RECORD OF DECISION

INTEGRATED GENERAL REEVALUATION REPORT
WITH SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT
MOBILE HARBOR, MOBILE, ALABAMA

The Integrated General Reevaluation Report with Supplemental Environmental Impact Statement (GRR/SEIS) dated May 2019 addresses Federal navigation system improvement opportunities in Mobile Harbor, Alabama, and recommends navigation improvements that are within the authorized dimensions. A Chief's Report, dated 18 November 1981, recommended Mobile Harbor's authorized project dimensions. Based on the GRR/SEIS; reviews by other Federal, state, and local agencies, and Tribes; input of the public; and review by my staff, I find the plan recommended in the GRR/SEIS to be technically feasible, environmentally acceptable, and economically justified, in accordance with environmental statutes, and in the public interest.

The Final GRR/SEIS, incorporated herein by reference, evaluated various alternatives that would allow for channel widening and deepening, channel bend easing, turning basin expansion, maintenance dredging, and dredged material placement in the study area. The recommended plan (RP) is the National Economic Development (NED) Plan and includes the following:

- Deepen the existing Bar, Bay, and River Channels (south of station 226+16) by 5 feet (ft) each to a project depths of 50 ft, with an additional 2 ft for entrance channel wave allowances and an additional 2 ft for advanced maintenance plus 2 ft of allowable overdepth for dredging (total depths of 56, 54, and 54 ft, respectively);
- Incorporate minor bend easings at the double bends (at stations 1857+00 and 1775+26) in the Bar Channel approach to the Bay Channel;
- Widen the Bay Channel from 400 ft to 500 ft at a depth of 50 ft (with an additional 2 ft for advanced maintenance plus 2 ft of allowable overdepth resulting in a total depth of 54 ft) from the mouth of Mobile Bay northward for 3 nautical miles to provide a two-way traffic area for passing; and
- Expand the Choctaw Pass Turning Basin 250 ft to the south at a depth of 50 ft with an additional 4 ft for advanced maintenance plus 2 ft of allowable overdepth for dredging (total depth of 56 ft) to better accommodate safe turning of the design vessel and other large vessels.

Placement areas for the new work material dredged for the proposed navigation improvements are as follows:

- Relic Shell Mined Area: The Relic Shell Mined Area is located to the northeast of Gaillard Island on the eastern side of the ship channel. The proposed placement within this site is the result of beneficial use discussions with the cooperating agencies in which it was suggested that the U.S. Army Corps of Engineers (USACE), Mobile District conduct open bay placement of the dredged material in strategic areas of the bay in an effort to restore sediment to the system. Approximately 5.5 million cubic yards (mcy) of new work material are anticipated to be placed in the Relic Shell Mined Area. Site selection and volume estimates for this site were based on the National Oceanic Atmospheric Administration compiled surveys within the area between 1960 and 1961 and 1984 and 1987. The potential placement areas were located in sections where

there were disturbances with 15-foot depths or greater based on the combined surveys from 1960 to 1961 and 1984 to 1987. These areas encompass approximately 4,100 acres, and existing depths within the sites generally range from 10 to 14 ft. Placement is anticipated to be accomplished with a maximum thickness of approximately 3 ft due to the characteristics of the new work material; however, the volume of material planned to be placed in the sites is based on an average material thickness of 1.5 ft over the sites.

- Sand Island Beneficial Use Area (SIBUA), including the Northwest Extension: Currently, no new work material from the Bar Channel is anticipated to be placed in the SIBUA or the northwest extension as part of the RP. The new work material in the Bar Channel is predominately clays and silts with some intermixed sands, and, based on available geotechnical information, none of this material meets the suitability criteria for placement in the SIBUA. Placement of new work material in the SIBUA or the northwest extension will be considered in the future if sandy material is identified during additional geotechnical investigations of the Bar Channel. Placement areas for material dredged during maintenance will remain unchanged with the exception of the SIBUA expansion.
- Ocean Dredged Material Disposal Site (ODMDS) Expansion: The capacity of the existing ODMDS site and proposed expansion was obtained from ongoing environmental coordination documents between the USACE, Mobile District, and the U.S. Environmental Protection Agency. An available/remaining capacity of approximately 52 mcy is expected after 20 years of future placement of maintenance material in the site. This volume is adequate to handle the anticipated 18.6 mcy of new work material that will be placed in the site during construction of the RP. Placement areas for material dredged during maintenance will remain unchanged with the exception of the proposed ODMDS expansion.

In addition to a “no action” plan, further alternatives were evaluated. After determination of the problems and needs of the study area specific measures were identified that could, or in combination with other measures, be used to address the problems. Subsequently, an initial array of alternatives was developed and refined through a screening process that evaluated their completeness, effectiveness, efficiency, and acceptability in order to maximize overall benefits and minimize costs and adverse environmental impacts. The resulting focused array included a deepening measure with alternative depths ranging from 47 to 50 ft (an additional 2 ft of depth in the Bar Channel for wave allowances); a widening measure that added 100 ft of width to the Bay Channel for 3 to 5 nautical mile lengths for each deepening alternative; and with the Choctaw Pass turning basin expansion and channel bend easings. To determine whether the Federal Government should participate in implementing navigation improvements, the expected returns to the national economy (NED benefits) were calculated. Net benefits were calculated by subtracting the total cost to construct and maintain the improvements over a 50-year period of analysis from the total transportation cost savings that would be generated by the proposed improvements over that period. The NED Plan is the alternative that reasonably maximizes net NED benefits while remaining consistent with the Federal objective of protecting the Nation’s environment. Further refinement of the focused array indicated that the 5-nautical mile widener would not be feasible for the depths under consideration; therefore, the 5-nautical mile widener was eliminated from further consideration. Based on the project objectives and Non-Federal Sponsor (NFS) input, both deepening and widening were to be desired outcomes. The analysis of the alternatives also established potential construction costs. The NFS used the cost data to determine the maximum project cost it could support given the requirement to cost share construction. With this information, the NFS indicated that deepening to 50 ft appeared to be the maximum that it could support. Based on analysis of the final array, the RP is the 50-foot deepening alternative with 100 ft of channel widening for a distance of 3 nautical miles. This alternative has greater net benefits than smaller scale plans (47, 48, and 49 ft),

and, considering categorical exemption from the NED Plan per paragraphs 3-2b(10) of Engineer Regulation (ER) 1105-2-100, the USACE analyzed a sufficient number of alternatives to insure that net benefits do not maximize at a scale smaller than the 50-foot plan. The alternatives formulation selection evaluation is found in Sections 3.3-3.5 of the GRR/SEIS. The RP was identified as the environmentally preferable alternative.

For all alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of the RP are listed in Table 1:

Table 1: Summary of Potential Effects of Recommend Plan

	Significant adverse effect	Insignificant effects due to mitigation	Insignificant effects	Resource unaffected by action
Aesthetics	☐	☐	☐	☒
Air quality	☐	☐	☒	☐
Aquatic resources/wetlands	☐	☐	☒	☐
Invasive species	☐	☐	☐	☒
Fish and wildlife habitat	☐	☐	☒	☐
Threatened/Endangered species	☐	☐	☒	☐
Historic properties	☐	☐	☒	☐
Other cultural resources	☐	☐	☒	☐
Hazardous, toxic & radioactive waste	☐	☐	☐	☒
Hydrology	☐	☐	☐	☒
Navigation	☐	☐	☒	☐
Noise levels	☐	☐	☒	☐
Public infrastructure	☐	☐	☒	☐
Socio-economics	☐	☐	☒	☐
Environmental justice	☐	☐	☒	☐
Soils	☐	☐	☒	☐
Tribal trust resources	☐	☐	☐	☒
Water quality	☐	☐	☒	☐
Climate change	☐	☐	☐	☒

All practicable means to avoid or minimize adverse environmental effects were analyzed and incorporated into the RP. Best management practices (BMPs) as detailed in the GRR/SEIS will be implemented to minimize impacts. Several avoidance and minimization measures are proposed to ensure that impacts are insignificant. These include the following: comply with all water quality standards and conditions issued in the water quality certification and adhere to monitoring protocols in the water quality monitoring plan to the maximum extent practicable; obtain and comply with ocean disposal standards and conditions issued in the Environmental Protection Agency's Section 103 concurrence under the Marine Protection Research and Sanctuaries Act of 1972; comply with all coastal zone management conditions and adhere to any other protocols issued as part of the concurrence with the Corps' Coastal Zone Consistency determination to the maximum extent practicable; dredge practices will adhere to the Gulf of Mexico Regional Biological Opinion (GRBO) (2003, and amended in 2005 and 2007); implement avoidance and measures required by National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (FWS) for Endangered Species Act-listed species; apply regional sediment

management and beneficial placement strategies for new work material; and continue working with cooperating agencies during the planning, Pre-construction Engineering and Design (PED), and construction phases. The avoidance and minimization measures evaluation is found in Section 3.27, Appendix C, of the GRR/SEIS.

No compensatory mitigation is required as part of the RP.

Public review of the Draft GRR/SEIS was completed on 11 September 2018. All comments submitted during the public comment period were responded to in the Final GRR/SEIS. All public comments and corresponding responses can be found in Appendix E of the GRR/SEIS. The USACE, Mobile District published its Notice of Availability (NOA) in the Federal Register on May 10, 2019 announcing the 30-day agency review period. In response to requests, the USACE, Mobile District extended the agency review period for an additional 7 days and 30 days with its NOA publications in the Federal Register on May 31, 2019, and June 11, 2019, respectively. As a result of state and agency review, the final GRR/SEIS was edited with all revisions reflected within the accompanying ERRATA sheet.

Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the U.S. Fish and Wildlife Service (FWS) concurred with the USACE's may affect but not likely to adversely affect determination on 21 December 2018. Newly listed species, Giant manta ray and Bryde's whale, would not occur in or around the project area given the lack of suitable habitat. Proposed channel improvements are within the congressionally authorized project dimensions; therefore, the USACE, Mobile District will implement terms and conditions for sea turtles and Gulf sturgeon identified in NMFS – Protected Resources Division's (PRD) Gulf Regional Biological Opinion for Dredging of Gulf of Mexico Navigation Channels and Sand Mining Areas Using Hopper Dredges by COE Galveston, New Orleans, Mobile, and Jacksonville Districts (Consultation Number F/SER/2000/01287) (GRBO) dated November 19, 2003 (amended in 2005 and 2007). These protective measures will be utilized if a hydraulic hopper dredge constructs the improvement features or performs routine future maintenance of the navigation channel. The project area is outside of designated Gulf sturgeon critical habitat, and placement of material will not breach the water surface. Thus, based upon this previous coordination, NMFS-PRD concluded these activities will not likely jeopardize the continued existence of these species.

Pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801-1882), the USACE determined that the RP will have no adverse effects to Essential Fish Habitat (EFH). Consultation with the NMFS-Habitat Conservation Division (HCD) was initiated and by letter dated 18 September 2018, NMFS-HCD concurred with the USACE's determination that the project will not result in adverse effects to EFH (Attachment C-4).

As referenced in Section 2.16, Appendix C, the Area of Potential Effect (APE) of the RP has a very high potential for the presence of cultural resources, including shipwrecks and now-submerged landforms that may contain prehistoric sites. The APE for the RP has been surveyed for cultural resources, and Phase II will be necessary based on recent Phase I findings. Continued Section 106 coordination and consultation with the State of Alabama State Historic Preservation Office (SHPO) and the USACE, Mobile District Tribal Partners will also be necessary. Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the USACE determined that historic properties may be adversely affected by the RP. A Programmatic Agreement (PA) between the Alabama SHPO and the USACE, Mobile District has been executed to guide the Section 106 process and mitigate any adverse effects to potential historic properties. On 26 July 2019, the USACE, Mobile District, and the State of

Alabama SHPO entered into a PA. The PA provides stipulations regarding the identification and evaluation of historic properties, sets forth the determination of effects to historic properties, and defines the roles of the SHPO, USACE, Federally Recognized Tribes, and other interested parties in the Section 106 process. All terms and conditions in the PA shall be implemented in order to avoid or minimize adverse impacts to historic properties. Shipwrecks identified as foreign vessels, such as those of French, Spanish, or English origin, would be the property of that sovereign nation, if no direct title of ownership can be established. If ownership is identified as a Foreign Sovereign Nation, consultation with that Foreign Sovereign Nation would be necessary.

Pursuant to the Clean Water Act of 1972, as amended, all discharges of dredged or fill material associated with the RP have been found to be compliant with the Section 404(b)(1) Guidelines (40 C.F.R. Part 230). The Clean Water Act Section 404(b)(1) Guidelines evaluation is found in Attachment C-2, Appendix C of the GRR/SEIS.

A water quality certification pursuant to Section 401 of the Clean Water Act will be obtained from the Alabama Department of Environmental Management (ADEM) prior to construction. All conditions of the water quality certification will be implemented in order to minimize adverse impacts to water quality to the maximum extent practicable.

ADEM's concurrence with USACE's determination of consistency with the State of Alabama Coastal Zone Management program pursuant to the Coastal Zone Management Act of 1972 will be obtained prior to construction. All conditions of the concurrence will be implemented in order to minimize adverse impacts to the coastal zone to the maximum extent practicable.

The USACE will perform sediment analysis necessary to obtain a Section 103 concurrence from the U.S. Environmental Protection Agency Region 4 pursuant to the Marine Protection, Research and Sanctuaries Act of 1972 for all material proposed for ocean disposal in the Mobile ODMDS (33 U.S.C. § 1413).

All applicable environmental laws have been considered and coordination with appropriate agencies and officials has been completed.

Technical, environmental, economic, and cost effectiveness criteria used in the formulation of alternative plans were those specified in the Water Resources 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 the review of these evaluations, I find that benefits of the RP outweigh the costs and any adverse effects. This Record of Decision completes the National Environmental Policy Act process.

6 September 2019
Date

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