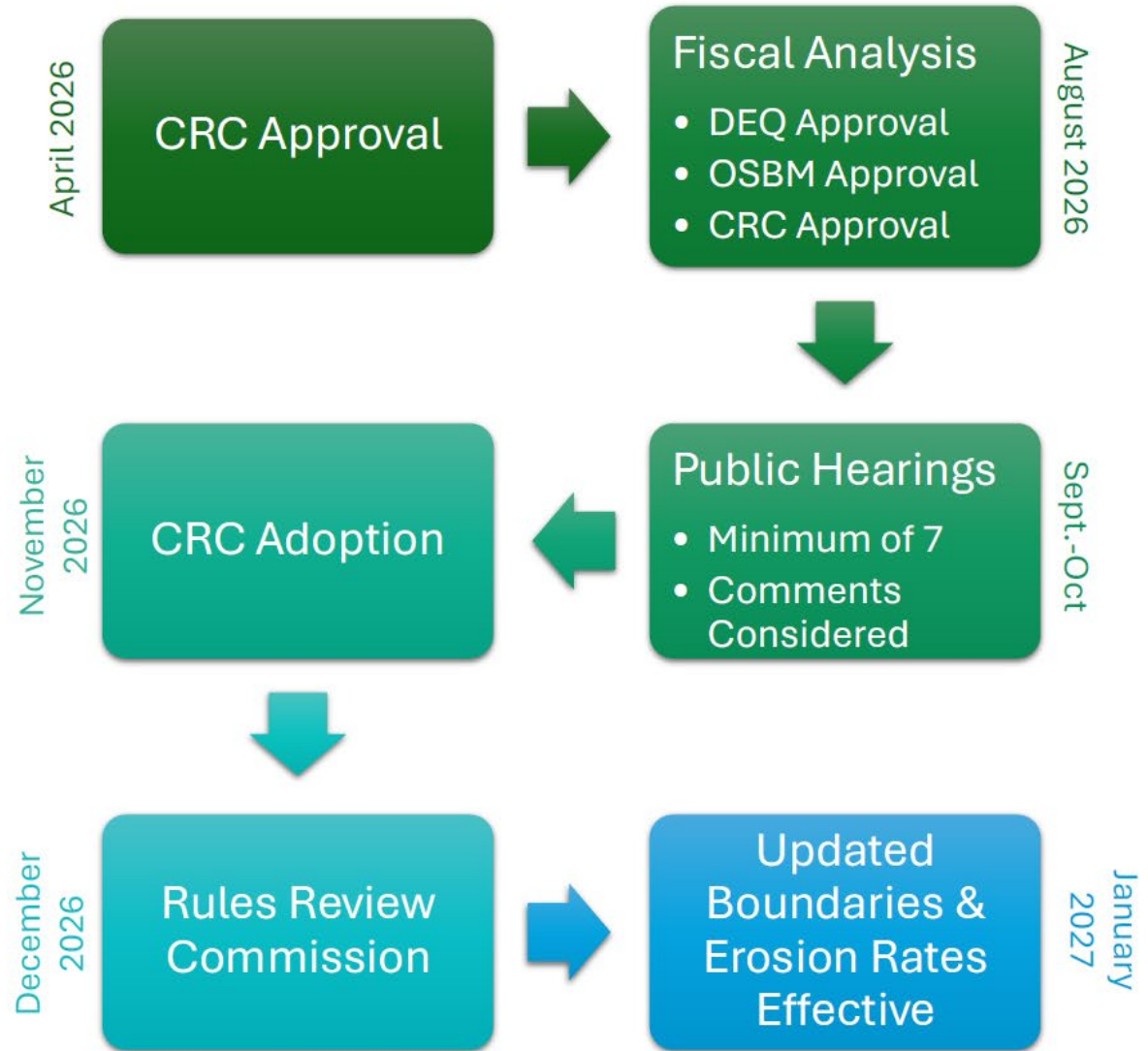
2024 Imagery

NOTE: SBF = Setback Factor



IHA PROCESS

Rule-Making Process



Town Beach Projects Updates

- New River Inlet Management Master Plan EIS: Meeting held in April with Dial Cordy and USACE.
- Post Tropical Cyclone 8 FEMA/NCEM- 53,000 cy dune restoration (in addition to 8,000 cy last April) in Phases 1, 2 and 3 COMPLETED. Another ~12,000 cy available.
- Disposal Area 143 (DA 143) Beneficial Reuse for Nourishment of Phases 1,2,3 of between ~1.9 and ~2.6 million cubic yards. Easement coordination on DA143 use ongoing with state agencies. Then final permit application submittal.
- DA 143 Grant Research and Funding Options Ongoing.
- 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
- IHA comment letter from the Town?
- Permitting Coordination (all projects)

