November 2020

Cost figures as of: February 2023

Bay Raccourci Marsh Creation and Ridge Restoration (TE-156)

Project Status

Approved Date: 2020 **Project Area:** 461 acres
Approved Funds: $3.44 M **Total Est. Cost**: $39.8 M
Net Benefit After 20 Years: 343 acres
Status: Engineering and Design
Project Type: Marsh Creation and Ridge Restoration
PPL #: 29

Location

The project is located in Region 3, Terrebonne Basin, Terrebonne Parish.

Problems

High saline waters from Lake Mechant have directly contributed to the loss and/or conversion of much of the historically intermediate marshes to low salinity brackish marshes north of Lake Mechant. Subsidence, canal dredging and storm damage have also contributed significantly to the loss of marsh in the area. The zone of intermediate marsh (transition zone between fresh and brackish marshes) is located just north of Lake Merchant. High salinity water entering Bay Raccourci via Bayou Raccourci/Lake Mechant flows unimpeded into low salinity marshes surrounding Bayou Raccourci, effectively short circuiting the TE-44 Project. The 1984 to 2016 USGS loss rate is -0.32%/yr for the extended boundary area.

Post project degraded marsh and open water.

Restoration Strategy

The primary goals of this project are; 1) restore marsh habitat in the open water and degraded marsh areas via marsh creation and 2) restore forested ridge habitat along Bayou Decade.

The project would consist of the creation of 341 acres of marsh and 103 acres of marsh nourishment with sediments dredged from Lake Mechant and confined with earthen dikes. The proposed design is to place the dredged material to a fill height of +1.17 ft NAVD88. Dewatering and compaction of dredged sediment should produce elevations conducive to the establishment of emergent marsh and within the intertidal range. Containment dikes will be gapped at the end of construction.

The northern containment dike would be built to a height of +4.0 feet NAVD88 with a 10 feet wide crown and would also serve as a ridge. Material for the ridge would be bucket dredged from both Bayou de Cade and from within the marsh creation cell. The entire 16,350 linear feet (17 acres) of ridge would be planted with saplings and bare root seedlings on the crown and smooth cordgrass along the bayou side slopes.

The project would result in approximately 342 net acres over the 20-year project life.

Progress to Date

The project was approved for Phase I Engineering and Design in January 2020.

The project is on Priority Project List (PPL) 29.

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) 342-4736

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Ridge Restoration *

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

Background Imagery:
2018 NAIP

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