



US Army Corps
Of Engineers
Wilmington District

PUBLIC NOTICE

Issue Date: March 15, 2021
Comment Deadline: April 14, 2021
Corps Action ID #: SAW-2016-02091

All interested parties are hereby advised that the Wilmington District, Corps of Engineers (Corps) is holding a scoping meeting for proposed work within jurisdictional waters of the United States by the Town of North Topsail Beach in Onslow County, North Carolina. The proposal is to implement a New River Inlet Management Master Plan for shoreline protection in the northern section of the Town and includes the construction of a terminal groin along the southwest shoulder of New River Inlet. Specific plans and location information are described below and shown on the attached plans. Due to COVID-19 restrictions, the scoping meeting will not be an open public meeting, but will be presented in the Facebook Live forum on March 25, 2021 at 6:00 P.M. and can be viewed at the following link, <https://fb.me/e/5B7NV8EgY>. A recording of this event will be available at <https://www.facebook.com/USACE.Wilmington> for further viewing. This Public Notice and all attached plans are also available on the Wilmington District Web Site at <https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Public-Notices/>.

Applicant: Town of North Topsail Beach
C/o: Mr. David Gilbride, Town Manager
1000 Hwy 210
Sneads Ferry, North Carolina 28460

AGENT (if applicable): Dail Cordy and Associates, Inc.
C/o: Mr. Steve Dail
201 N. Front St., Ste 307
Wilmington, North Carolina 28401

Authority

The Corps will evaluate this project pursuant to applicable procedures to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbor; and will develop an Environmental Impact Statement (EIS) to assess the proposal. Additionally, the Corps will coordinate with North Carolina Division of Coastal Management and North Carolina Division of Water Quality in the development of the Environmental Impact Statement (EIS) to ensure the process complies with all State Environmental Policy Act (SEPA) requirements.

Location

The project site is located at 34.526763, -77.337396, adjacent to the New River Inlet, at the end of New River Inlet Road (SR 1568) and encompasses approximately 5,100 linear feet of inlet and oceanfront shoreline in North Topsail Beach, Onslow County, North Carolina.

Existing Site Conditions

North Topsail Beach is located on Topsail Island, a 22-mile long barrier island situated in both Onslow and Pender Counties, and encompasses approximately 11 miles at northeastern tip of the island. This portion of the island is generally low and narrow with elevations ≤ 10 ft MSL and subaerial widths range from approximately 400 to 1,000 ft. The oceanfront beach is backed by a low and discontinuous line of narrow dunes, and the majority of the subaerial island interior has been developed for residential use. The proposed project area comprises of New River Inlet and approximately 5,100 linear-ft of oceanfront shoreline at the most northern end of North Topsail Beach. This section of the island contains several oceanfront multi-family condominiums and apartments, with single-family residential structures closet to the inlet.

The New River Inlet channel is a designated federal navigational channel that is federally maintained via periodic dredging. In addition to this dredging, the Corps' Regulatory Division issued a 30-year authorization on May 27, 2011 to the Town to maintain the ebb tide channel within a specific location. This permit allows the Town to conduct a maintenance dredging event if specific thresholds are triggered and has an expiration date of December 31, 2041. The Town's reevaluation of the original alignment led to development of a modified "pivot channel" alignment that was authorized through a 2017 permit modification of the original 2011 authorization. Within the vicinity of the project area, other authorizations have been granted to the Town and separate individual property owners to provide protection along the parking lot at the inlet shoulder, dune construction and dune plantings along the oceanfront shoreline, and the installation of sand bags.

Applicant's Stated Purpose

The Town's stated purpose for the New River Inlet Management Master Plan is to mitigate ongoing severe and chronic shoreline erosion in order to protect structures and infrastructure located on the north end of North Topsail Beach. The inlet management component of the Town's currently authorized shore protection project is a long-range strategy that may not provide significant north end protection for 15 to 20 years. North end erosion rates have accelerated during the early phases of that project, with rates as high as 100 feet/year occurring in the vicinity of the Topsail Reefs condominium complex. As stated by the Town, the extreme severity of the erosional threat necessitates the need for immediate action to supplement the Town's existing shore protection project with the proposed terminal groin structure.

Project Description

Under the May 27, 2011 authorization, the Town conducted the initial 2012/2013 channel realignment and north end oceanfront nourishment event. After the channel dredging, the north end shoreline experienced higher than expected erosion rates, resulting in the rapid loss of the placed beach fill material. During the initial post-construction year (2013), essentially all of the material placed on approximately 3,700 linear feet of the northernmost end eroded and returned to the inlet. Additionally, ebb channel shoaling and thalweg migration exceeded the established thresholds in just 18 to 24 months. By August 2014, accelerating north end erosion led the Town to seek an emergency permit for construction of a sandbag revetment to protect threatened homes and infrastructure on the north end. In February 2015, the Town completed construction of an approximate 2,000 linear-ft sandbag revetment that extends north from the existing Topsail Reefs revetment to New River Inlet. In total, the north end is currently protected by an approximate 3,600 linear-ft sandbag revetment.

With the channel realignment not protecting the northern end as expected and the sandbag revetment being a more short-term alternative, the Town reevaluated other protection options and have determined that a terminal groin would provide supplemental protection at this location. This project alternative would involve the construction of a 2,021 ft-long terminal groin on the north end ocean beach at New River Inlet and recurring beach nourishment of the adjoining approximate 5,100 linear-ft north end shoreline using sand derived from the inlet's outer bar channel realignment dredging events. The proposed terminal groin would consist of three main sections: anchor section, upland section, and in-water section. Although the in-water section and most of the upland section would require immediate construction, the anchor section would be constructed at a later date as a cost-saving measure. As proposed, the landward-most approximate 500-ft section of the terminal groin would only be constructed when the receding shoreline contacts an established threshold for a specified buffer distance from the anchor footprint. Beach nourishment events would place approximately 310,000 cy of sand along the northernmost approximate 5,100 linear-ft reach of the north end shoreline (average of 61 cy/ft). Nourishment events would occur approximately every four years in conjunction with outer bar channel realignment/maintenance events. The Town's existing May 27, 2011 permit authorizes dredging of the outer bar channel to a depth of 16 ft and width of 500 ft. Inlet channel dredging events are expected to yield approximately 600,000 cy of beach-compatible material (based on recent sedimentation and pre-project bathymetries). The volume of dredged material in excess of that required for the approximate 5,100 linear-ft project shoreline reach will be placed to the southwest on the remainder of the Phase 1 reach and/or the Phase 2-4 shoreline reaches in accordance with the Town's existing permit. Assuming the long-term success of the New River Inlet ebb channel realignment project, the terminal groin may eventually be modified (e.g., shortened, lowered) or removed completely (based on monitoring data and project performance).

Several alternatives are being considered for the shoreline protection in the northern end of the island. These alternatives will be further formulated and developed during the scoping process and an appropriate range of alternatives, including the no federal action alternative, will be considered in the development of the EIS and review of the Town's permit request.

The scheduled public scoping meeting will be held on March 25, 2021 at 6:00 P.M. As stated above, the scoping meeting will not be an open public meeting, but will be presented in the Facebook Live forum and can be viewed at the following link, <https://fb.me/c/5B7NV8EgY>. A recording of this event will be available at <https://www.facebook.com/USACE.Wilmington> for further viewing.

The scoping meeting is designed to provide information in order to solicit comments from the public; Federal, State and local agencies and officials; and other interested parties to incorporate in the Draft EIS document. The purpose of these comments concerning public interest factors, ranging from navigation to biological resources to private and public lands, will identify issues to be addressed in the Draft EIS.

Written comments pertinent to the proposed work, as outlined above, must be submitted to this office, Attention: Mr. Jordan Jessop, at jordan.e.jessop@usace.army.mil, no later than 5:00 p.m. on April 14, 2021. Questions can be directed to Mr. Mickey Sugg at telephone (910) 251-4811, Wilmington Regulatory Field Office.

CORPS PUBLIC SCOPING MEETING NORTH TOPSAIL BEACH INLET MANAGEMENT MASTER PLAN

Send Public Notice Comments to: Mr. Jordan Jessop, Project Manager, Wilmington Regulatory Field Office, at jordan.e.jessop@usace.army.mil

Questions regarding the permit process: Mr. Mickey Sugg, Chief of Wilmington Regulatory Field Office, at telephone (910) 251-4811 or mickey.t.sugg@usace.army.mil

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25 March 2021

"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."



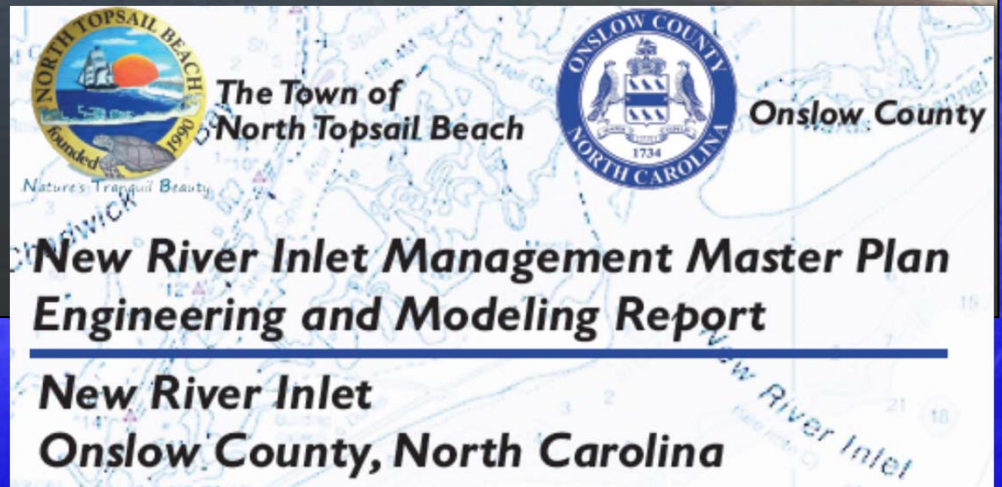
US Army Corps
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New River Inlet Management Master Plan Project Proposal North Topsail Beach and Onslow County *March 25, 2021*



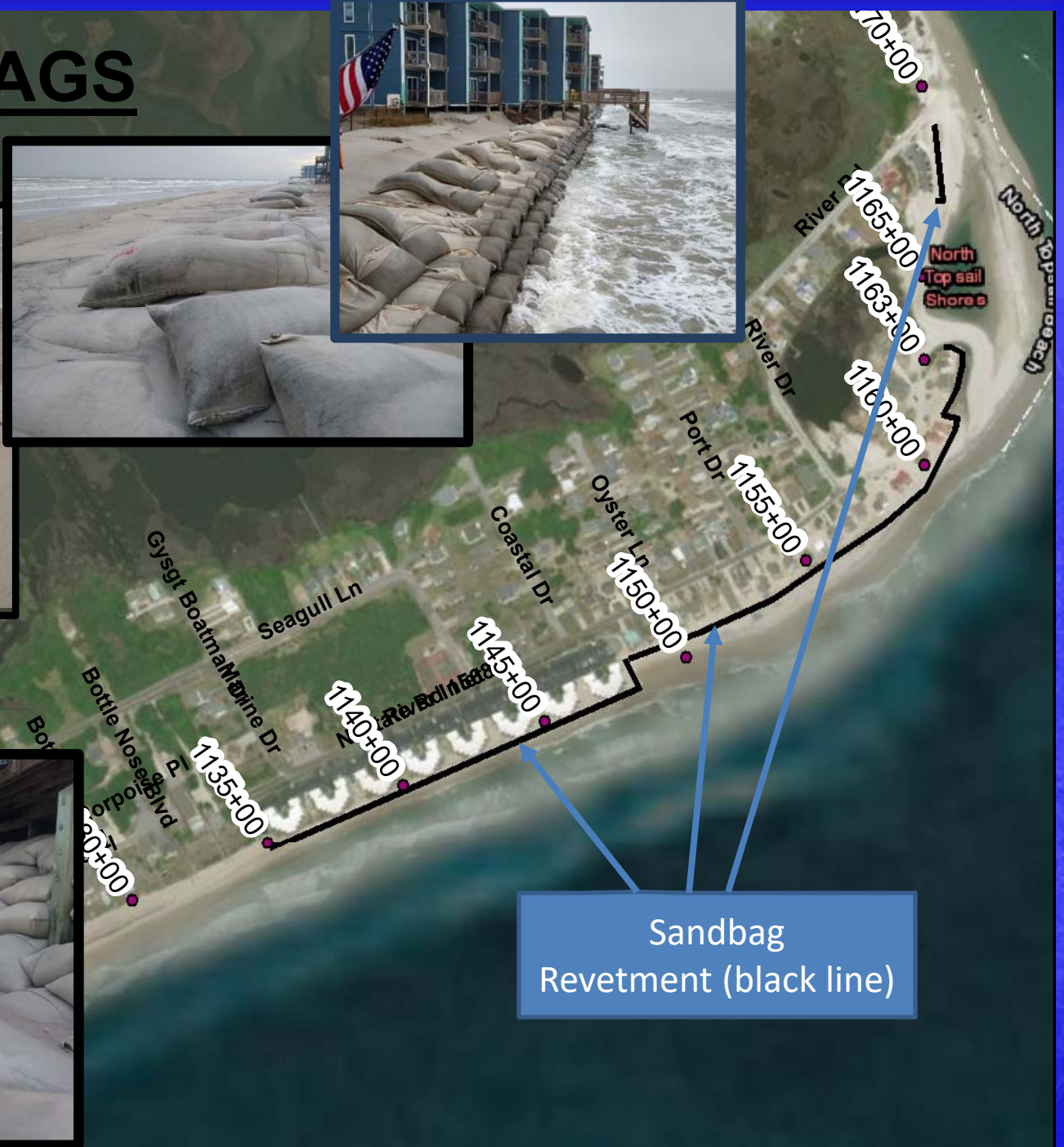
*Marina, Coastal, Environmental
& Water Resources Engineers*



PROJECT AREA



SANDBAGS



Sediment Transport Schematic



Historic Aerials

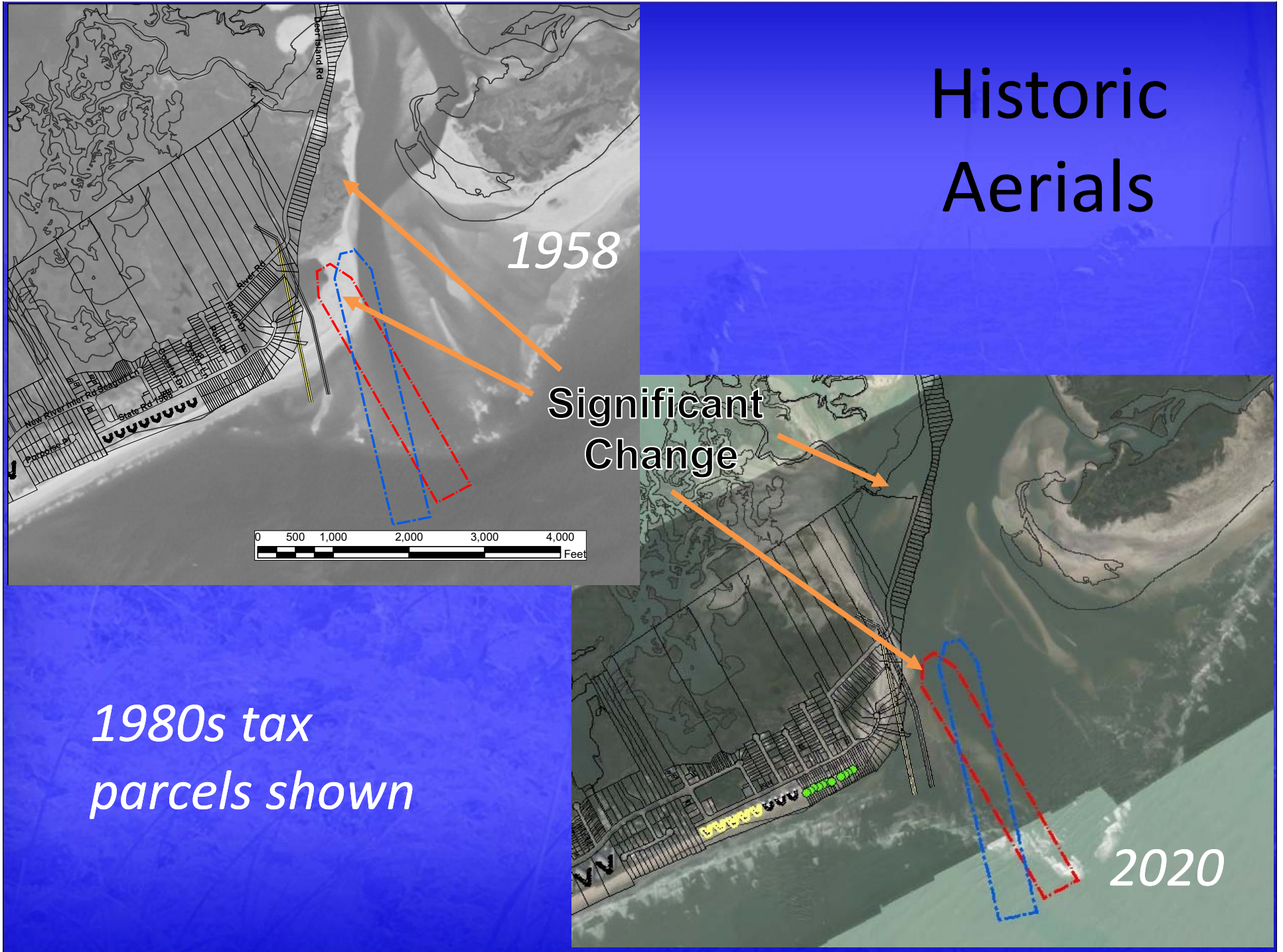
1958

Significant
Change

0 500 1,000 2,000 3,000 4,000
Feet

*1980s tax
parcels shown*

2020



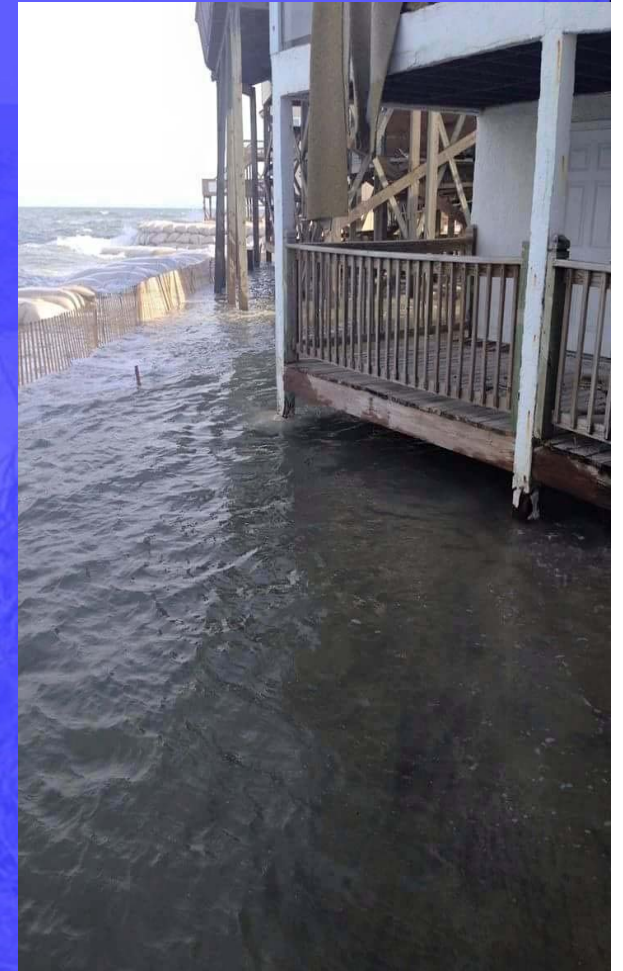
Hurricanes, Storms, High Water Events



Hurricane Matthew
(2016)



Hurricane Florence
(2018)



King Tide - August 4, 2015

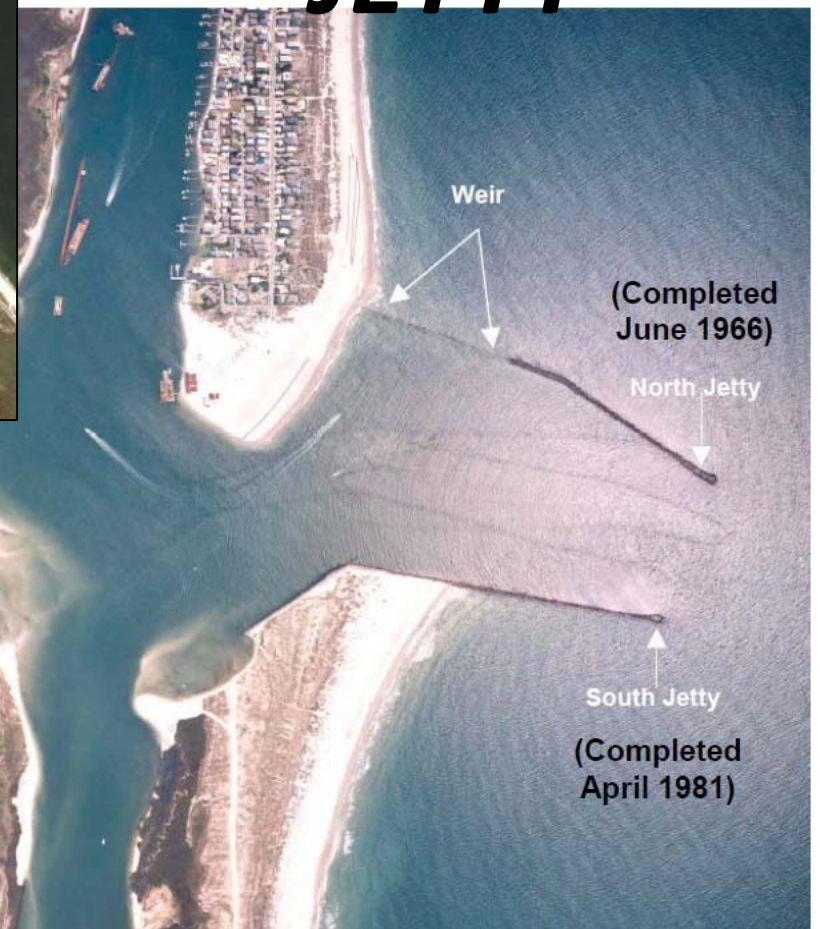
SAND BORROW AREA SOURCES

- 1.Upland (Truck Haul)**
- 2.Dredge Spoil Islands**
- 3.New River Inlet**
- 4.Offshore**
- 5.New River/AIWW/Cedar
Bush Cut**

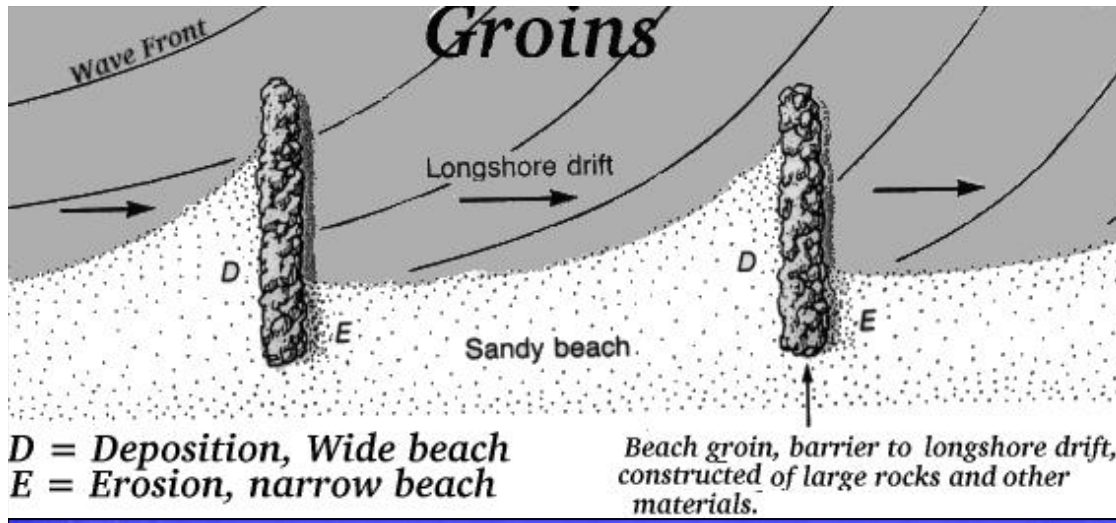
Oregon Inlet Terminal Groin



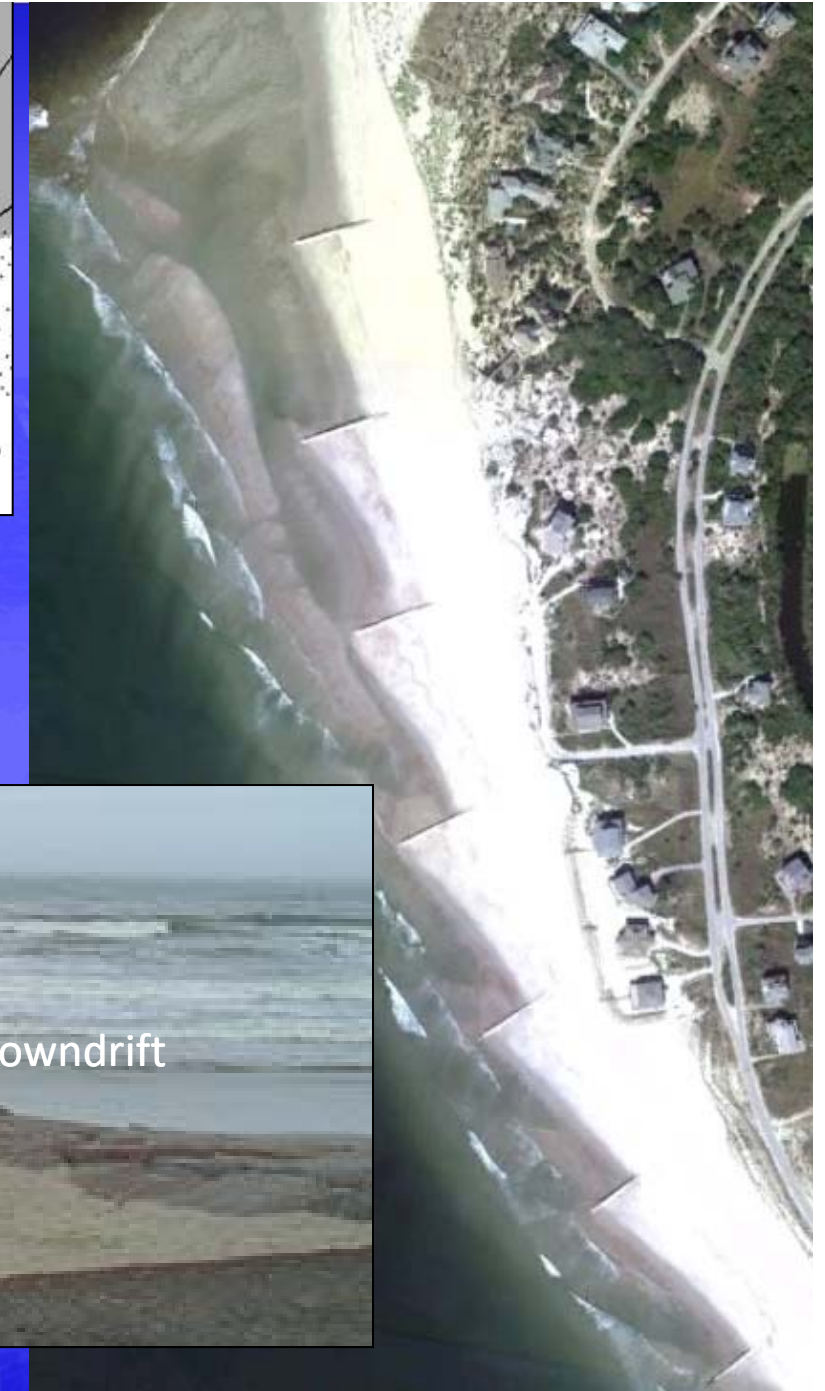
GROIN VS JETTY



Masonboro Inlet Jetties
(~3,600 feet long, navigation=primary purpose, extend seaward of ebb shoal complex)



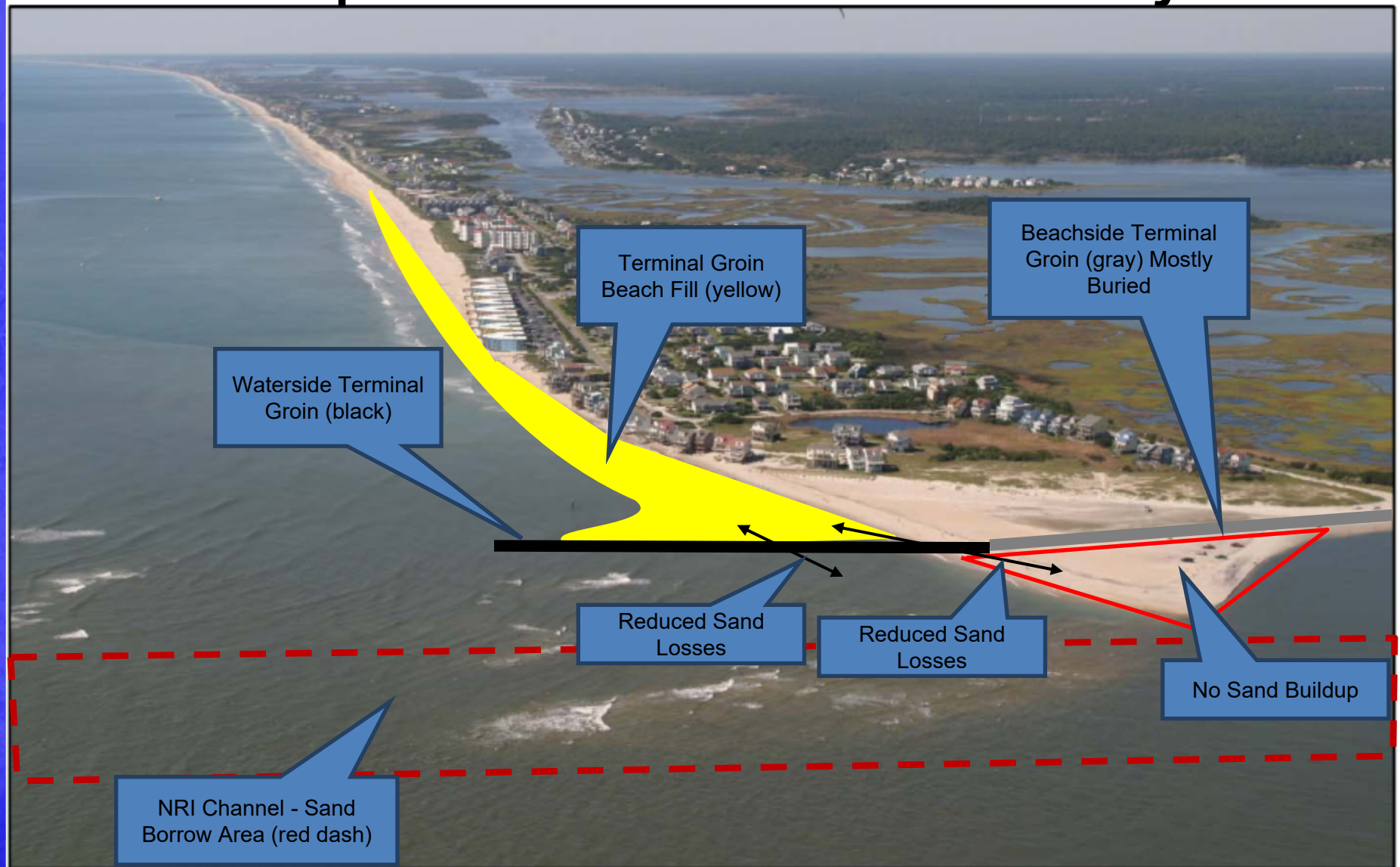
Winter/Summer Patterns



Alternatives

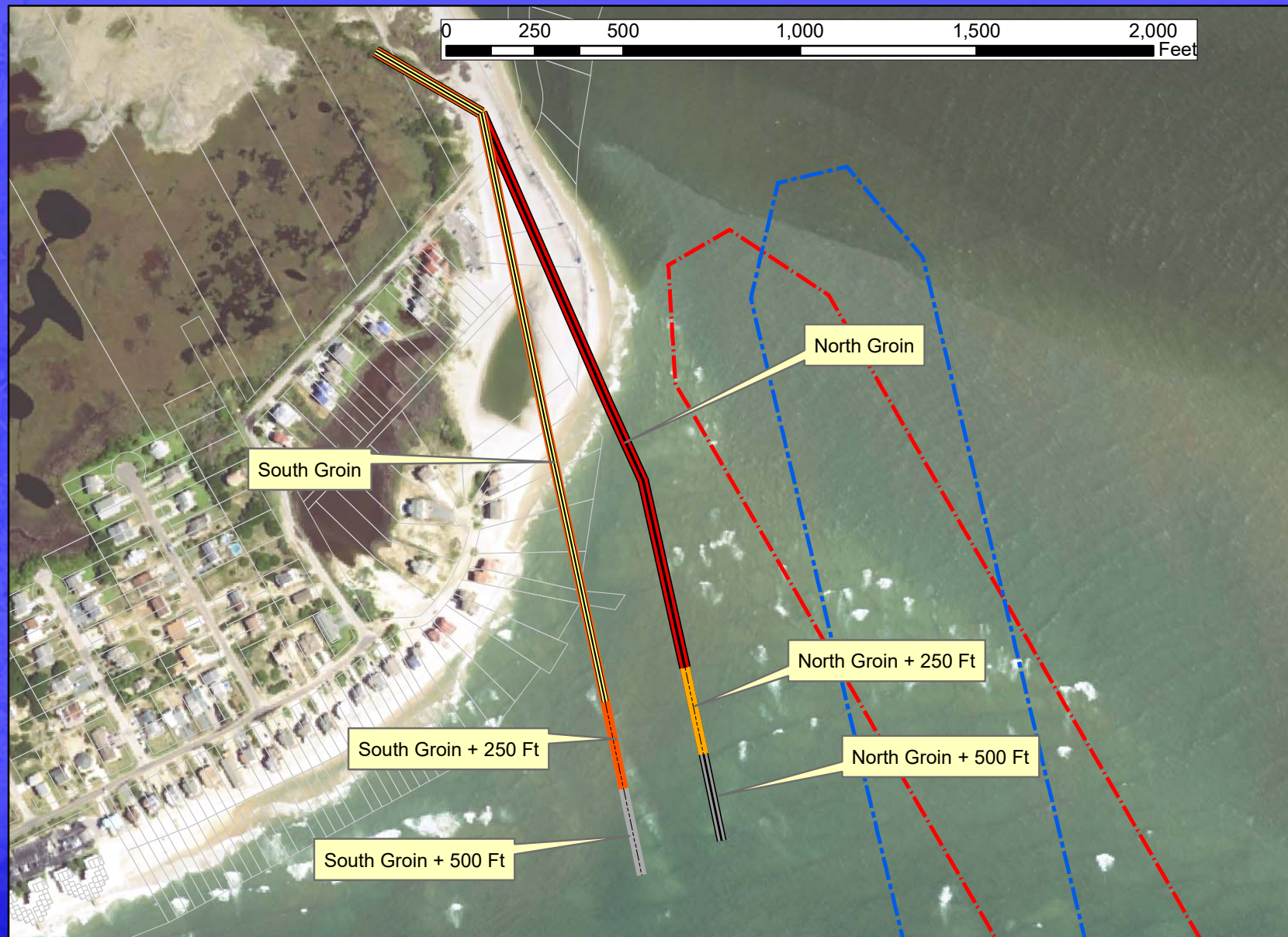
- 1) No Action
- 2) Abandon/Relocation
- 3) Inlet Realignment with Beach Nourishment Only
- 4) Terminal Groin with Beach Nourishment using Offshore Borrow Area Sand Source
- 5) Terminal Groin with Beach Nourishment using NRI Channel Sand Source

Conceptual Groin and Fill Project

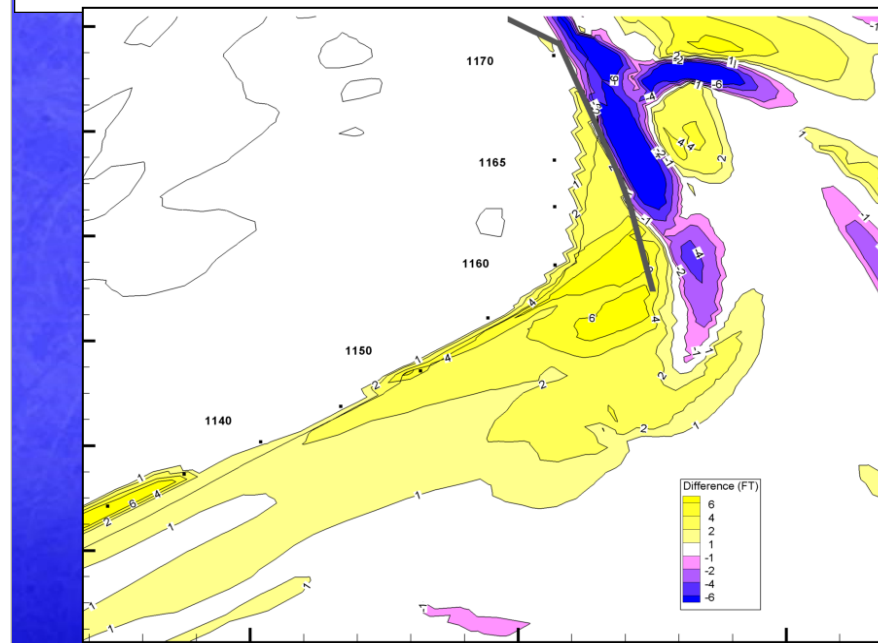
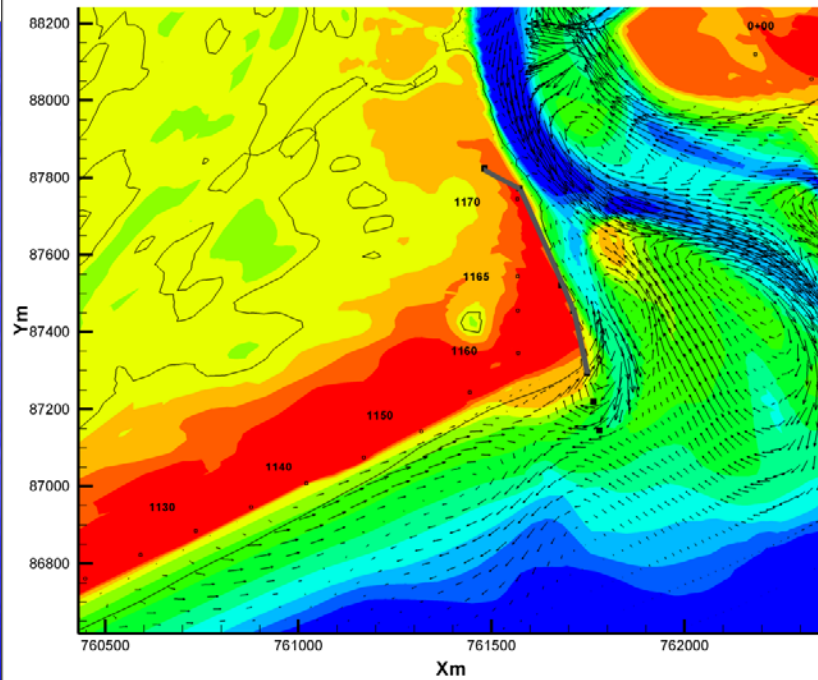
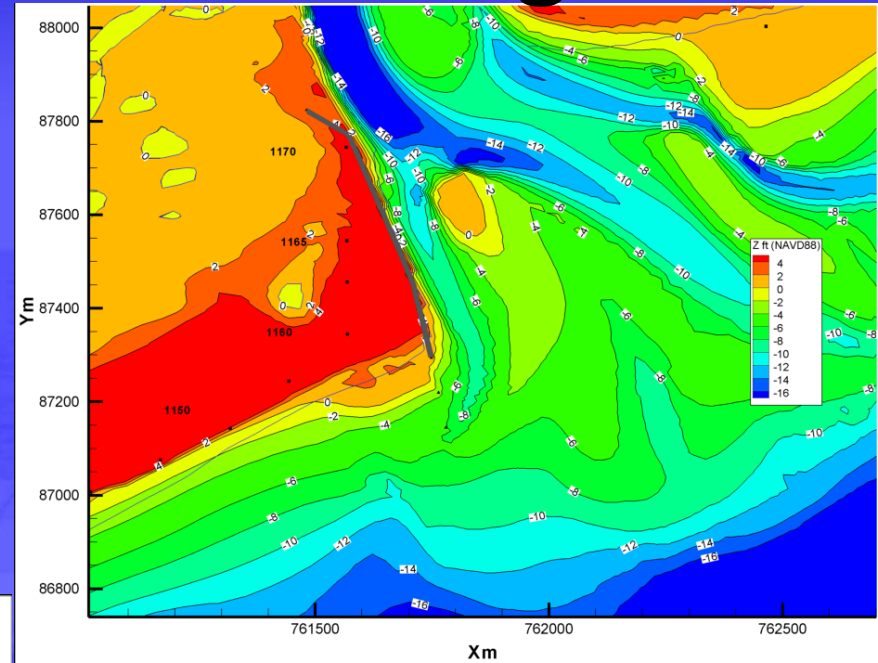
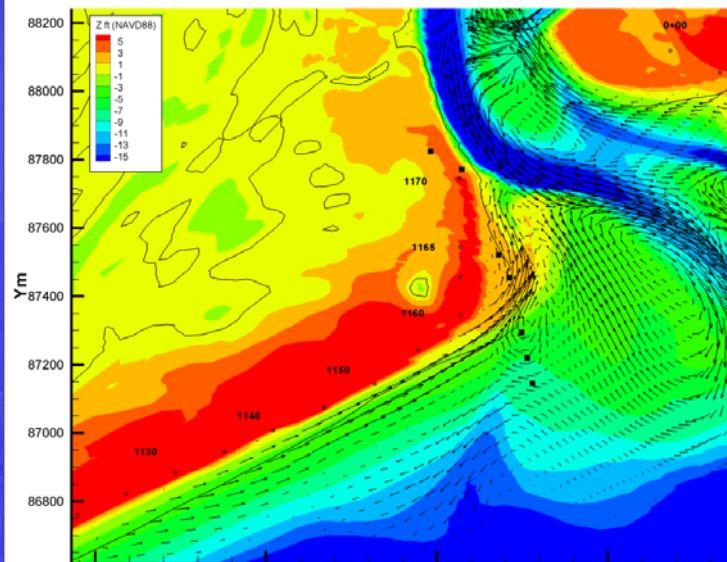


(Aerial Photo dated Oct. 5 2014, Provided by Dr. William Cleary)

Terminal Groin Alts

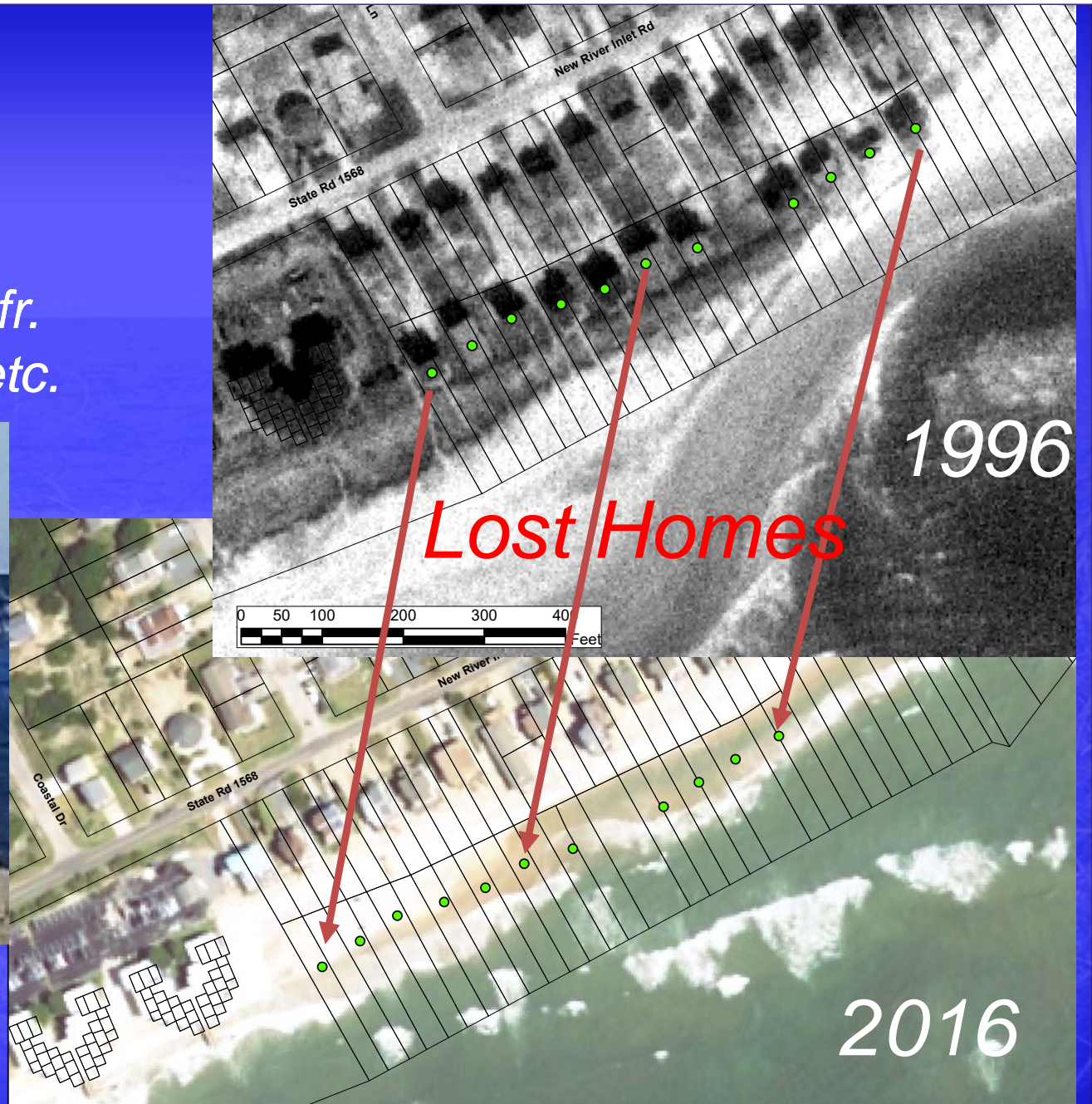


Numerical Modeling

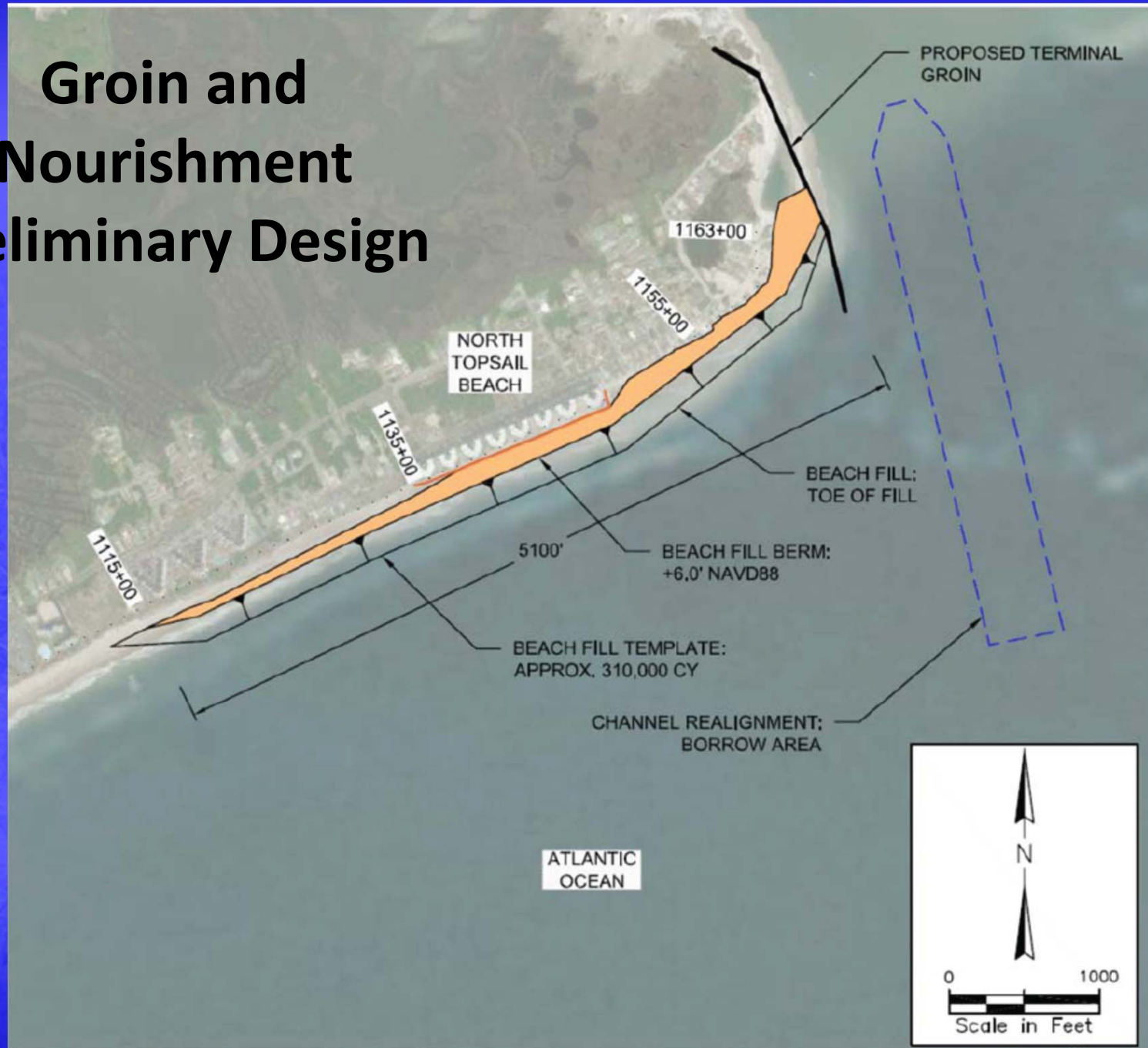


No Action –

- Lost Tax Base*
- Private \$\$ Homes*
- Public \$\$ Roads/Infr.*
- Utility Relocation, etc.*



Groin and Nourishment Preliminary Design



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