FINDING OF NO SIGNIFICANT IMPACT for the Bayou Dupont Marsh and Ridge Creation Project (BA-48) in Jefferson and Plaquemines Parishes, Louisiana

National Oceanic and Atmospheric Administration (NOAA) Administrative Order 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality (CEQ) regulations at Title 40 Code of Federal Regulations (CFR) Section 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below is relevant to making a finding of no significant impact (FONSI) and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NOAA Administrative Order (NAO) 216-6 criteria and CEQ's context and intensity criteria and is specific to the preferred alternative – Alternative 1 – based on the evaluation of the alternative in the supporting environmental assessment (EA), hereby incorporated by reference. These criteria include:

(1) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats or essential fish habitat as defined under the Magnuson-Stevens Act and identified in Fishery Management Plans (FMPs)?

> Response: No, the proposed action will not cause substantial damage to ocean and coastal habitats and essential fish habitat (EFH) as defined under the Magnuson-Stevens Act and identified in FMPs. Although some temporary adverse impacts may occur during construction, they are not substantial. The NOAA Fisheries Habitat Conservation Division is charged with review of federal projects pursuant to the Magnuson-Stevens Act and has determined that the action presents no significant threat to EFH or managed species. The project sponsors determined that the preferred alternative will enhance existing habitat. Some types of EFH that are abundant in the northern Gulf of Mexico (such as open water) will be converted to less common types of EFH (for example, emergent marsh habitat) of critical importance to juveniles of some estuarine-dependent managed species, including brown shrimp, white shrimp, and red drum. Short-term, unavoidable, adverse impacts to habitats supportive of various life stages of brown shrimp, white shrimp, and red drum would occur during the construction phase of the proposed project as marsh is filled and created. Approximately 95 acres (38 ha) of marsh would be covered by fill. However, post-construction increases in the quality and quantity of the marsh would offset these impacts. Compared with pre-construction acreage of 95 (38 ha), and the anticipated 272 acres (110 ha) to remain after twenty years of no action, a total net of 186 acres (72 ha) of marsh habitat are projected to benefit from the preferred alternative.
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> Short-term adverse minor impacts to EFH will result from dredging. Turbidity and disturbance of the benthic habitat will increase during dredging, affecting shallow EFH for managed species. However, turbidity is naturally high in the northern Gulf of Mexico. Natural sedimentation rates are expected to fill the borrow areas in Mississippi River to pre-dredging bathymetric contours. Managed species can

readily relocate to the hundreds of thousands of acres of similar substrate available nearby. See Section 4.3.3 of the attached EA.

(2) Can the proposed action be expected to have a substantial impact on biodiversity or ecosystem function within the affected area (for example, benthic productivity, predator-prey relationships, and similar factors)?

Response: No, the project will not have a substantial negative impact on ecosystem function and species biodiversity within the affected area. The project is designed to approximate naturally occurring marsh and stream bank conditions along the Louisiana coast, which will increase the biological productivity and diversity of the site. Native plant species will be planted to mimic naturally occurring banks and marshes and increase diversity. Tidal channels will occur naturally within the marsh after gapping sediment retaining dikes to provide highly valuable edge habitat and enhance fisheries ingress and egress.

(3) Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?

Response: No, the project will not have a substantial adverse impact on public health or safety. The project location is remote, accessible only by boat and used primarily for recreational fishing. During construction, some noise and exhaust fumes would create a temporary localized disturbance, but not a hazard to human health or safety. See sections 4.2.3 and 4.2.4 of the attached EA.

Pipeline rupture followed by an oil spill is the most serious accident that could occur during dredging. Surveys to identify any unmarked pipelines will be required of the contractor prior to dredging and four potential abandoned well locations will be avoided during construction to further minimize the likelihood.

(4) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, their critical habitat, marine mammals, or other non-target species?

Response: No, the project is not likely to adversely affect any federal or state listed species. Although temporary adverse impacts may occur to individuals, these impacts are not expected to be biologically significant or adversely modify populations. The U.S. Fish and Wildlife Service (USFWS) and NMFS have coordinated avoidance measures of the proposed action that will limit or avoid adverse effect on federally proposed or listed endangered or threatened species known to exist within the project area, i.e. pallid sturgeon. As a result, NMFS concluded informal Section 7 consultation under the Endangered Species Act upon receipt of the USFWS's concurrence with NMFS's determination that the proposed action is not likely to adversely affect any federally listed species. No other non-target species will be adversely impacted.

The potential for adverse effects for species are expected to be limited to the construction phase. The avoidance procedures are described in the attached EA section 4.3.5.

(5) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: No, no significant adverse social or economic impacts are interrelated with natural or physical environmental effects brought by the proposed action. The human environment will benefit minimally from construction-related economic activity and from enhanced opportunities for recreational and commercial fishing, but these effects will not be significant.

(6) Are the effects on the quality of the human environment likely to be highly controversial?

Response: No, it has been determined that the project will have no substantial adverse effects on the quality of the human environment and thus is not likely to generate high levels of controversy. Restoring the ridge and marsh will improve the human environment. The proposed action was selected to be designed by the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) Task Force through a publicly vetted process. Federal, state, and local government agencies have had the opportunity to review and comment on the proposed action since its inception in 2007. No substantial dispute exists as to the project's size, nature, or effect. NMFS's review of the environmental impacts of the project, including comments provided by other resource agencies, did not raise substantial questions as to whether the project may cause significant degradation of some human environmental factor.

(7) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas?

Response: No, the project cannot be reasonably expected to have a substantial negative impact on historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, EFH, or ecologically critical areas. No prime farmlands, parklands, or wild and scenic rivers exist on the site or in the limited area of the project's impact. The proposed action is assumed to have a beneficial effect on wetland habitat, fish habitat, and ecologically critical areas. The intent of the project is to restore a highly degraded marsh. The temporary impact to fish and wetlands habitat is non-significant and expected to be offset by the restoration of habitat derived from the preferred alternative.

The State Historic Preservation Office (SHPO) was consulted under National Historic Preservation Act (NHPA) Section 106 and determined that the project will have no adverse effect on cultural or historic resources. A protective buffer zone

around terrestrial cultural resources will be maintained during construction. There were no submerged cultural sites identified within the construction or borrow areas, and thus no impacts are expected.

(8) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: No, the proposed action is similar to completed marsh restoration projects in Louisiana during the past several years. The project involves risks that are understood and avoidable. Lessons learned on previous projects are propagated throughout the CWPPRA program through meetings of the technical committees and work groups, and the project sponsor participates in these meetings.

(9) Is the proposed action related to other actions with individually insignificant, but cumulatively significant, impacts?

Response: No, the proposed action will not contribute to any cumulatively significant impacts. The proposed action is part of a regional effort to restore and protect wetlands across coastal Louisiana. Every individual project creates temporary, localized adverse effects on existing habitat, but these are not cumulatively significant and results in the long-term beneficial addition of valuable elevation to the wetland system. Collectively, marsh creation projects contribute positively to an ecosystem by providing additional sediment into the system. These sediments then become available to help nourish and sustain adjacent marshes.

(10) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources?

Response: No, a potentially eligible national historic site (shell midden) is located near the project area. A survey was conducted to delineate this and other areas that may contain cultural resources. The project area of work was altered to avoid adversely impacting the site and provide a buffer around the potential historic site. The SHPO was consulted and determined that the project will have no adverse effect on cultural or historic resources.

(11) Can the proposed action reasonably be expected to result in the introduction or spread of a non-indigenous species?

Response: No, the action will not result in the introduction or spread of non-indigenous species but instead will result in their reduction. The proposed action is habitat restoration that will increase the functional value of the marsh, thereby supporting native species. Native plant species will be used to stabilize the soil and increase the diversity of native species in the area. The proposed action

includes plans to eradicate woody invasive species should they occur after project construction.

(12) Is the proposed action likely to establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration?

Response: No, the proposed action will not establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration. This project is a stand-alone project with no identifiable funding for future action beyond the scope and funding currently allocated for the preferred alternative. Any additional action in this area would need to be re-competed through the CWPPRA, or any other funding process.

(13) Can the proposed action reasonably be expected to threaten a violation of federal, state, or local law or requirements imposed for the protection of the environment?

Response: No, the project has been planned and coordinated to comply with all applicable environmental protection laws, and no violations are likely or expected. In addition, the project will be implemented in compliance with all permits and other authorizations required by the state and federal regulatory agencies.

(14) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: No, the proposed action will not result in a substantial cumulative adverse effect on target species or non-target species. The primary goal of this restoration project is to restore fragmented marsh habitat and eroded ridge habitat, thereby increasing the functional value of EFH and other habitat in the vicinity. As such, the net effects are incrementally beneficial.

DETERMINATION

In view of the information presented in this document and the analysis contained in the supporting EA prepared for the Bayou Dupont Ridge Marsh and Ridge Creation Project (BA-48) in Jefferson and Plaquemines Parishes, Louisiana it is hereby determined that the preferred alternative identified for implementation will not result in direct, indirect or cumulative significant impact on the quality of the human environment.. In addition, all beneficial and adverse impacts of the proposed action have been fully considered and evaluated to reach the Finding of No Significant Impact (FONSI). Accordingly, preparation of an Environmental Impact Statement for this action is not necessary.

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6/8/11
Date