April 2019
Cost figures as of: February 2023

Bayou De Cade Ridge and Marsh Creation (TE-138)

Project Status

Approved Date: 2017 **Project Area:** 517 acres
Approved Funds: $25.8 M **Total Est. Cost**: $27.2 M
Net Benefit After 20 Years: 378 acres
Status: Construction
Project Type: Marsh Creation
PPL #: 26

Location

Region 3, Terrebonne Basin, Terrebonne Parish, Lake Mechant Mapping Unit

Problems

The Terrebonne Basin is an abandoned delta complex, characterized by a thick section of unconsolidated sediments that are undergoing dewatering and compaction, contributing to high subsidence, and a network of old distributary ridges extending southward from Houma. Historically, subsidence and numerous oil and gas canals and pipelines in the area have contributed significantly to wetland losses. Since 1932, the Terrebonne Basin has lost approximately 20% of its wetlands. Current loss rates range from approximately 4,500 to 6,500 acres/year. This loss amounts to about 130,000 acres over the next 20 years. One-third of the Terrebonne Basin's remaining wetlands would be lost to open water by the year 2040. The wetland loss rate in the area is -0.79%/year based on USGS data from 1984 to 2016.

Restoration Strategy

The project's primary feature is to create and/or nourish approximately 473 acres of intermediate marsh adjacent to Lake De Cade and restore 11,133 linear feet of ridge habitat along the northern bank of Bayou De Cade. To achieve this, sediment will be hydraulically pumped from a borrow source in Lake De Cade. The borrow area in Lake De Cade is located and designed in a manner to avoid and minimize environmental impacts (e.g., to submerged aquatic vegetation and water quality) to the maximum extent practicable. Containment dikes will be constructed around the marsh creation area to retain sediment during pumping. No later than three years post construction, the containment dikes will be degraded and/or gapped. Additionally, the newly constructed marsh will be planted after construction to stabilize the platform and reduce time for full vegetation. Material for the ridge feature will be mechanically dredged from adjacent areas within Bayou De Cade and/or the marsh area and lifted to a crown elevation of +5.0 feet, 10 feet wide, and will be planted.

Photo facing southeast across proposed marsh creation area towards proposed ridge area.

Progress to Date

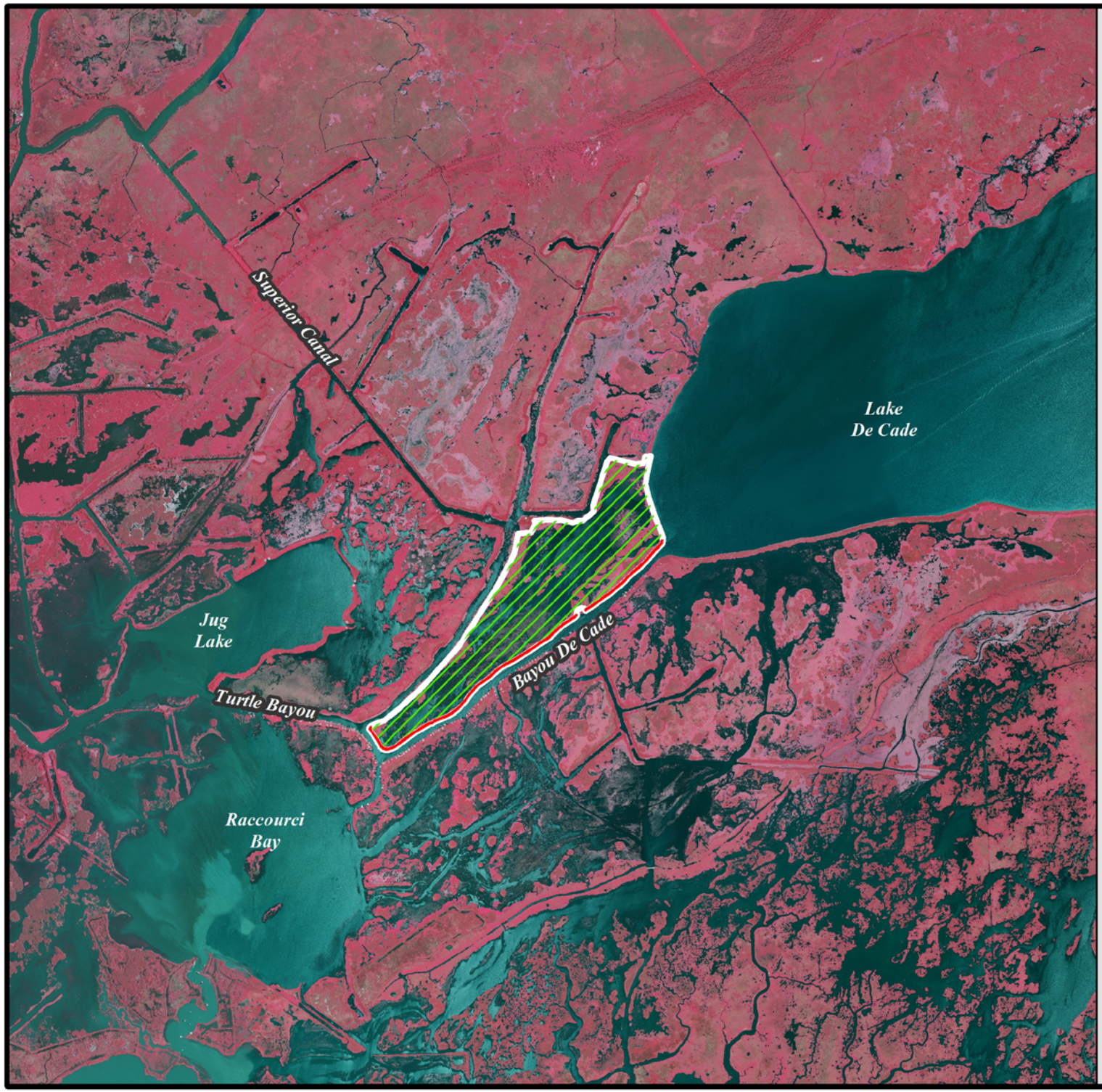
The CWPPRA Technical Committee recommended this project for Phase II Construction funding on December 6th, 2019 and the Task Force approved the project for Phase II Construction funding on February 12th, 2019.

This project is on Priority Project List (PPL) 26.

For more information, please contact:

Federal Sponsor:
National Marine Fisheries Service
Baton Rouge, LA
(225) 757-5230

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-6412



Bayou Decade Ridge and Marsh Creation (TE-138)

Ridge Restoration *

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
Wetland and Aquatic Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La.

Background Imagery:
2015 NAIP Photography

Map Date: January 13, 2017
Map ID: USGS-NWRC 2017-11-0009
Data accurate as of: September 29, 2016