November 2020

Cost figures as of: February 2023

Bayou La Loutre Ridge Restoration and Marsh Creation (PO-178)

Project Status

Approved Date: 2017 **Project Area:** 460 acres
Approved Funds: $3.23 M **Total Est. Cost**: $29.7 M
Net Benefit After 20 Years: 203 acres
Status: Engineering and Design
Project Type: Marsh Creation
PPL #: 26

Location

Region 1, Lake Pontchartrain Basin and Breton Basin, St. Bernard Parish

Problems

Historic and current ridge habitat loss occurs in the form of subsidence and shoreline erosion along Bayou La Loutre. The shoreline erosion is caused by increased boat traffic diverted due to the closure of the MRGO channel. Ridge habitat consists of Live Oak Hackberry Maritime forest which is utilized by trans-gulf migratory bird species as a first and last stop when crossing the Gulf of Mexico. This critical habitat is rated as S1-Most Critically Imperiled (State Natural Heritage Program) and S2 priority by the state of Louisiana. Interior marsh loss along Lena Lagoon is caused by subsidence, sediment deprivation, increased wave fetch and construction of access and navigational canals. The integrity of the Lena Lagoon shoreline has been breached, and loss of this wetland buffer will expose the La Loutre ridge to highly erosional winter storm events.

Restoration Strategy

The goal of the project is to create an approximately 31.7 acre ridge feature with material from bucket dredging Bayou La Loutre. Additionally dredged material from Lake Borgne will create 163 acres of marsh and nourish approximately 258 acres of marsh along Lena Lagoon (421 acres total).

The proposed project will create approximately 5.25 miles (27,471 ft) of ridge along Bayou La Loutre and 19.4 acres of Live Oak/Hackberry Maritime forest habitat. The ridge habitat will be built centerline along the bank of the bayou. The structure will have a +5 elevation with 5:1 slope. Additionally the newly created ridge will include herbaceous and woody plantings with smooth cord plantings along the toe. The Lena Lagoon site will create and nourish approximately 421 acres of marsh using sediment dredged from Lake Borgne. Containment will be degraded as necessary to re-establish hydrologic connectivity with adjacent wetlands.

View of marsh area and remnants of trees that once stood on adjacent historic ridges that have significantly subsided.

Progress to Date

This project was approved for Phase I Engineering and Design in January 2017.

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

For more information, please contact:

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

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
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Bayou La Loutre Ridge Restoration and Marsh Creation (PO-178)

Ridge Restoration *
Marsh Creation *
Project Boundary
*denotes proposed features

USGS
science for a changing world

N

0.5 0 0.5 1 Kilometers

0.5 0 0.5 1 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:
2019 NAIP Photography

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