

## RECORD OF DECISION

### CHARLESTON HARBOR POST-45 NAVIGATION STUDY CHARLESTON, SOUTH CAROLINA

The Final Integrated Feasibility Report and Environmental Impact Statement (IFR/EIS), dated June 2015, and the report of the Chief of Engineers, dated September 8, 2015, address navigation improvements for Charleston Harbor, Charleston, South Carolina. 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, cost effective, in accordance with applicable environmental statutes, and in the public interest.

The final IFR/EIS, incorporated herein by reference, evaluated various alternatives to improve transportation efficiency for commercial vessels. The recommended plan is a Locally Preferred Plan (LPP), and includes the following navigation improvements (depths do not include over-depths or advance maintenance):

- Deepen the existing entrance channel from a project depth of -47 feet to -54 feet mean lower low water (MLLW) over the existing 800-foot bottom width, while reducing the existing stepped 1,000-foot width to 944 feet at the same time it is deepened from an existing depth of -42 feet to a depth of -49 feet.
- Extend the entrance channel approximately three miles seaward from the existing location to a depth contour including a -54-foot MLLW project depth.
- Deepen the inner harbor from an existing project depth of -45 feet to -52 feet MLLW to the Wando Welch container facility on the Wando River and the New Navy Base Terminal on the Cooper River, and -48 feet MLLW for the reaches above that facility to the North Charleston container facility.
- Enlarge the existing turning basins to an 1800-foot diameter at the Wando Welch and New Navy Base Terminal to accommodate Post Panamax Generation 2 and 3 container ships and widen portions of Mt. Pleasant Reach, Bennis Reach, Horse Reach, Hog Island Reach, Wando River Lower Reach, Wando River Upper Reach, Drum Island Reach, Myers Bend Reach, Daniel Island Reach, Clouter Creek Reach, North Charleston Reach, Filbin Creek Reach, and Ordnance Reach to safely and efficiently accommodate the vessels expected to utilize the channels.
- Enlarge the North Charleston Terminal turning basin to a 1650-foot diameter for Post Panamax Generation 2 container ships.
- Place approximately 6.02 million cubic yards (CY) of dredged material in existing upland confined disposal sites with raised dikes dredged material from the upper harbor and raise dikes, as needed, at Clouter Creek, Yellow House Creek, and Daniel Island;

place approximately 31.46 million CY of dredged material from the lower harbor and entrance channel at the Ocean Dredged Material Disposal Site (ODMDS).

Mitigation features of the plan include:

- Create approximately 33 acres of hardbottom habitat with the beneficial use of dredged materials as part of the project disposal plan as mitigation for unavoidable impacts to approximately 29 acres of hardbottom habitat in the entrance channel. As a least cost placement of beneficial use of dredged material, place approximately 360,000 CY of rock from the dredged material at two new compensatory mitigation reef sites; place approximately 1.92 million CY of rock at 6 new rock placement sites for reef habitat; and place approximately 240,000 CY of rock at the existing South Carolina Department of Natural Resources Charleston Nearshore Reef.

- Preserve an estimated 665.6 acres of freshwater wetlands to be transferred to the United States Forest Service and managed as a part of the Francis Marion National Forest as compensatory mitigation for unavoidable indirect impacts (salinity increases) to approximately 324 acres of freshwater forested and herbaceous wetlands.

- Implement the monitoring and adaptive management plan included in the Final IFR/EIS for approximately nine years to ensure creation of the hardbottom habitat is successful and to validate the estimated indirect impacts to the wetlands, estimated water quality impacts, and potential shoreline changes and wake impacts.

In addition to a “no action” plan, several nonstructural and structural alternatives were evaluated. The nonstructural alternatives included using additional tug boats, additional trucking, light-loading of vessels, lightering, and taking advantage of the natural tidal cycle to meet depth requirements. The nonstructural alternatives were eliminated due to their inability to create transportation cost savings, safety considerations, and/or environmental impacts. Deepening alternatives between -48 and -52 feet were evaluated in 2-foot increments throughout the system.

Two cost-effective alternatives were developed that generated comparable net benefits. After careful consideration, the U.S. Army Corps of Engineers (Corps) identified the less costly alternative as the National Economic Development (NED) Plan. The LPP is more costly than the NED plan but generates more net benefits and is environmentally acceptable. The LPP would be two feet deeper than the NED plan from the area of the entrance channel up to the New Navy Base Terminal, and was requested by the sponsor. In accordance with Corps policy, the LPP was evaluated and approved for consideration as the recommended plan by my office on October 1, 2014.

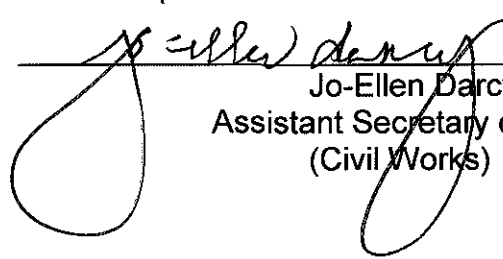
The draft IFR/EIS was circulated for public review for 45 days on October 10, 2014. All comments submitted were responded to in the final IFR/EIS. The final IFR/EIS was completed on July 10, 2015.

All practicable means to avoid and/or minimize adverse impacts to environmental resources were analyzed and incorporated into the recommended plan. In accordance

with Section 7 of the Endangered Species Act, the National Marine Fisheries Service issued a Biological Opinion to the Corps determining that the recommended plan will not jeopardize the continued existence of threatened or endangered species or adversely modify designated critical habitat. All terms and conditions resulting from the Biological Opinion will be implemented to avoid or minimize take of endangered species. In addition, the recommendations made in the Fish and Wildlife Coordination Act Report will be implemented. The South Carolina Department of Health and Environmental Control issued a Water Quality Certification in accordance with Section 401 of the Clean Water Act and all conditions of the certification will be implemented with this project.

Technical and economic criteria used in the formulation of alternative plans were those specified in the Water Resource Council's 1983 Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. 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 of the recommended plan outweigh the costs and any adverse effects. This Record of Decision completes the National Environmental Policy Act process.

1/12/2016  
Date

  
Jo-Ellen Darcy  
Assistant Secretary of the Army  
(Civil Works)