

Shallowbag Bay, Manteo, North Carolina Dredging Plan

Case Study

The primary purpose of the Dare County, NC dredging program is for navigation. Suitable material resulting from the dredging operations is used beneficially. They manage the dredging of coastal inlets (to include Oregon and Hatteras Inlets) and accesses to ferry terminals, as well as dredging of interior areas such as Shallowbag Bay in Manteo, NC. The Shallowbag Bay project was completed to facilitate the home porting of the “Elizabeth II,” a replica of merchant ships that brought the English to Roanoke Island, NC from 1584 to 1587. To facilitate their dredging program, they have established a Grants and Waterways Commission (DCGWC). The DCGWC has multiple responsibilities including staffing, facilitating special grant projects, and overseeing mitigation grants. The commission was created by the Dare County Board of Commissioners in January 1983.

The availability of areas for upland disposal in the region is very limited, although an upland site at the Dare County landfill site was beneficially used for the Shallowbag Bay project. The authorized depth of the federal channel is -12 ft. MLLW. The project consisted of the removal of an estimated 40,632 cubic yards of material within a 50-ft wide channel to a required depth of -9 feet MLLW with 3H:1V side slopes within Ranges 1-5 of the Manteo (Shallowbag Bay) Federal Navigation Project, as well as the construction of a connector channel.

A modified mechanical dredge was used for this project, with ancillary requirements including staff to man the dredge, associated transport barges, a dredged material transfer station (from floating barge to shore), and an upland dredge material disposal (placement) site. Dump trucks were used to transport dredge material from the transfer facility to an upland disposal site. The dredging project was funded via a \$1.9 million allotment from the North Carolina General Assembly. The Town of Manteo provided an additional \$170,000 for the project.



Dredge Material Transfer Station, Shallowbag Bay, NC. Source Credit: Dare County Grants and Waterways



Photo courtesy of Dare County, NC Grants and Waterways



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