National Park Service
U.S. Department of the Interior

Outer Banks Group
Manteo, North Carolina

Cape Hatteras National Seashore (Seashore) is inviting your review and comment on a proposal from Dare County to repair a degraded groin (jetty) in Buxton, North Carolina (N.C.). Dare County proposes to repair the entire southernmost groin in conjunction with the planned beach nourishment projects adjacent to the villages of Avon and Buxton in 2026 (Figure 1). The Seashore is reviewing Dare County's application to consider permitting at least 300 feet of the repair landward from mean low water (MLW). Dare County is also seeking permits from the U.S. Army Corps of Engineers and the state of N.C. to repair portions of the groin located on N. C. submerged lands in the Atlantic Ocean. The purpose of the project is to repair the deteriorated structure to improve sand-trapping capacity and increase or maintain beach widths on the updrift (north) side, providing shoreline protection for N. C. Highway 12 within the Village of Buxton.

Dare County proposes to drive new steel sheet pile into the sand directly adjacent to the existing sheet-pile material. Once installed, the piles will be stabilized and tied together with wood or metal walers, and rip-rap material will be placed at the base of the sheet pile for scour protection. Heavy equipment, including pile drivers, excavators, and trucks, will be used to implement repairs supporting equipment and vehicles. Materials and equipment will be staged in the Buxton Beach Access, Old Lighthouse Beach, or Lifeguarded beach parking areas and those staging areas will be closed for the duration of the project. A section of Seashore beach, approximately 1000 feet long, surrounding the groin, will be closed for the duration of the project, estimated to last several months, to protect public safety. Debris associated with the repair, including dilapidated sections of steel or fill materials, will be removed from the site and the beach will be re-contoured and graded before reopening to the public. Mitigation measures will be put in place to avoid impacts associated with the repair project. Work performed during spring, summer and fall will be implemented carefully and overseen by qualified monitoring technicians that will assist with avoiding and minimizing impacts to nesting sea turtles, shorebirds, and other wildlife. Visitors in areas to the north and south may temporarily experience noise from pile driving and increased turbidity within the surf zone in an area immediately outside the project area.

Over the past 60 years, shoreline protection measures have been implemented in northern Buxton. Measures have included dune building, use of sandbags, beach nourishment, groin construction and repair, and installation of artificial submerged vegetation. Beach nourishment and groin construction appeared to have had the greatest influence on the shoreline.

By 1970, in response to coastal erosion adjacent to the Naval Facility Cape Hatteras (now known as the Buxton Beach Access or Buxton Formerly Used Defense Site), the U.S. Navy constructed three groins—two to the north of and one just south of the former location of the Cape Hatteras Lighthouse, for the purpose of protecting Naval Facility Cape Hatteras.

Shortly after their construction, the three groins experienced wave damage, leading the U.S. Navy to change designs; however, ongoing damage continued. The following list provides details on prior groin repairs:

- In 1974, damaged portions of the northern and southern groins were repaired by installing additional sections of sheet piling. Offsets were required along the alignment of the groins to avoid debris of the original construction that could not be removed.
- In the fall of 1980, the southern groin, located just south of the Cape Hatteras Lighthouse at the time, became flanked and the shoreline retreated to within 70 ft. of the lighthouse base. This flanking required emergency action by the Seashore which involved driving 25 ft. long steel sheet piling extending 150 ft. from the shoreward end of the existing groin.
- In December 1980, asphalt rubble and large sandbags were added to fill the gap between the groin extension and the lighthouse base.
- In 1982, due to the December 1980 action being insufficient, the Seashore added a 150 ft. extension to the southernmost groin.
- In 1984, the Seashore placed a rubble scour apron along a portion of the southern groin.
- In 1985, Hurricane Gloria caused between 30% and 50% of the apron to become dislodged.
- In 1999, the Cape Hatteras Lighthouse was moved away from the groins to its current location.
- Today, the two northern groins have badly deteriorated and are completely submerged on most days; the southern terminal groin is consistently visible above the water but also clearly showing signs of deterioration.

More information on groins and jetties can be found here: Groins and Jetties (U.S. National Park Service)

Public comments will be accepted from Aug. 27 through Sept. 29, 2025, and may be submitted electronically at https://parkplanning.nps.gov/Buxton_Groin, or mailed to: Superintendent, 1401 National Park Dr., Manteo, N.C. 27954. Thank you for your interest and participation.

Figure 1-Depiction of three groins including southeast where repair work is proposed, 2017.