January 2011
Cost figures as of: November 2013

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

Project Status

Approved Date: 2011 **Project Area:** 616 acres
Approved Funds: $2.37 M **Total Est. Cost:** $23.4 M
Net Benefit After 20 Years: 534 acres
Status: Engineering and Design
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 would 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 would be designed to avoid and minimize impacts to oysters and other sensitive aquatic habitat. Tidal creeks would be constructed prior to placement of dredge material and retention levees would be gapped to support estuarine fisheries access and to achieve a functional marsh. The project would result in approximately 534 net acres of brackish marsh over the 20-year project life.

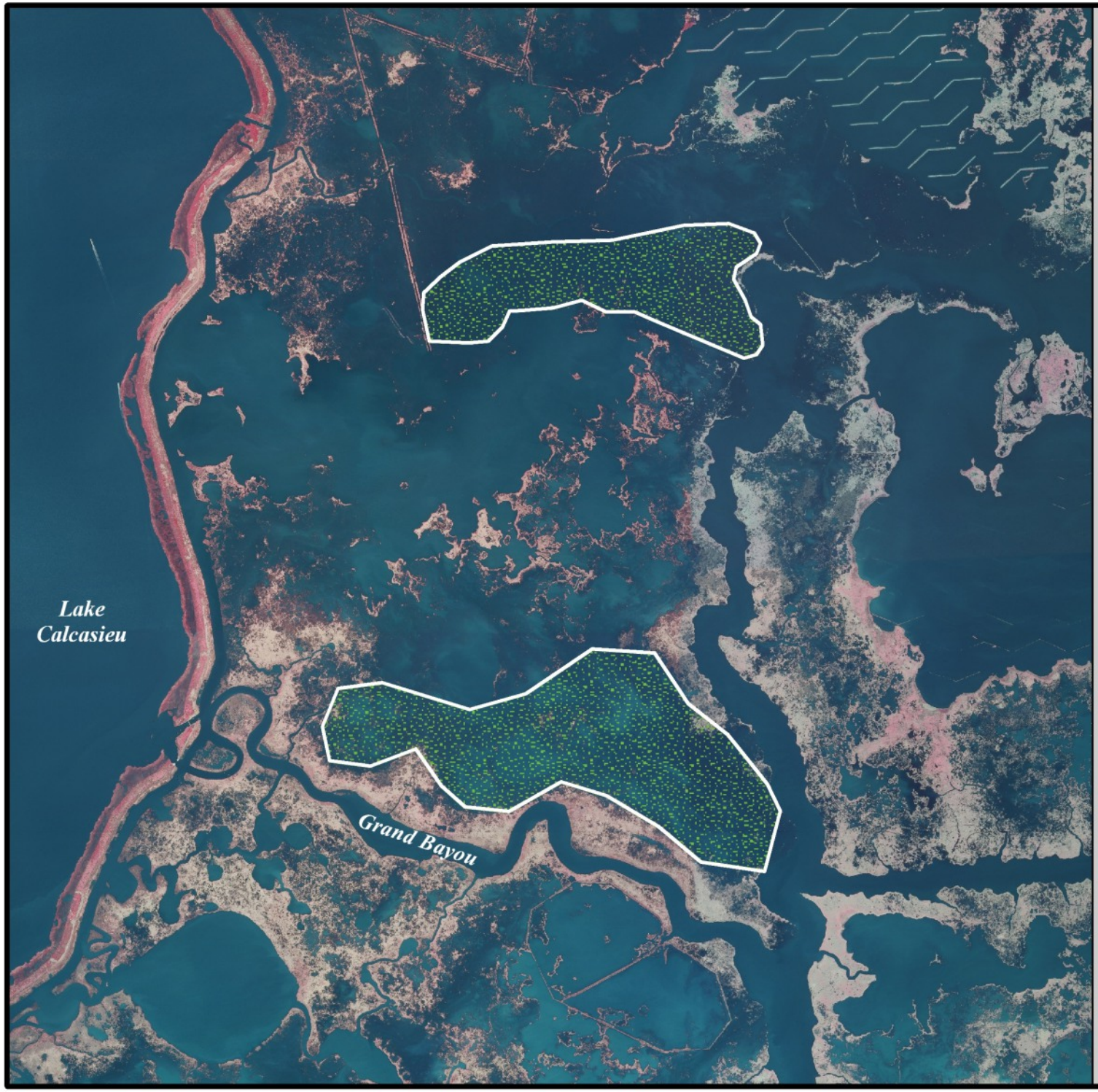
Progress to Date

This project is on Priority Project List 20. Phase 1 funding approval for engineering and design was given by the Task Force in January 2011.

For more project 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) 342-4736



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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
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Data accurate as of: January 3, 2011