Mid Breton Land Bridge Marsh Creation and Terracing (BS-32)

Project Status
- **Approved Date:** 2018  
- **Project Area:** 792 acres  
- **Approved Funds:** $3.71 M  
- **Total Est. Cost:** $40.8 M  
- **Net Benefit After 20 Years:** 364 acres  
- **Status:** Engineering and Design  
- **Project Type:** Marsh Creation and Terracing  
- **PPL #:** 27

Location
This project is located in Region 2, Breton Sound Basin, Plaquemines Parish, south of Lake Lery and west of Delacroix Island.

Problems
The landfall of Hurricane Katrina in southeast Louisiana destroyed thousands of acres of marsh and other coastal habitats east of the Mississippi River. One of the areas most severely impacted was the Breton Sound Basin where it is estimated that 40.9 square miles of marsh were converted to open water. Since 2005, the operation of the Caernarvon Freshwater Diversion alone has not adequately addressed hurricane impacts. It seems that the Caernarvon Diversion will not be able to rebuild the marshes in the project area. Without some other restoration this region will continue to see the coalescence of water bodies such as Grand Lake, Lake Petit, and the surrounding marsh areas resulting in more direct connection between interior intermediate marshes and the open brackish Black Bay system. This will have a snowball effect with increased marsh loss due to wind induced erosion.

Restoration Strategy
The goal of this project is to maintain/restore the landbridge between the Bayou Terre aux Boeufs and River aux Chenes ridges by restoring critical wetlands destroyed by Hurricane Katrina.

The project will create approximately 500 acres of intertidal marsh using sediment hydraulically dredged from Lake Lery. Lake Lery is currently filling in with sediment from the Caernarvon Diversion structure. Existing canal spoil banks, emergent marsh, and segments of containment dikes will be used to contain the dredge material. Containment dikes will be degraded/gapped as necessary to reestablish hydrologic connectivity with adjacent wetlands. The project would also create approximately 23,000 LF of terraces (12 acres of marsh) in strategic areas to reduce erosion due to wind induced waves.

U.S. Fish and Wildlife Service goals include the creation of habitat or improvement of habitat for rare species, species of concern, and threatened and endangered species. The creation of brackish intertidal marsh habitat would be beneficial to several species that are currently on the lists of species of concern. These include, but are not limited to Least Bittern, Black Rail, Seaside Sparrow, and Saltwater topminnow.

Progress to Date
This project was approved for Phase I Engineering and Design on February 9th, 2018.

This project is on Priority Project List (PPL) 27.