January 2015
Cost figures as of: February 2017

Fritchie Marsh Creation and Terracing (PO-173)

Project Status

Approved Date: 2015 **Project Area:** 882 acres
Approved Funds: $3.03 M **Total Est. Cost:** $27.9 M
Net Benefit After 20 Years: 290 acres
Status: Engineering and Design
Project Type: Marsh Creation and Terracing
PPL#: 25

Location

Region 1, Pontchartrain Basin, St. Tammany Parish, located approximately three miles southeast of Slidell, Louisiana. A substantial portion of the project is located on Big Branch National Wildlife Refuge.

Problems

A significant portion of the Fritchie Marsh was lost due to Hurricane Katrina. Post storm shallow open water areas dominate the landscape which limits the effectiveness of the PO-06 CWPRRA project. Wetlands in the project vicinity are being lost at the rate -1.09%/year based on USGS data from 1985 to 2015. These marshes cannot recover without replacement of lost sediment, which is critical if the northshore marshes are to be sustained.

A view from the Fritchie Marsh in an area converted to open water with Hurricane Katrina. The project would create marsh and construct earthen terraces to restore coastal wetland habitat and afford some protection for subdivisions in the area.

Restoration Strategy

Project goals include restoring and nourishing marsh. Specific goals of the project are: 1) create approximately 291 acres of marsh; 2) nourish approximately 49 acres of existing marsh; and 3) construct about 36,610 feet of earthen terraces or 26 emergent acres.

An alternatives analysis was conducted leading to the selection of features and configuration to compliment and work synergistically with the existing PO-06 project and planned mitigation and restoration projects in the Fritchie Marsh. A robust engineering cost is included to evaluate increasing the project size if costs allow or adjust the layout, if needed during Phase 1. Approximately 2 million cubic yards of material would be placed confined to restore 291 acres and nourish approximately 49 acres of brackish marsh. Material would be dredged from a borrow site in Lake Pontchartrain. The borrow site would be designed to avoid and minimize impacts to aquatic habitat and existing shorelines. Approximately 26 acres of earthen terraces would be constructed within various locations totaling approximately 36,610 feet or 523 acres of terrace field. All containment dikes would be gapped or degraded no later than three years after construction to facilitate the development of tidal marsh functions supportive of estuarine species. The terraces would be planted as well as 50% of the created marsh acres to expedite colonization and enhance stabilization.

Progress to Date

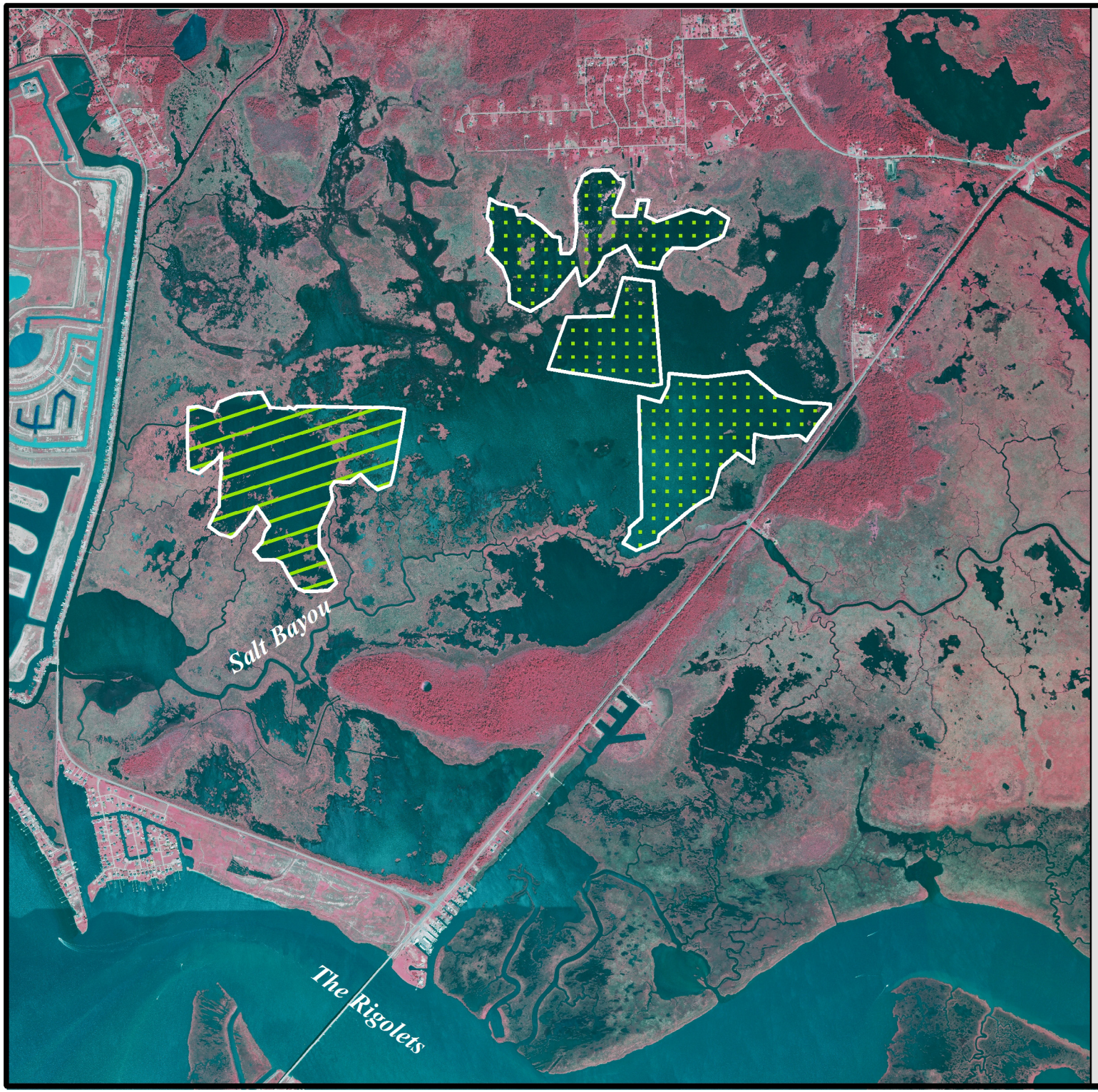
This project was approved for Phase I Engineering and Design in January 2016.

This project is on Priority Project List (PPL) 25.

For more information, please contact:

Federal Sponsor:
National Marine Fisheries Service
Baton Rouge, LA
(225) 389-0508

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



Fritchie Marsh Creation and Terracing (PO-173)

Marsh Creation
Terrace Field
Project Boundary

USGS
science for a changing world

Louisiana
Project Location
N

0.25 0 0.25 0.5
Kilometers
0.25 0 0.25 0.5
Miles

Map Produced by:
U.S. Department of the Interior
U.S. Geological Survey
Wetland and Aquatic Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La.

Background Imagery:
2013 NAIP Photography

Map Date: February 10, 2016
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