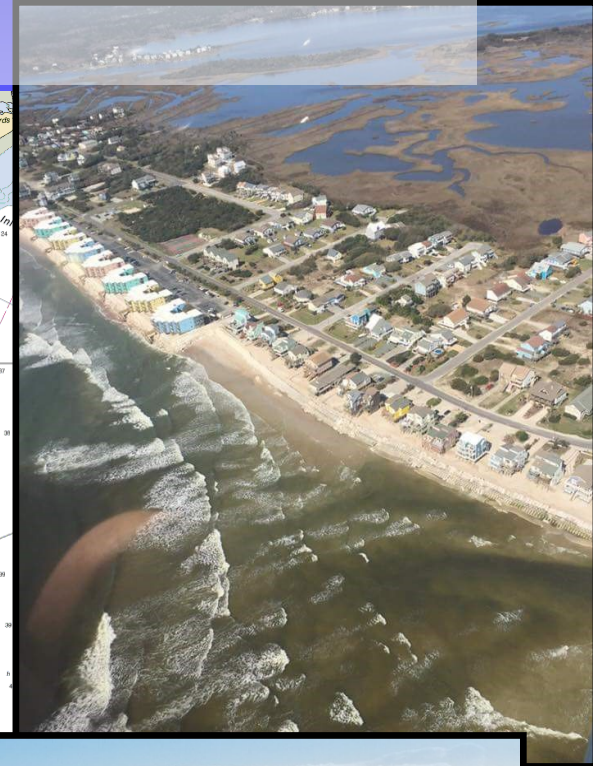
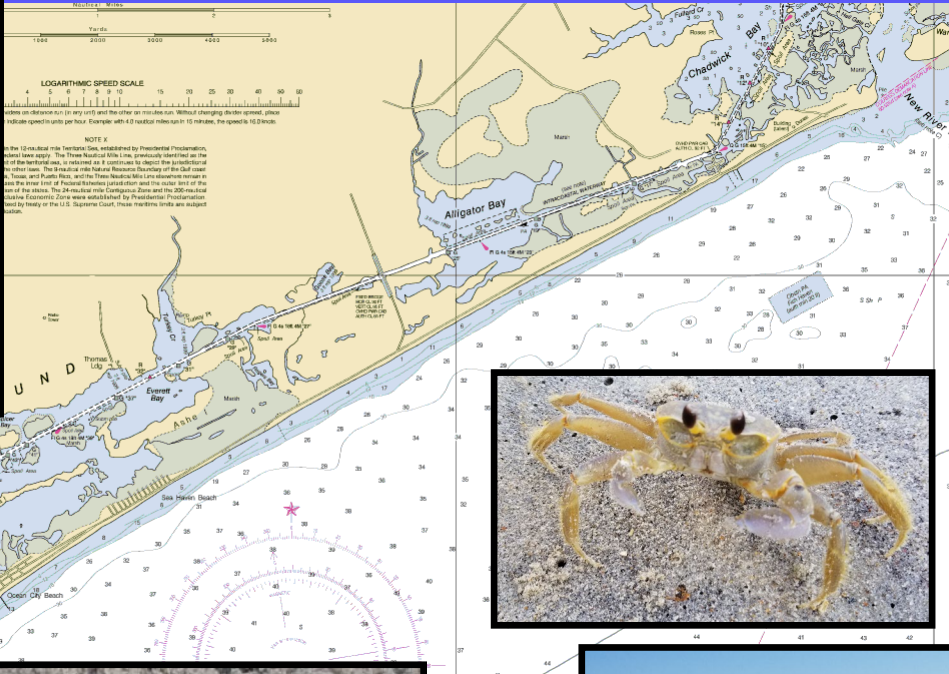


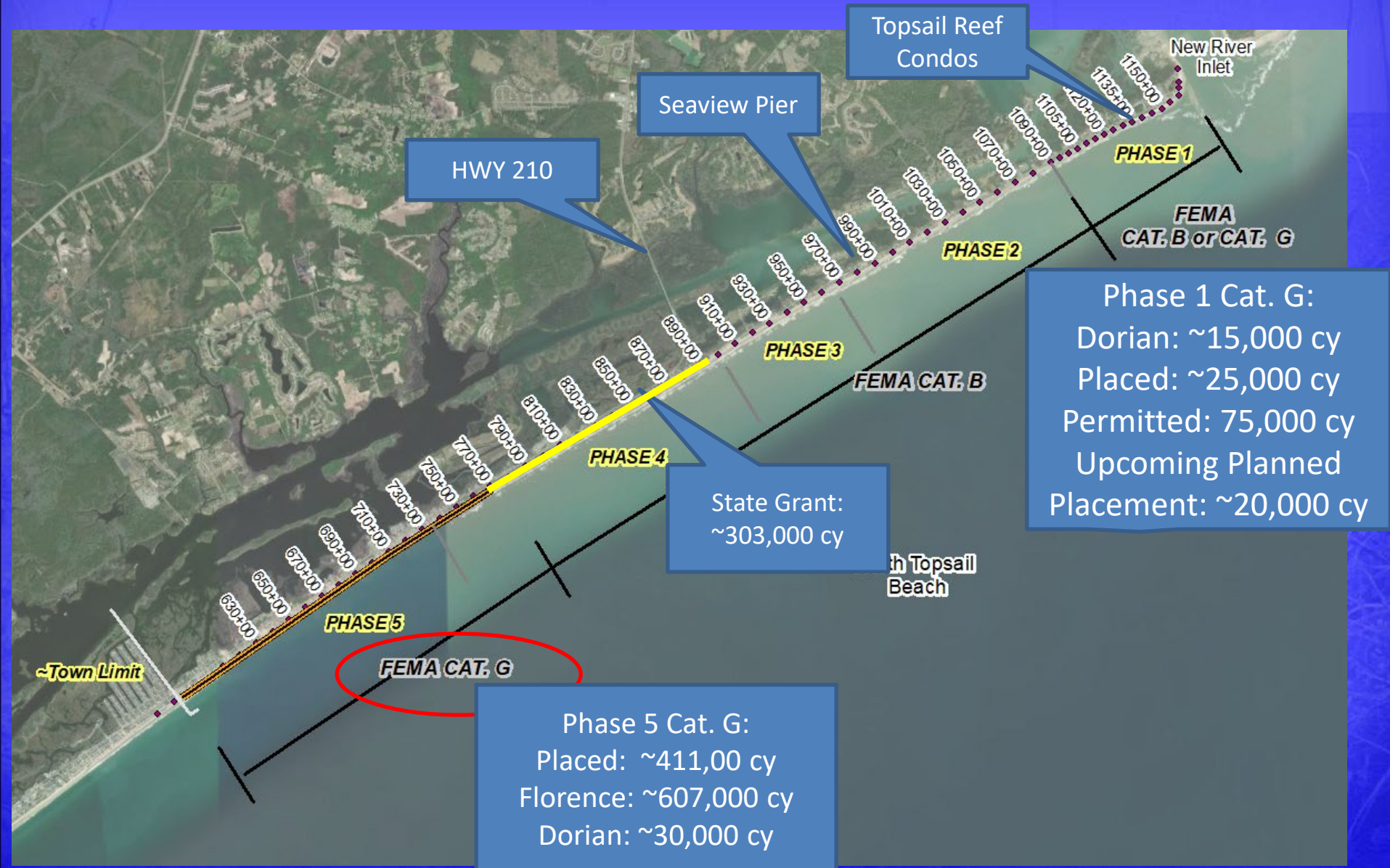
North Topsail Beach Coastal Update October 2023



Marina, Coastal, Environmental
& Water Resources Engineers

Ongoing and Upcoming Projects Overview

State Grant, Dorian and Florence FEMA Category G



Phase 1 Beach (not Dune) Truck Haul Nourishment

Phase 1 Nourishment
20,000 CY Planned for
Upcoming Placement
Environmental
Window

POTENTIAL BEACH ACCESS
(TO BE COORDINATED WITH
TOPSAIL REEF VILLAS)

Permitted for Placement
(separate from Corps)

March 2023 Placement: ~25,000 cy

REEF VILLAS)

EXISTING TEMPLATE
(HATCHED)

EXISTING BEACH
ACCESS AT
JENKINS WAY
MAY BE UTILIZED

LANDWARD EDGE OF FILL

MODIFIED
TOE OF FILL

LANDWARD EDGE OF FILL

MHW:
+1.1' NAVD88

MLW:
-1.7' NAVD88

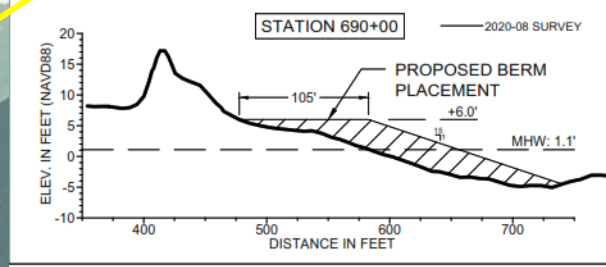
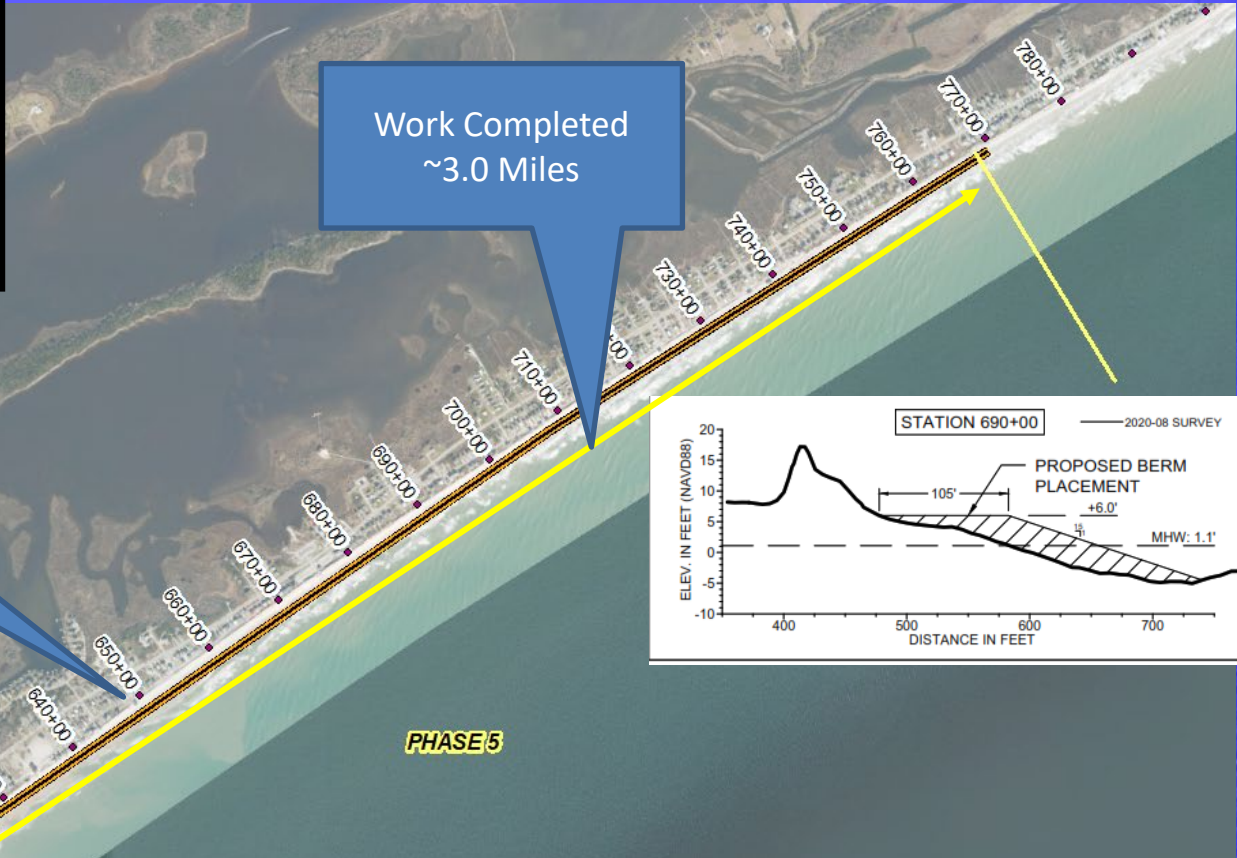
MODIFIED
EDGE OF BERM

Placement of ~20,000 cy this winter

Phase 1
Nourishment
Full 75,000 CY
Permitted Template
Shown (Placed and
Not Yet Placed)



Ongoing Florence & Dorian Nourishment in Phase 5 Beach (not Dune) Nourishment. ~3.0 Miles of New Beach Completed



Access at Gray Street and Working South

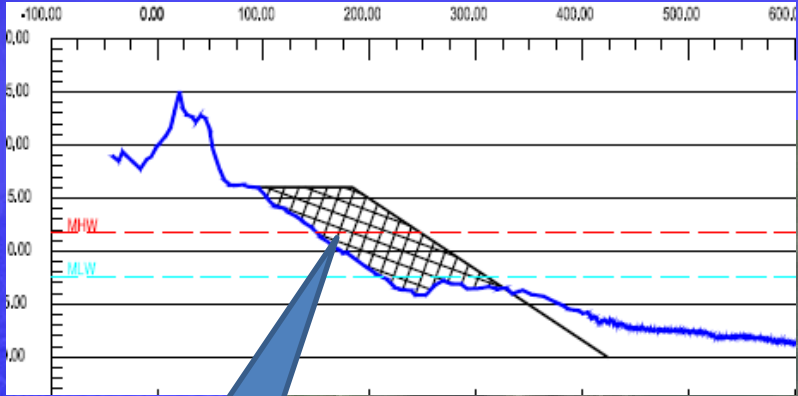
Remaining Work

Town Limit

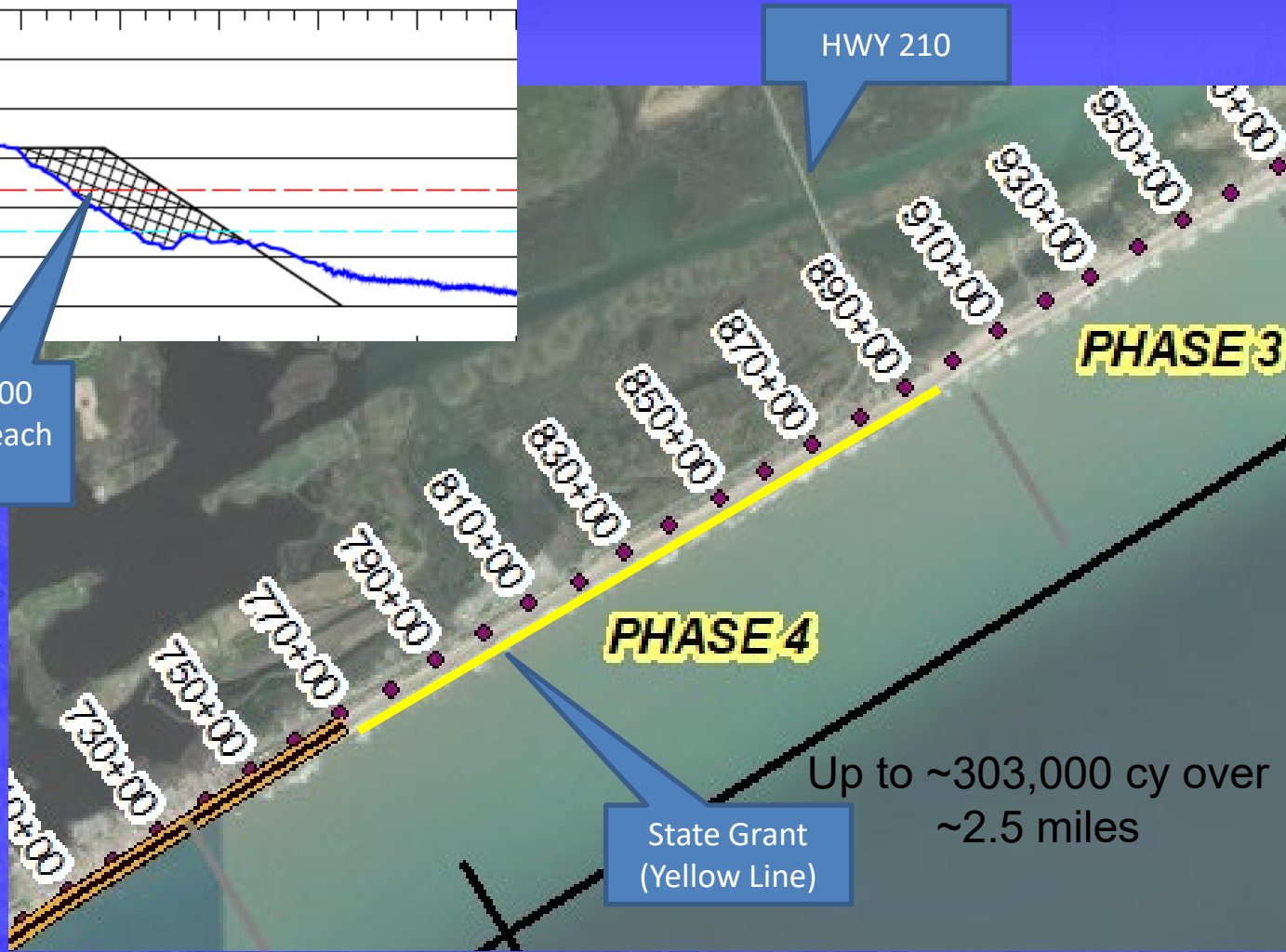


April Aerial June Survey

Successful State Grant in Phase 4. Beach (not Dune) Nourishment



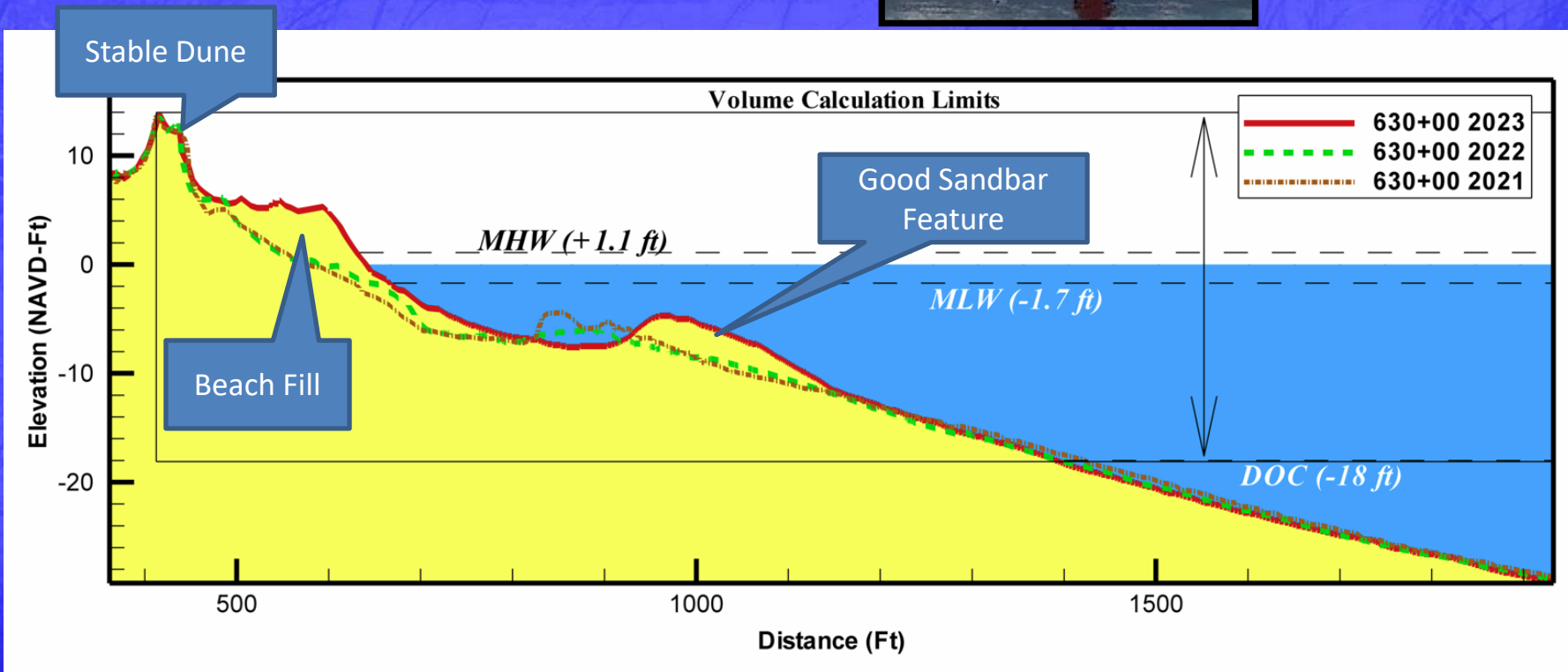
~80 to 100 Feet of Beach Width



Project Timing vs Project Production

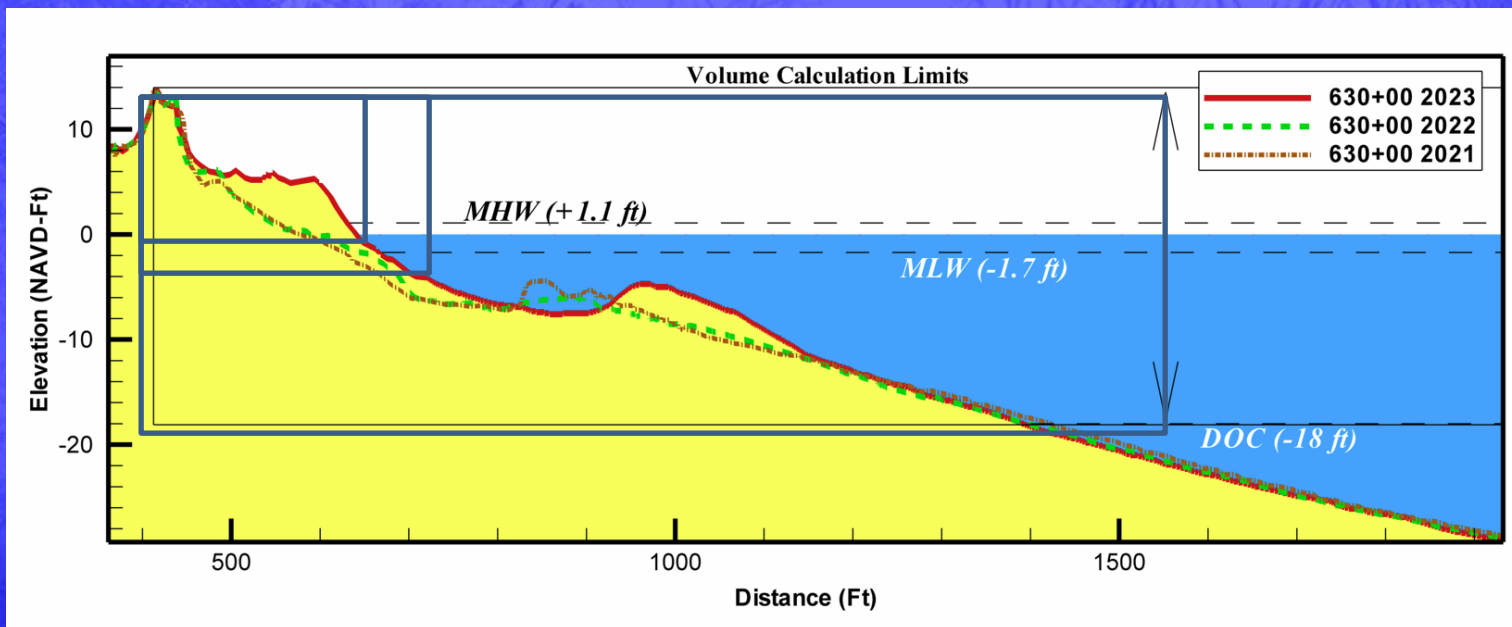
Annual Monitoring Results

- Volume Change
- Shoreline Change
- Occurs annually in ~June/July (before the heart of hurricane season)
- Nourishment Planning
- FEMA Eligibility and Document Pre-Storm Conditions (if needed)
- Survey is Town Wide from Dune out to ~500 Yards Offshore



	Annual Monitoring Gain/Loss (CY)		
Volume Limits:	Dune to Depth-Of-Closure (~300 yards offshore)	Dune to MLW	Dune to MHW
PHASE 1	+120,481	+56,267	+36,947
PHASE 2	-23,352	-8,380	-3,866
PHASE 3	-28,884	-27,494	-22,790
PHASE 4	+100,335	+45,771	+11,008
PHASE 5	+255,868	+164,282	+114,411
Total	+424,448	+230,446	+135,709

	Annual MHW Change (ft)
PHASE 1	+24.8
PHASE 2	+10.9
PHASE 3	+0.2
PHASE 4	+8.5
PHASE 5	+36.8
TOTAL	+19.1



Town Beach Projects Updates

- Annual Monitoring Completed in June. Beach wide overall gain of ~424,000 cy over the last year (largely due to nourishment efforts).
- Phase 1 - ~20,000 cy planned for placement this winter.
- New River Inlet Management Master Plan EIS: Draft EIS under development.
- State Grant Nourishment - ~303,000 cy in Phase 4 and connects with Phase 5 Truck Haul.
- Phase 5 Beach Nourishment – Placed ~411,000 cy. Remaining volume (~226,000 cy).
- Working with NTB Finance Officer and DEC Associates regarding funding for FEMA and State funded projects
- Permitting Coordination (all projects)

