Cost figures as of: September 2018 / February 2023

# Cameron-Creole Watershed Grand Bayou Marsh Creation (CS-54)

## Project Status

**Approved Date:** 2011 **Project Area:** 616 acres
**Approved Funds:** $28.1 M **Total Est. Cost**: $28.7 M
**Net Benefit After 20 Years:** 476 acres
**Status:** Construction
**Project Type:** Marsh Creation
**PPL #:** 20

## Location

This project is located in Region 4, Calcasieu-Sabine Basin, Cameron Parish, 6 miles northeast from Cameron, LA, on the Cameron Prairie NWR and Miami Corporation property north of Grand Bayou.

## Problems

Approximately 14,390 acres (32%) of the Cameron-Creole Watershed Project (CCWP) marshes were lost to open water from 1932 to 1990 at an average loss rate of 248 acres/year (0.55 percent/year) due to subsidence and saltwater intrusion from the Calcasieu Ship Channel. The CCWP was implemented by the NRCS in 1989 to reduce saltwater intrusion and stimulate restoration through revegetation. Hurricanes Rita and Ike in 2005 and 2008 breached the watershed levee scouring the marsh and allowing higher Calcasieu Lake salinities to enter the watershed causing more land loss. The Calcasieu-Sabine Basin lost 28 square miles (17,920 acres) (4.4%) as a result of Hurricane Rita (Barras et al. 2006). Land loss is estimated to be 1.33 percent/year based on USGS data from 1985 to 2009 within the extended project boundary.

This picture shows the depletion of the marsh due to saltwater intrusion from the Gulf.

## Restoration Strategy

Project goals include restoring and nourishing hurricane-scoured marsh in the Cameron Prairie National Wildlife Refuge and adjacent brackish marshes of the Calcasieu Lake estuary. Approximately 3 million cubic yards of material will be dredged from a borrow site proposed in Calcasieu Lake and placed into two marsh creation areas north of Grand Bayou to restore 609 acres and nourish approximately 7 acres of brackish marsh. The borrow site was designed to avoid and minimize impacts to oysters and other sensitive aquatic habitat. Containment dikes will be gapped and/or degraded after construction to support estuarine fisheries access and to achieve a functional marsh. In addition to CWPPRA funding, the project has received an additional $1.3 million in mitigation/beneficial use funding from the Louisiana Department of Natural Resources to expand the project footprint by more than 50 acres. The project is anticipated to result in approximately 476 net acres of brackish marsh over the 20-year project life.

## Progress to Date

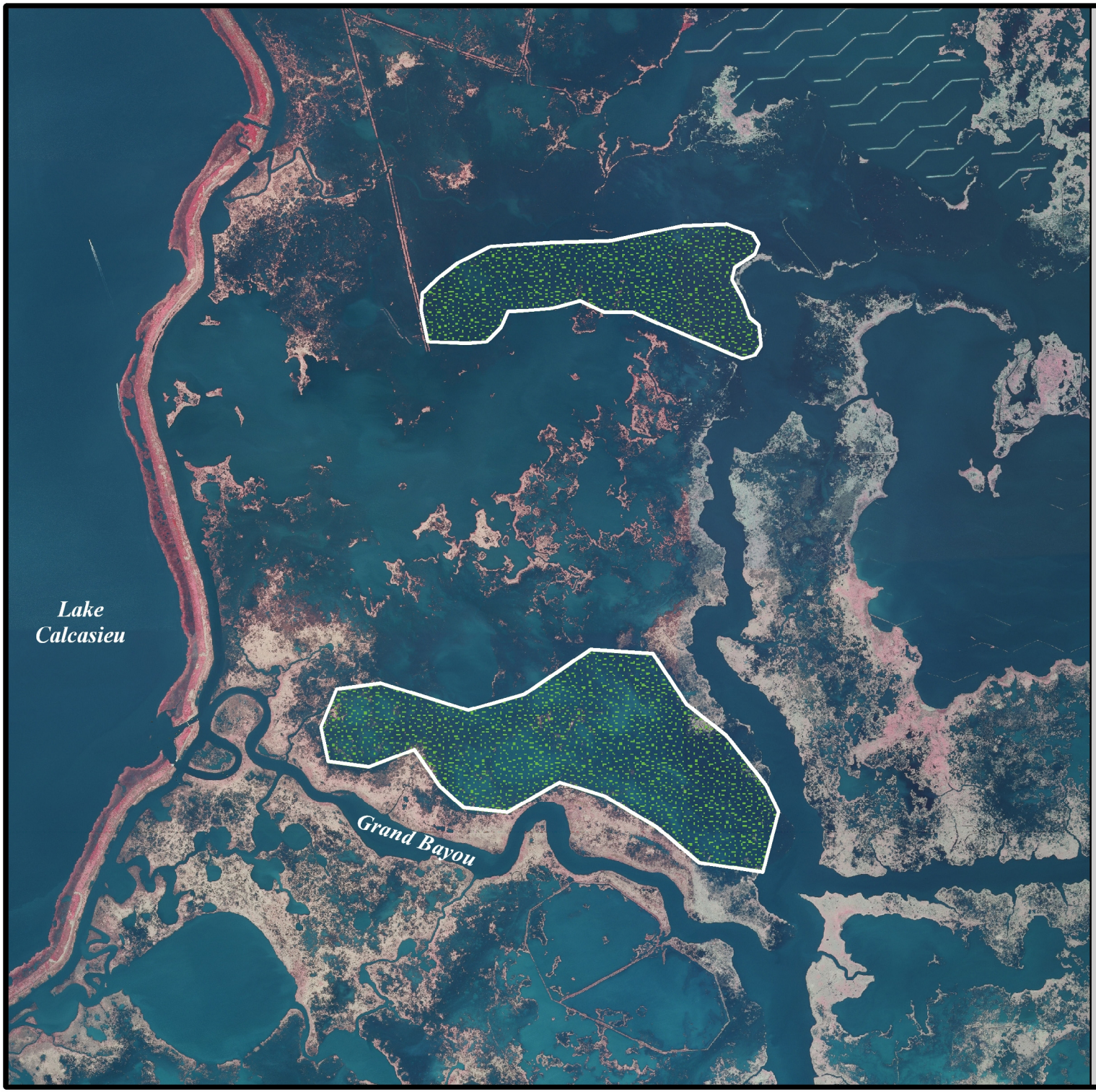
Phase 1 funding approval for engineering and design was given by the Task Force in January 2011. Notice to proceed with construction was issued on September 13, 2017. This project is on Priority Project List 20.

Photo of a marsh creation cell's containment dike during construction.

*For more information, please contact:*

**Federal Sponsor:**
U.S. Fish and Wildlife Service
Lafayette, LA
(337) 291-3100

**Local Sponsor:**
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4733




# Cameron Creole Watershed Grand Bayou Marsh Creation (CS-54)

Marsh Creation *

Project Boundary

*denotes proposed features

USGS
science for a changing world

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
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, La.

Background Imagery:
2008 Digital Orthophoto Quarter Quadrangle

Map Date: January 24, 2011
Map ID: USGS-NWRC 2011-11-0014
Data accurate as of: January 3, 2011