

# Evaluation of Changes to Phase IV Early Restoration Project: Restoring Living Shorelines and Reefs in Mississippi Estuaries- Big Island Living Shoreline Component

## I. Introduction

In 2015, the Deepwater Horizon NRDA Trustees approved the Restoring Living Shorelines and Reefs in Mississippi Estuaries Project, an Early Restoration project selected as part of the Record of Decision (ROD) in the **2015 Deepwater Horizon Oil Spill Final Phase IV Early Restoration Plan and Environmental Assessment (Final Phase IV RP/EA)**. This project includes the Big Island Living Shoreline Component (Project), which, at the time of approval of the Final Phase IV RP/EA, was subject to final engineering and design. The Mississippi Department of Environmental Quality (MDEQ) is the Implementing Trustee for this Project. Consistent with the Final Phase IV RP/EA and a prior **Notice of Project Change** for the Restoring Living Shorelines and Reefs In Mississippi Estuaries Project, the MS TIG has performed a project review to evaluate material changes made to the Project as a result of final engineering and design.

According to Section 9.5.2 of the Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the Deepwater Horizon (DWH) Oil Spill, the MS TIG will conduct a project review to determine whether any project change is consistent with the environmental review in the Final Phase IV RP/EA or if there are substantial changes that are relevant to environmental concerns. Second, the MS TIG will assess whether or not there are significant new circumstances or information relevant to environmental concerns for the Project not addressed in the impact analysis of the Final Phase IV RP/EA (40 C.F.R. § 1502.9 (c)). Third, the MS TIG will evaluate whether project changes affect their selection under the Oil Pollution Act of 1990 (OPA).

## II. Description of Project Change

As a result of final engineering and design studies, and through coordination with Mississippi Department of Marine Resources (including the Marine Patrol Division) and the U.S. Coast Guard, the MS TIG learned that the refinements to the Project would be necessary to achieve restoration goals and to protect public health and safety. Changes from the conceptual design presented in the Phase IV Restoration Plan include:

- Construction of two breakwaters instead of one:
  - An outer breakwater constructed of riprap with crest elevation at mean higher high water to reduce wave energy, and

- An inner breakwater constructed of riprap, Wave Attenuation Devices (WADs), OysterBreaks or other comparable engineered structures/materials, as approved by the permitting agencies, with a crest elevation at mean lower low water to provide additional wave attenuation and to maximize secondary productivity benefits.
- Elimination of 9.3 acres of dredged flotation channels, and
- Elimination of 20 navigation signs originally proposed.

The final design does not affect the total Project breakwaters footprint (3.5 acres) or the project location. These refinements are all located within the original Project area that was defined and analyzed in Chapter 6 of the Final Phase IV RP/EA (Figure 1). Table 1 below provides a summary of the design refinements.

Table 1  
Summary of the Big Island project changes

Project Element	Parameters	Final Phase IV ERP/EA	Current Design	
			Outer breakwater	Inner breakwater
<b>Breakwater</b>	<b>Length</b>	Up to 5,011 linear feet of breakwater	5,200 feet	2,800 feet
	<b>Base Width</b>	30 ft.	Varies depending on water depth from 19 to 28 feet	Approximately 9 feet
	<b>Footprint</b>	3.5 acres	2.9 acres	0.6 acres
	<b>Construction materials</b>	Appropriate manufactured and/or natural materials	Riprap	OysterBreaks, WADS; riprap or other comparable engineered structures/materials as approved by the permitting agencies
	<b>Temporary flotation channels (acres)</b>	9.3 acres	0 acres	0 acres
	<b>Navigation signs</b>	0 to 27	7	0



Figure 1: Big Island Living Shoreline Project Conceptual Design (Final Phase IV RP/EA)

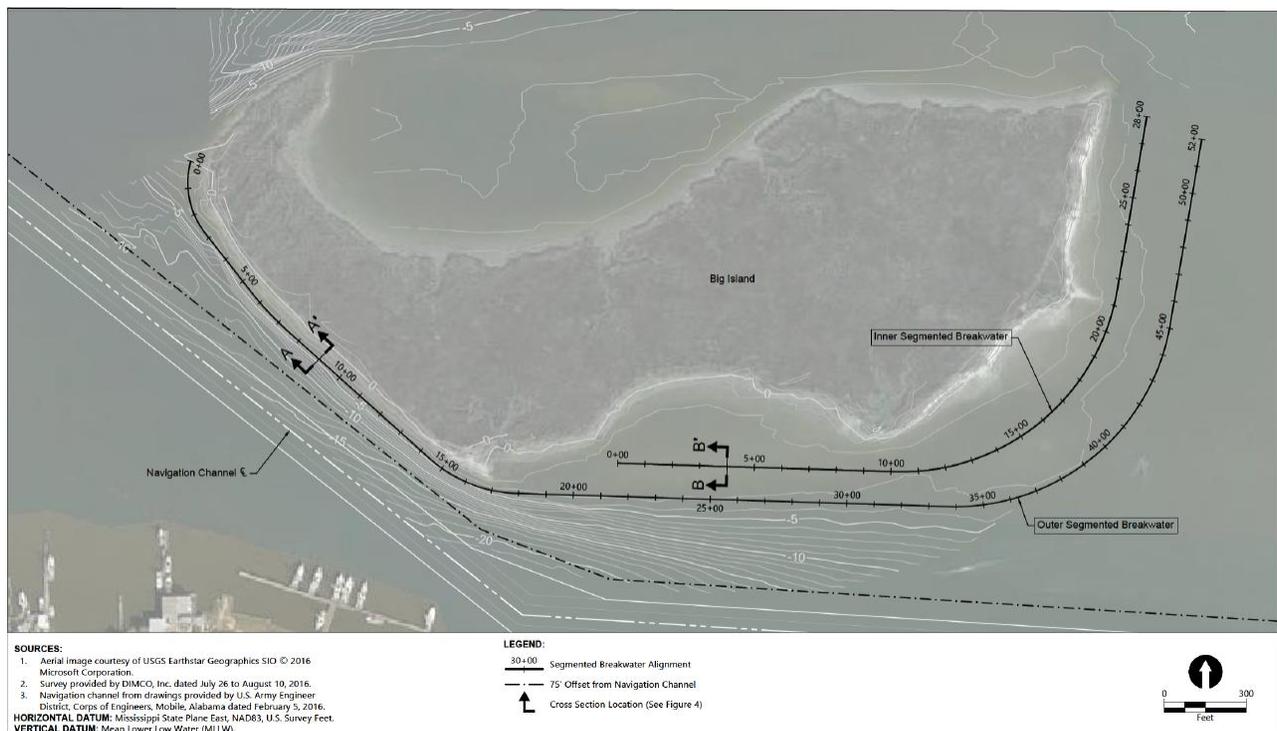


Figure 2: Big Island Living Shoreline Project Final Design

Figure 2: Final Design Big Island Living Shoreline Project

### III. Determination of Need for Additional NEPA Analysis

A thorough environmental review of the Project was performed and is described in the Finding of No Significant Impact (FONSI) in Appendix G-2 of the Final Phase IV RP/EA. The analysis in the FONSI states that there would be long-term minor to moderate adverse impacts to geology and substrates. The original analysis indicated minor short-term adverse impacts to all other project specific resource categories.

The design refinements for the Project will not increase the project footprint and eliminates 9.2 acres flotation channels and 20 navigation signs; therefore, adverse impacts to geology and substrates have been reduced relative to the conceptual design upon which the initial environmental review was based. The final design will not have potential adverse impacts beyond the scope of the original analysis, as described in the Final Phase IV RP/EA and the FONSI.

Further, additional environmental consultations were conducted for the Project based on the final design:

- **By memorandum dated July 10, 2019**, the NOAA Restoration Center, through consultations with NOAA's Protected Resource Division and Habitat Conservation Division, determined that the design updates will not result in any discernible changes to the effects of the project to designated EFH or species protected under the ESA. The ESA and EFH consultations were conducted in 2015 and 2016 and can be found in the DWH Administrative Record. All BMPs and minimization measures in these consultations remain in effect for implementation.
- On July 10, 2019, the USFWS Field Office indicated by **Email from FWS to USACE Re: Big Island Living Shoreline Refinements** that they had previously completed an ESA Section 7 consultation with the USFWS NRDAR office in 2015. They concluded at that time that the proposed project "may affect, but is not likely to adversely affect" the Atlantic gulf sturgeon, piping plover, red knot, and West Indian manatee, and will have "no effect" on the Alabama red-bellied turtle. They further stated that the changes to the project since that time are consistent with the original consultation.
- Final permits for the Project incorporate the final design and have been issued (**Sections 404/401 Clean Water Act, Section 10, Rivers and Harbors Act**, and the **Mississippi Coastal Wetlands Protection Act**).
- There is no change to the "No Effect" determination under section 106 of the National Historic Preservation Act because the design refinements did not affect the Area of Potential Effect.

#### **IV. Determination of Need for Additional OPA Restoration Planning**

The Project refinements do not change the decision to select the Project in the Final Phase IV RP/EA. In particular, the Project as designed still meets the evaluation criteria established for OPA. The Project was proposed and selected to restore injuries to salt marsh and benthic secondary productivity injured as a result of the Deepwater Horizon oil spill and related response actions. The Project will still restore injured salt marsh and lost benthic secondary productivity. The nexus to resources injured by the Spill remains clear.

Construction of the Project is technically feasible and uses proven techniques with established methods and documented results. Further, the Project can still be implemented with minimal delay. Agencies have successfully completed projects of similar scope throughout the Gulf Coast over many years. For these reasons, the final Project design has the same high likelihood of success and the costs are reasonable.

Best management practices (BMPs) and measures to avoid or minimize adverse impacts described Chapter 6 of the Final Phase IV RP/EA will still be implemented. As a result, collateral injury will be avoided and minimized during Project implementation.

As described above, the final Project design would not affect the determination of the project's environmental effects in the Final Phase IV RP/EA and, further, is not anticipated to negatively affect regional ecological restoration and is therefore not inconsistent with the long-term restoration needs of the State of Mississippi.

The Project does not require or result in any change to the project's performance criteria, monitoring and maintenance, offsets or costs as provided in the Final Phase IV RP/EA for the Restoring Living Shorelines and Reefs in Mississippi Estuaries Project.

Therefore, the MS TIG determined that the Project with the design refinements is consistent with the selection of the project under OPA in the Final Phase IV RP/EA and does not require further evaluation.

#### **V. Summary**

After reviewing the final design for the Big Island Project Component, the MS TIG has determined that:

1. The final Project design is consistent with the environmental review in the Final Phase IV RP/EA and the ROD;
2. There are no new circumstances or information relevant to environmental concerns not addressed in the Final Phase IV/RP/EA and the ROD; and

These changes do not affect the selection of the Project under OPA.