RECORD OF DECISION

Bogue Banks, Carteret County, North Carolina Coastal Storm Damage Reduction Project

The Final Integrated Feasibility Report and Environmental Impact Statement (IFR/EIS), dated August 2014, addresses coastal storm damage reduction at Bogue Banks, Carteret County, North Carolina. The final recommendation is contained in the report of the Chief of Engineers, dated December 23, 2014. Based on these reports, the reviews of other Federal, State, and local agencies, input from the public, and the review by my staff, I find the plan recommended by the Chief of Engineers to be technically feasible, economically justified, in accordance with environmental statutes, and in the public interest.

The Final IFR/EIS, incorporated herein by reference, evaluated various structural and non-structural alternatives to address the coastal storm damage reduction needs of Bogue Banks, North Carolina. The recommended plan is the National Economic Development plan and is the environmentally preferred alternative. The recommended plan consists of a dune and berm system constructed of sand from offshore borrow sites. Specific coastal storm damage reduction features include:

- Construction of approximately 22.7 miles of main beach berm fill, approximately 50-feet wide, with a consistent profile across the entire length. The main beach fill would be bordered at either end by tapered transition berms approximately 1,000 feet in length.
- Construction of a total of 5.9 miles of dune landward of the main beach berm at certain intervals, expanding the existing dune system.
 Constructed dunes will be planted with native dune vegetation. The constructed dunes would vary in elevation from 15 to 20 feet North Atlantic Vertical Datum 1988. The width of the constructed dunes would vary from 10 to 95 feet.
- Placement of approximately a total of 19.6 million cubic yards of sand. Approximately 2.5 million cubic yards of sand will be placed during initial construction of the main berm and dunes. Approximately 1.07 million cubic yards of sand will be placed during each nourishment cycle.
 Nourishment cycles are estimated at 3-year intervals (16 nourishment cycles during the 50-year project life). Sand from the initial construction and the subsequent nourishment cycles will be dredged from borrow sites located one to five miles offshore.
- In order to avoid and minimize potential impacts to sea turtles listed under the Endangered Species Act of 1973, as amended, initial construction will occur between December 15 and March 31. Placement of sand during nourishment

cycles will occur between January 1 and March 31.

In addition to a "no action" plan, a number of non-structural and structural alternatives were evaluated. The non-structural measures analyzed included demolition and relocation; retreat; and floodplain and regulatory restrictions. Structural alternatives included "soft" structures such as beach fills, and "hard" structures such as breakwaters, seawalls, revetments, and groins. Structural alternatives focused on beach nourishment in varying scales.

The Draft IFR/EIS was circulated for public review on August 29, 2013. All comments submitted were responded to in the Final IFR/EIS. State, Agency, and public review of the Final IFR/EIS was completed on October 2, 2014. None of the comments received identified any reasonable alternatives or major substantive issues that were not already addressed in the report, nor did comments require any changes to the impact determinations in the Final IFR/EIS.

The recommended plan has been fully coordinated with the North Carolina Department of Environment and Natural Resources, U.S. Fish and Wildlife Service, National Marine Fisheries Service, U.S. Environmental Protection Agency, Bureau of Ocean Energy Management, and other government agencies. As a result of the project coordination and project design, all practicable means to avoid or minimize adverse environmental effects have been incorporated into the recommended plan including future renourishment intervals. The project would include monitoring consisting of semiannual beach profile surveys, aerial photography, and an annual beach fill monitoring report, as well as annual sea beach amaranth monitoring for five years following initial construction. No compensatory mitigation is required.

Technical, environmental, economic, and risk criteria used in the formulation of alternative plans were those specified in the <u>Water Resource Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies</u>. All applicable laws, executive orders, regulations, and local government plans were considered in the evaluation of alternatives. Based on review of these evaluations, I find that the benefits outweigh the costs and any adverse effects. Thus, I approve that plan for construction. This Record of Decision completes the National Environmental Policy Act process.

Date:	11 February 2016	so-ulen dancy
Daie.		Jo Ellen Darcy Assistant Secretary of the Army (Givil Works)