rev. August 2019
Cost figures as of: February 2023

Oyster Bayou Marsh Restoration (CS-59)

Project Status

Approved Date: 2012 **Project Area:** 808 acres
Approved Funds: $27.5 M **Total Est. Cost**: $28.0 M
Net Benefit After 20 Years: 433 acres
Status: Construction
Project Type: Marsh Creation and Terracing
PPL #: 21

Location

This project is in Region 4, Calcasieu-Sabine Basin, located west of the Calcasieu Ship Channel and south of the west fork of the Calcasieu River.

Problems

Altered hydrology, drought stress, saltwater intrusion and hurricane induced wetland losses have caused the area to undergo interior marsh breakup. Recent impacts from Hurricane Rita in 2005 and Hurricane Ike in 2008 have resulted in the coalescence of Oyster Lake with interior water bodies increasing wave/wake related erosion. Based on USGS hyper temporal data analysis (1984 to 2011), land loss for the area is -0.75% per year. The subsidence rate is estimated at 0.0 to 1.0 ft per century (Coast 2050, Mud Lake mapping unit).

Restoration Strategy

The project boundary was expanded during construction to restore 8 acres. Specific goals of the project were: 1) create and/or nourish 836 acres of saline marsh; 2) create 9,000 linear feet of terraces; and 3) reduce wave/wake erosion.

Approximately 836 acres of marsh were created and nourished using sediment dredged from a Gulf of Mexico borrow area located about five miles south of the project site. Marsh ponds and tidal creeks were also constructed in the project site. About 13 acres of additional marsh area were created using unconfined disposal. Approximately 9,000 linear feet of earthen terraces were also constructed for the project. Containment dikes were gapped to improve access for fish and other aquatic organisms and create a functional marsh.

Looking northeast across the Oyster Bayou marsh creation areas (photo by Patrick Quigley/Weeks Marine).

Looking northeast across an Oyster Bayou marsh creation area.

Progress to Date

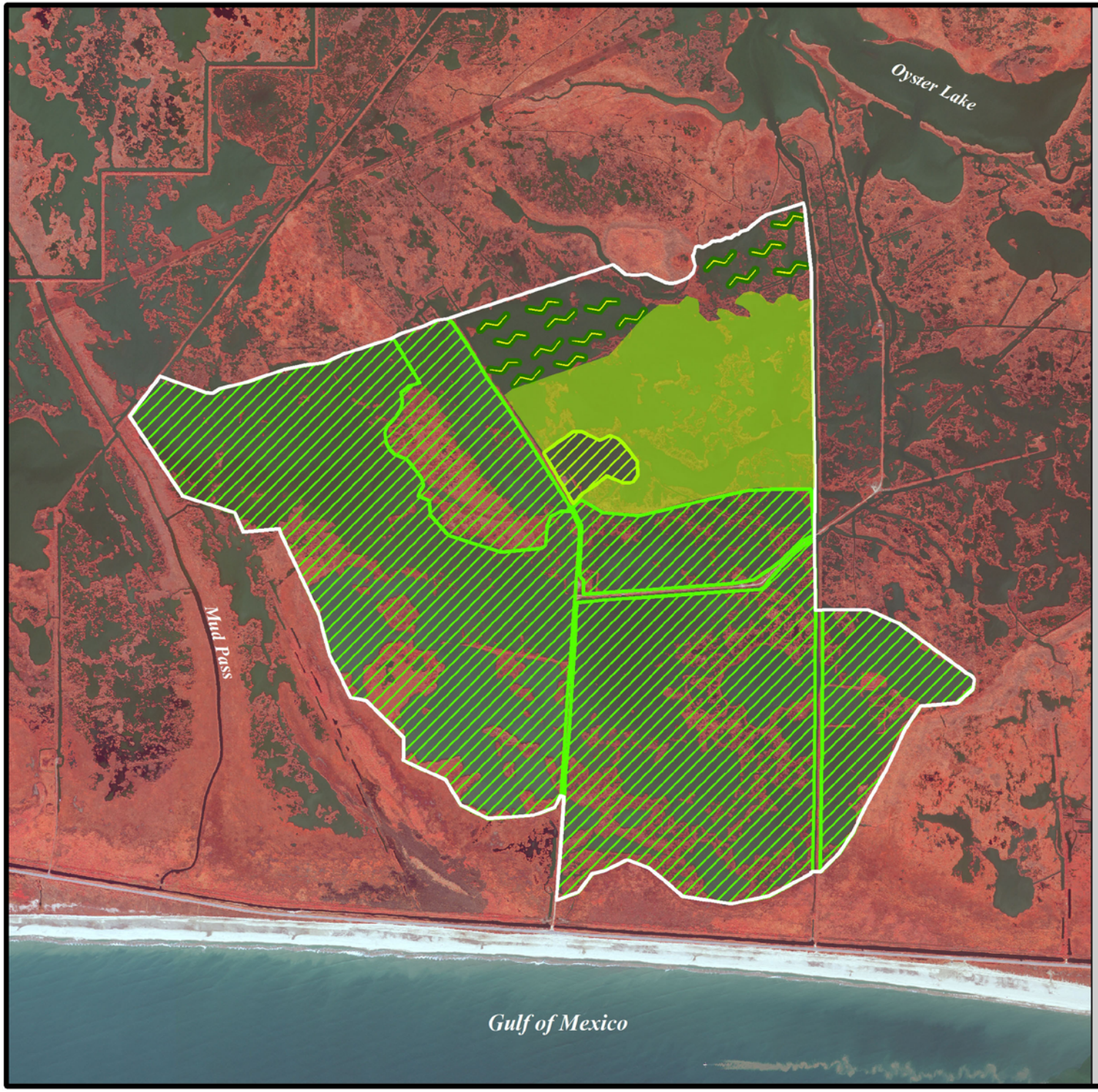
The project was approved for construction (Phase 2) in January 2015. Construction of the project began in December 2016 and was completed in January 2019.

This project is on Priority Project List 21.

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) 342-4733



Oyser Bayou Restoration (CS-59)

- Terrace Field
- Marsh Creation
- Unconfined Marsh Creation
- Marsh Nourishment
- Project Boundary

USGS
science for a changing world

N

0.1 0 0.1 0.2 Kilometers

0.1 0 0.1 0.2 Miles

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

Background Imagery:
2015 DOQQ

Map Date: September 04, 2018
Map ID: USGS-NWRC 2018-11-0031
Data accurate as of: September 04, 2018