Deepwater Horizon Natural Resource Damage Assessment and Restoration

Hancock County Marsh Living Shoreline Project Phase III Early Restoration

PROJECT DESCRIPTION

The Hancock County Marsh Living Shoreline project is intended to employ living shoreline techniques including natural and artificial breakwater material and marsh creation to reduce shoreline erosion by dampening wave energy while encouraging reestablishment of habitat that was once present in the region. The project will provide for construction of up to 5.9 miles of living breakwater, approximately 46 acres of marsh creation, and approximately 46 acres of subtidal reef restoration in Heron Bay to increase secondary productivity in the area. The project will reduce shoreline erosion, create habitat for secondary productivity, and protect and create salt marsh habitat. The National Oceanic and Atmospheric Administration is partnering with the State of Mississippi on this project.

Located between Bayou Caddy and the mouth of the East Pearl River, the project area falls within the 20,909-acre Hancock County Marsh Preserve. This complex, one of the largest in Mississippi, is part of the Pearl River estuary in the western Mississippi Sound and managed as part of the Mississippi Coastal Preserves Program. Once, extensive, prolific reefs of the American Oyster (Crassostrea virginica) were found in the shore zone and nearshore areas of lower Hancock County. These reefs provided natural protection from shoreline erosion. High erosion rates recorded over the years, particularly at St. Joseph's Point, make this area a priority for protection and marsh creation.

This project helps protect the Hancock County Marsh complex that includes freshwater, estuarine, marine, and submerged habitats. There are emergent, forested and scrub-shrub wetlands in the marsh complex. Design techniques for the living shoreline incorporated natural breakwater materials.

Construction of the subtidal reef in Heron Bay was completed in 2017, and construction of the six miles of breakwater segments along the marsh shoreline was completed in 2018. The 46-acre marsh in the southeastern portion of Heron Bay is in final design phase and construction will begin in 2019. Project performance monitoring began in 2017 and associated data and reports are available at

https://www.gulfspillrestoration.noaa.gov/project ?id=38.

ESTIMATED COST: \$50,000,000



