January 2011
Cost figures as of: March 2013

# Kelso Bayou Marsh Creation (CS-53)

## Project Status

**Approved Date:** 2011 **Project Area:** 319 acres
**Approved Funds:** $2.36 M **Total Est. Cost:** $16.6 M
**Net Benefit After 20 Years:** 274 acres
**Status:** Engineering and Design
**Project Type:** Marsh Creation
**PPL #:** 20

## Location

This project is located in Region 4, Calcasieu-Sabine Basin, Cameron Parish. The project features are located in an area south of the Gulf Intracoastal Waterway and just west of the Calcasieu Ship Channel.

## Problems

The most significant environmental problem affecting the marshes in this area is deterioration and conversion to open water. Marsh loss has and continues to occur as a result of salt water intrusion and sediment export (erosion). The construction of the Calcasieu Ship Channel and the Gulf Intracoastal Waterway greatly increased the efficiency of water exchange through Calcasieu Pass. Freshwater retention was consequently reduced and salt water is able to enter interior marshes and penetrate further north and west. Project-area marshes are connected to the navigation channels through a network of canals and bayous including Kelso Bayou and Alkali Ditch. Unvegetated substrate is vulnerable to increased tidal exchange and immense quantities of organic substrate are being exported.

Recent marsh loss and scouring at the mouth of Kelso Bayou from impacts related to Hurricanes Rita and Ike allow increased salt water intrusion, tidal exchange, and storm surge impacts.

## Restoration Strategy

The goal of this project is to restore and protect approximately 319 acres of critically important marsh and the numerous functions provided by those areas. The proposed project will restore a portion of the historic meandering channel of Kelso Bayou and provide direct protection to Louisiana State Highway 27, the region's only northward hurricane evacuation route. Project features include creating/nourishing 319 acres of marsh, 3,200 linear feet of shoreline protection, and rock armor at the mouth of Kelso Bayou to prevent additional tidal scour.

## Progress to Date

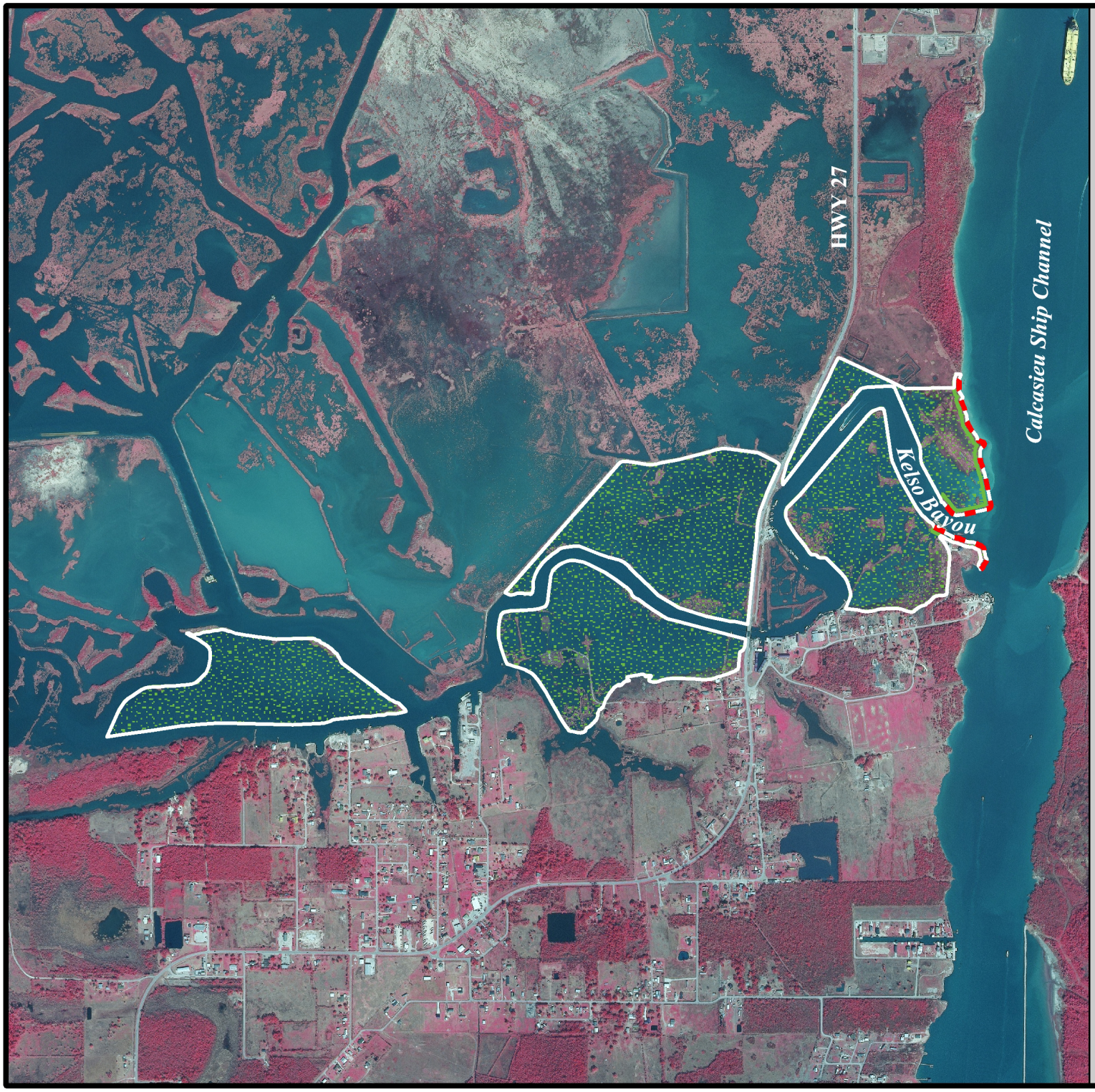
This project is on Priority Project List 20. Phase 1 funding approval for engineering and design was given by the Task Force in January 2011.

Interior marsh loss along Louisiana Highway 27 exposes the areas only hurricane evacuation route to increased storm impacts.

*For more project information, please contact:*

**Federal Sponsor:**
Natural Resources Conservation Service
Alexandria, LA
(318) 473-7756

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




# Kelso Bayou Marsh Creation (CS-53)

Shoreline Protection *

Marsh Creation *

Project Boundary

*denotes proposed features

USGS
science for a changing world

N

0.2 0 0.2 0.4 Kilometers

0.2 0 0.2 0.4 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: February 8, 2011
Map ID: USGS-NWRC 2011-11-0015
Data accurate as of: January 3, 2011