

Mississippi Sound Watershed

Deer Island Beneficial Use (USACE_RESTORE_004_000_Cat1)



Project Name: Deer Island Beneficial Use - Implementation

Cost: Category 1: \$3,000,000

Responsible Council Member: U.S. Army Corps of Engineers

Partnering Council Member: State of Mississippi

Project Details: The Deer Island Beneficial Use project will use material dredged during maintenance of the Black Warrior - Tombigbee (BWT) Federal navigation project in Alabama to beneficially construct a five acre Chenier (ridge), and complete the construction of another five acre Chenier to create the containment component of a 40 acre beneficial use site on the northern side of Deer Island in Mississippi. Subsequent filling of the site with dredged material leveraged from the Biloxi Harbor Federal navigation project and local dredging projects will result in the creation of 40 acres of emergent tidal wetlands just offshore of Biloxi. This project will build upon other Deer Island restoration efforts.

Activities: Between approximately 75,000 and 100,000 cubic yards of the sandy material from the BWT will be excavated and placed on barges and moved to the restoration site. The southern Chenier will be constructed to an elevation of approximately +10 ft. along the entire southern footprint using the hydraulically placed sand. The northern berm at elevation +7 ft. will initially act as containment for future fine-grain dredge material placement, but will eventually be re-graded to allow for full tidal exchange and access for marine organisms once the new marsh is established. An open area will remain at the west end of the site to allow some tidal influence and draining until the site becomes a fully functional marsh.

Environmental Benefits: Constructing this beneficial use containment site at Deer Island allows for restoration, improvement and protection of aquatic habitat on Mississippi Coastal Preserves state lands and the adjacent Gulf sturgeon critical habitat within the Mississippi Sound. The creation of additional marsh protects the island from further erosive forces caused by routine wave energy. The marshes created will provide new feeding grounds supporting natural resources, ecosystems, fisheries, marine and wildlife habitats, and coastal wetlands of the Gulf Coast region. Once completed, the 40 acre site will be able to contain approximately 400,000 cubic yards of local beneficial use dredge material.

Duration: Construction will begin within three months of receiving funds and be completed within six to nine months of initiation.

More information on this activity can be found in Appendix E. Mississippi Sound; Unique Identifier: USACE_RESTORE_004_000_Cat1.

