Shoreline Stabilization for Erosion Control



Public Scoping Newsletter

January 2025

Background

Fort Raleigh National Historic Site comprises 355 acres on the north end of Roanoke Island in the Outer Banks of North Carolina. This national park unit was established in 1941 to preserve known portions of England's first New World settlements from 1584 to 1590 including the first colony to the Americas. Combating erosion along Fort Raleigh's shoreline has been a management issue since the park's creation.



Damaged wooden groins installed along a section of shoreline.

Erosion control efforts began in the 1940s with the construction of wooden groins along the shoreline followed by the construction of an offshore breakwater in the 1960s. In the late 1970s approximately 1500 feet of riprap was installed near the Dough Cemetery and along the shoreline around the Lost Colony Waterside Theater.

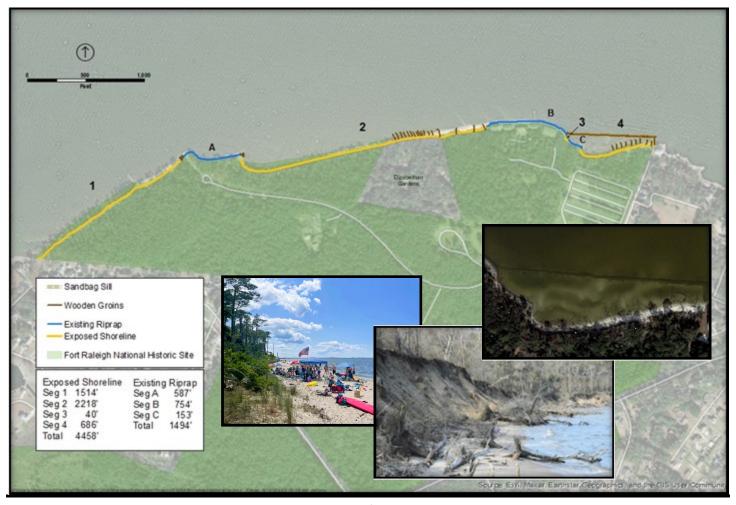


Rock revetment installed along Dough Cemetery shoreline.

Current Conditions

Erosion along the remaining exposed shoreline, including 4500 feet of unstable, undercut cliffs as high as 25 feet, poses a serious threat to potential archeologically significant sites and park facilities. Without action, the erosion will most likely continue, causing continued loss of park lands, vegetation, archeological resources, and ultimately park facilities such as roadways, parking areas, and buildings.

The park needs to design and implement shoreline protection structures to protect archeological resources and park infrastructure.



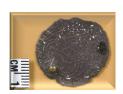
Overview map displaying the current stabilization structures of the shoreline with picture insets showing current conditions.

Resources to Be Analyzed

The following are resources which are being considered in the analysis of potential shoreline protection actions:

- •Biological Resources (vegetation, wildlife, wetlands, floodplains, aquatic resources)
- •Cultural Resources (archeology, cultural landscapes, historic structures)
- Natural Soundscapes

- •Geologic Features and Processes (topography, littoral processes, soil)
- •Land Use
- Visitor Use and Experience



















Preliminary Alternatives

The NPS is developing an environmental assessment in accordance with the National Environmental Policy Act of 1969 and Section 106 of the National Historic Preservation Act of 1966 to consider the following shoreline protection preliminary conceptual alternatives along the one mile of Fort Raleigh National Historic Site shoreline and analyze potential resource impacts of each alternative:

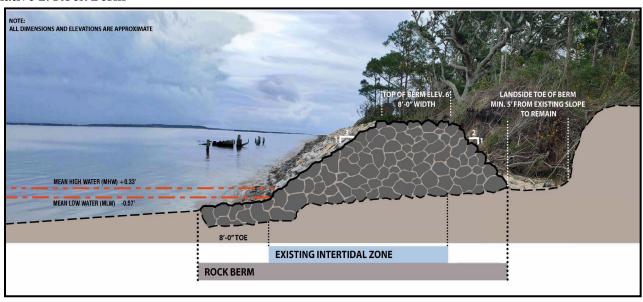
Alternative 1: Revetment



Conceptual profile image of Alternative 1: Revetment displaying rocks sloped along the shoreline.

- Granite rocks or other hardened material or structures placed against the shoreline escarpment
- Fill material added to create an approximately 3:1 slope

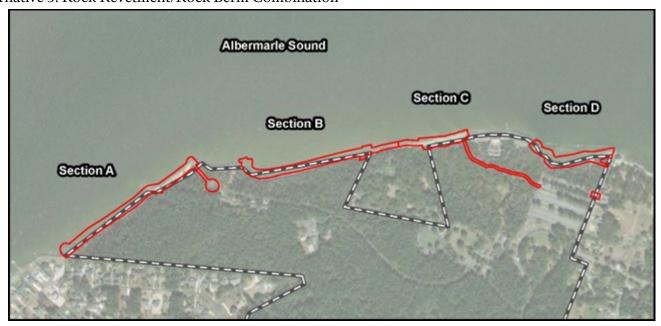
Alternative 2: Rock Berm



Conceptual profile image of Alternative 2: Rock Berm displaying a mounded pile of rocks placed on the exposed beach.

- Granite rocks or other hardened material or structures placed on beach adjacent to the toe of existing slope and possibly backfilled with trees, sediment, or other materials
- Five to ten feet high with a base that may be 20-40 feet wide

Alternative 3: Rock Revetment/Rock Berm Combination



Aerial image of Fort Raleigh shoreline showing the segments where stabilization structures would be installed and access locations.

- Combination of Alternative 1 and 2
- Sections A-D stabilization alternatives designed for site specific conditions

Actions Common to All Alternatives



Conceptual profile image displaying the placement of 3-5 fee of sand fill to build out the shoreline.

- Potential placement of sand if resources are available as an interim measure.
- Construction and restoration of temporary access roads

We Invite Your Comments

Please submit comments on the preliminary alternatives, potential resources, or other ideas for the project no later than **February 7, 2025,** online at https://parkplanning.nps.gov/FORA_shoreline or mail your comments to:

Superintendent 1401 National Park Drive Manteo, NC 27954

Comments are accepted during the 30-day scoping period. Please also consider attending our public meeting to learn more about the preliminary alternatives and planning process.

You should be aware that your entire comment, including your personal identifying information, may be made publicly available at any time. You may request that the NPS withhold your name and/or address from public disclosure. If you wish to do this, you must state this prominently at the beginning of your comment and make such a request by checking the box "keep my contact information private" on the website. The NPS will honor such requests to the extent allowable by law, but individuals should be aware that the NPS may still be required to disclose personal identifying information.



John White's 1585 map of Raleigh's Virginia: The Carolina Coast—La Virginea Pars. Courtesy of The British Museum

Please Join Us for a Public Meeting

Please join us to learn more about this project and the potential designs for shoreline stabilization and protection. You are invited to attend a public meeting to hear more about this project. Park staff will present information on the proposed project, with an opportunity to ask questions following the presentation.

In-person Meeting:

Date: January 23, 2025 **Time:** 6:00 –7:00 pm

Location: Fort Raleigh National Historic Site Visitor Center Auditorium