

## FINDING OF NO SIGNIFICANT IMPACT

### WRDA Section 1122 Beneficial Use Pilot Project, Beneficial Use Placement for Marsh Restoration Using Navigation Channel Sediments Hickory Cove Marsh Bridge City, Texas

The U.S. Army Corps of Engineers, Galveston District (Corps) has conducted an environmental analysis in accordance with the National Environmental Policy Act of 1969, as amended. The final Integrated Feasibility Report and Environmental Assessment (IFR/EA) dated **DATE OF IFR/EA**, for the WRDA Section 1122 Beneficial Use Pilot Project, Beneficial Use Placement for Marsh Restoration Using Navigation Channel Sediments Hickory Cove Marsh addresses ecosystem restoration opportunities and feasibility in Bridge City, Orange County, Texas. The final recommendation is contained in the report of the Chief of Engineers, dated **DATE OF CHIEF'S REPORT**.

The Final IFR/EA, incorporated herein by reference, evaluated various alternatives that would beneficially use high quality sediment dredged from the existing federal navigation channel to restore aquatic ecosystem habitats while providing high environmental, economic, and social benefits in the study area. The recommended plan is the National Ecosystem Restoration (NER) Plan and includes:

- Restore 670 acres of emergent marsh using 3.5 million cubic yards of material dredged from the Sabine Neches Waterway (SNWW)
- Repair the existing containment levee to a uniform elevation of +5.0 mean sea level (MSL) and 3:1 slopes using material dredged from the SNWW
- Construct approximately 14,623 linear feet (LF) (about 2.8 miles) of breakwaters in shallow open water (<3 feet deep) along the shoreline of Hickory Cove using approximately 138,000 tons of stone
- Construct a 95-acre living shoreline between the toe of the existing containment levee and the breakwaters by removing non-native/invasive species and planting the area with smooth cordgrass (*Spartina alterniflora*).

In addition to a “no action” plan, three alternatives were evaluated. The alternatives included plans that build upon the previous to increase resiliency to future conditions. Alternative 1 involves marsh restoration and repair of the existing containment levee, while Alternative 2 added construction of breakwaters and Alternative 3 added construction of the breakwaters and a living shoreline.

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

**Table 1: Summary of Potential Effects of the Recommended Plan**

	Insignificant effects	Insignificant effects as a result of mitigation*	Resource unaffected by action
Aesthetics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquatic resources/wetlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invasive species	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Insignificant effects	Insignificant effects as a result of mitigation*	Resource unaffected by action
Fish and wildlife habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Threatened/Endangered species/critical habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Historic properties	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other cultural resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floodplains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous, toxic & radioactive waste	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hydrology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Navigation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Noise levels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Socio-economics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental justice	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soils	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tribal trust resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate change	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All practicable and appropriate means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Best management practices (BMPs) as detailed in the IFR/EA will be implemented, if appropriate, to minimize impacts. BMPs and conservation measures included in the project design are seasonal timing restrictions, biological monitors with stop-work authority, utilizing existing access roads and channels to the greatest extent practicable, employing construction BMPs, siting pumps and pipes in areas that would have the least disturbance on the overall system, and utilizing the smallest construction footprint possible. The project is intended to restore the natural form and function of the coastal system; therefore, all long-term impacts are expected to be beneficial to the overall ecosystem and increase resiliency and sustainability.

No compensatory mitigation is required as part of the recommended plan.

Public review of the draft IFR/EA and FONSI was completed on 24 December 2021. All comments submitted during the public review period were responded to in the Final IFR/EA and FONSI.

Pursuant to section 7 of the Endangered Species Act of 1973, as amended, the U.S. Army Corps of Engineers determined that the recommended plan may affect but is not likely to adversely affect the following federally listed species or their designated critical habitat: eastern black rail (*Laterallus jamaicensis jamaicensis*), whooping crane (*Grus americana*) and West Indian manatee (*Trichechus manatus*). The U.S. Fish and Wildlife Service (FWS) concurred with the Corps' determination on **DATE OF CONCURRENCE LETTER**

Pursuant to section 106 of the National Historic Preservation Act of 1966, as amended, the U.S. Army Corps of Engineers determined that historic properties may be adversely affected by

the recommended plan. The Corps and the Texas State Historic Preservation Office entered into a Programmatic Agreement (PA), dated **DATE OF AGREEMENT**. All terms and conditions resulting from the agreement shall be implemented in order to minimize adverse impacts to historic properties.

Pursuant to the Clean Water Act of 1972, as amended, the discharge of dredged or fill material associated with the recommended plan has been found to be compliant with section 404(b)(1) Guidelines (40 CFR 230). The Clean Water Act Section 404(b)(1) Guidelines evaluation is found in Appendix B-3 of the IFR/EA.

A water quality certification pursuant to section 401 of the Clean Water Act was obtained from the Texas Commission on Environmental Quality on **DATE OF CERTIFICATION**. All conditions of the water quality certification shall be implemented in order to minimize adverse impacts to water quality.

A determination of consistency with the Texas Coastal Zone Management program pursuant to the Coastal Zone Management Act of 1972 was obtained from the Texas General Land Office on **DATE OF CONSISTENCY**. All conditions of the consistency determination shall be implemented in order to minimize adverse impacts to the coastal zone.

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

Technical, environmental, 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 evaluation of alternatives. Based on this report, the reviews by other Federal, State and local agencies, Tribes, input of the public, and the review by my staff, it is my determination that the recommended plan would not cause significant adverse effects on the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

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Date

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Timothy R. Vail  
Colonel, Corps of Engineers  
District Commander