

**MOREHEAD CITY HARBOR PROJECT  
U.S. ARMY CORPS OF ENGINEERS AND NATIONAL PARK SERVICE'S PREFERRED ALTERNATIVE  
TO PLACE SAND ON SHACKLEFORD BANKS**

Following five years of development, the United States Army Corps of Engineers (the "Corps") recently released the draft Dredged Material Management Plan ("DMMP") and Environmental Impact Statement ("EIS") for the Morehead City Harbor Project. The preferred alternative in the draft DMMP includes placement of dredged material on the beaches of Shackleford Banks and in a nearshore area off the coast of Shackleford Banks. Placement of sand on Shackleford Banks not only would provide little to no benefit to Shackleford Banks, it also would disturb the natural conditions of Shackleford Banks, which is managed as a wilderness area. In addition, this plan would greatly reduce the amount of sand available for renourishment of Bogue Banks, where it is needed to protect valuable investments in infrastructure as well as recreational uses.

For the past century, the Corps has administered a federally-authorized navigation project commonly known as the Morehead City Harbor Project ("MCHP"). The MCHP involves the Corps' regular dredging of Beaufort Inlet and the disposal of dredged material. The Corps has dumped the vast majority of the dredged material offshore – essentially removing it from the active nearshore zone or littoral system (generally considered to extend from the upper beach to the seaward edge of the nearshore zone where sediment is actively transported by waves and currents). This practice has caused a number of significant, adverse impacts to Bogue Banks. Of particular concern, the accelerated beach erosion caused by removal of sand from the Bogue Banks littoral system jeopardizes homes, commercial development, infrastructure, and Fort Macon, an important historic landmark and the most visited state park in North Carolina.

In December 2007, Carteret County filed a lawsuit against the Corps alleging that its dredged material management practices associated with the MCHP violated the National Environmental Policy Act and the Coastal Zone Management Act. The County sought to require the Corps to: (i) eliminate placement of beach-quality dredged material in the offshore disposal area; (ii) move the nearshore disposal area into shallower water where sand would be kept in the littoral system; (iii) place a greater quantity of beach-quality dredged material on the beaches of Bogue Banks; and (iv) place a sufficient quantity of dredged material west of the nodal point at Bogue Banks to offset impacts of the MCHP.

One year later, in December 2008, the County entered into a settlement agreement with the Corps in which the Corps agreed to reevaluate its dredged material management practices and prepare a new DMMP for the MCHP.

Two years into the DMMP process and thirty-five years after rejecting the Corps' proposal to place dredged material on Shackleford Banks, the National Park Service ("NPS") indicated that the alternative of placing dredged material on Shackleford Banks is consistent with the NPS' Management Policy and should not be eliminated from the DMMP on that basis. Specifically, NPS stated that "sediment disposal and other types of shoreline process interference are permitted in national park units when necessary to restore or mitigate the impacts of human-

caused activities.” On October 14, 2011, NPS formally requested that the Corps include Shackleford Banks beach placement as an alternative in the DMMP.

Shackleford Banks is part of the Cape Lookout National Seashore. It is the only major North Carolina barrier island managed as *wilderness area* and vehicles are prohibited on the island. The primary consequence of wilderness designation is that it prohibits future development, use of mechanized equipment, and other man-made intrusions on the natural environment. In recommending Shackleford Banks to be managed as a wilderness area in August 1985, the NPS described it as follows:

Shackleford Banks is a barrier island lying approximately two miles from the mainland. The island contains 2,990 acres of emergent land, configured and situated to make practicable its preservation in its natural condition. It is accessible only by boat. Undulating high dunes and maritime forest enhance both the feeling of remoteness and the opportunities for solitude. All the island is scenic. Visitors disperse along the island on foot to fish, beachcomb, swim, picnic, hike, backpack, and camp. Natural processes dominate. The power of the island is always evident from the sound of the surf, and the dynamism of the island is emphasized by deposits and traces from past storm overwash. Studying the island environment and associated geological features and processes is of increasing interest to scientists and educators. These attributes – remoteness, scenic beauty, and natural conditions – are in contrast to other neighboring coastal islands that are easily accessible, more heavily used and are undergoing development. The island was once inhabited; however, developments have all disappeared except for more recent minor structures and remnants of cemeteries.

Despite the NPS’ management of Shackleford Banks as wilderness area, the NPS Coastal Geology Program – located in Lakewood, Colorado – has relied upon an exception to the wilderness designation to request dredged material be placed on Shackleford Banks.

Although NPS policy permits mitigation of certain adverse impacts to wilderness areas, mitigation is only permitted to the extent caused by external forces – in this case, the navigation project. *See* NPS Management Policy § 6.3.7 (providing that that management intervention may be undertaken in wilderness areas “to the extent necessary to correct past mistakes, the impacts of human use, and influences originating outside of wilderness boundaries”); Draft DMMP/EIS, p. 54 (“The National Park Service (NPS) is the agency responsible for the management of Shackleford Banks, and has determined that only the quantity of material lost from the island as a result of the navigation channel can be returned to the beaches of Shackleford Banks.”). Despite this limitation, the Corps failed to determine the amount of material lost at Shackleford Banks as a result of the navigation project. Draft DMMP/EIS, p. 46 (“The following volumes computed for these areas do not separate volume loss resulting from the navigation channel from the loss that would naturally occur with no project in place.”). Therefore, placement of material at Shackleford Banks is inconsistent with NPS policy, and no material should be placed at Shackleford Banks until the Corps determines the amount of sediment lost as a result of the navigation project.

While Shackleford Banks does experience a loss of sand due to the MCHP, there is no evidence that this loss adversely affects any ecological function on Shackleford Banks or threatens the wilderness and recreational uses made of the island. Because the island is undeveloped, and will never be developed, there is no threat to buildings or other infrastructure due to beach erosion.

Moreover, renourishment of Shackleford Banks will not result in any meaningful benefit to the island. In fact, due to concerns of rapid shoaling, dredged material will *not* be placed in the most critical area of erosion on the western end of Shackleford Banks. While sand placed in the westerly transport zone will be transported back towards the inlet, this sand will be rapidly lost to the channel without construction of a terminal structure, exacerbating shoaling issues in this section of the channel. It is well documented that Shackleford Banks is migrating to the west into Beaufort Inlet. In fact, as a result of that migration, the most critical section of the channel for navigation purposes is the “cutoff.” If sand is placed on Shackleford Banks (especially within the westerly transport zone), this rate of migration will likely increase and further inhibit navigation.

Shackleford Banks is also known as a popular surfing location. The Corps has recognized that “Shackleford Banks supports one of the best and most unique surfing spots on the east coast of the United States” and “when the conditions are right, local and national surfers will travel long distances to surf this unique wave.” Draft DMMP/EIS, p. 208. Despite this recognition, the Corps failed to analyze the potential impact of placing sand on Shackleford and in the nearshore area off the coast of Shackleford on this unique surf break.

While providing no meaningful benefit to Shackleford Banks, the placement of dredged material on the island has significant potential to adversely impact the undisturbed ecosystem of Shackleford Banks due to the use of heavy mechanized equipment, addition of sand, and nighttime lighting. In a letter dated May 31, 2011, the North Carolina Division of Marine Fisheries expressed concerns regarding placement of dredged material on Shackleford Banks’ beaches. “Since Shackleford Banks is an undisturbed island, serving as valuable habitat to fish and rare species, and there is no development to protect by using the beach renourishment shoreline stabilization techniques, DMF sees no justification for the amount of disturbance that would be caused by including Shackleford Banks as a disposal area.” In addition, the NPS Cape Lookout National Seashore located on Harkers Island does not favor beach renourishment at Shackleford Banks.

Diverting a substantial portion of the limited dredged material to Shackleford Banks will severely reduce the benefits of the DMMP to Bogue Banks. Under the Corps’ preferred alternative, the sand available for renourishment of Bogue Banks would be reduced by almost half, and much of the sand placed on Bogue Banks will be placed east of the nodal point. As confirmed by the Corps’ own studies, any sand placed east of the nodal point is rapidly transported back to the inlet. Therefore, it is critical for a sufficient quantity of sand to be placed west of the nodal point where it will benefit Atlantic Beach and other communities to the west. However, because of the proposed renourishment at Shackleford Banks, there is less sand available to be placed on Bogue Banks, especially west of the nodal point. In summary, the beaches of Bogue Banks will receive less sand under the proposed DMMP than has been placed

historically and therefore will be more vulnerable to background and storm-induced erosion than in the past.

For the reasons outlined above, the County does not favor any renourishment of Shackleford Banks. In summary, placing dredged material on Shackleford Banks will: (i) provide little to no benefit to Shackleford Banks; (ii) disturb the natural conditions of Shackleford Banks, which is managed as wilderness area; and (iii) provide less sand for Bogue Banks where it is needed to provide protection for infrastructure and development and provide for recreation.

The draft DMMP/EIS is available at:

<http://www.saw.usace.army.mil/Missions/Navigation/Dredging/MoreheadCityHarbor.aspx>

We encourage concerned citizens to provide comments in response to the draft DMMP/EIS. The comment period has been extended to February 3, 2014, and comments may be submitted to:

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The Corps and NPS will hold a public meeting on January 15, 2014 in the auditorium at the Duke Marine Lab on Pivers Island from 6:00 pm to 8:00 pm to discuss the preferred alternative and provide the public an opportunity to provide oral comments.