Bayou Cane Marsh Creation (PO-181)

Project Status
Approved Date: 2018  Project Area: 449 acres
Approved Funds: $3.23 M  Total Est. Cost: $33.9 M
Net Benefit After 20 Years: 356 acres
Status: Engineering and Design
Project Type: Marsh Creation
PPL #: 27

Location
This project is located in Region 1, Upper Pontchartrain Basin, St. Tammany Parish, between Mandeville and Lacombe. The majority of the project is located on property owned by either the State of Louisiana (Fontainebleau State Park) or the Big Branch National Wildlife Refuge.

Problems
In 2005, the marshes in the North Shore Mapping Unit sustained severe damage due to Hurricane Katrina. Hundreds of acres of emergent marsh within this mapping unit were lost, resulting in hundreds of acres of shallow open water and scour ponds averaging about 2 ft deep. USGS calculated a 1984 to 2016 area loss rate of -0.91 % per year. Currently there is one area along the shoreline that looks as if a breach is forming. This area also has a small pond immediately behind the critical shoreline. If there were a breach in this area it would allow direct connection between the fresher interior marshes and higher salinity waters of Lake Pontchartrain.

Restoration Strategy
The overall goal of this project is to restore marshes that were lost and/or damaged due to the effects of Hurricane Katrina. Restoring the marshes should reduce salinity effects on interior emergent marshes.

The proposed features of this project consist of filling approximately 384 acres of shallow open water and nourishing an additional 65 acres of fragmented and/or low marsh with material hydraulically dredged from Lake Pontchartrain. Target settled marsh elevation would be +1.2 NAVD 88, but will ultimately correspond to surrounding healthy marsh.

Temporary containment dikes would be constructed around each marsh creation/nourishment site to retain the dredged slurry. Containment dikes located adjacent to naturally occurring marshes or small interior ponds would be sufficiently gapped within 3 years of construction to allow for greater tidal and estuarine organism access. This project will work synergistically with the recently constructed Goose Point Marsh Creation (PO-33) and Bayou Bonfouca Marsh Creation (PO-104) projects.

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.