



Northwest Little Lake Marsh Creation Extension (BA - 276)

Project Status

Approved Date: 2024
Approved Funds: \$3 M
Net Benefit After 20 Years: 200 acres
Status: Engineering and Design
Project Type: Marsh Creation
PPL #: 33

Location

This project is located in Region 2 within Lafourche Parish and the Barataria Basin along the western shorelines of Little Lake and Bay L'Ours.

Problems

Until 2021, the project area was relatively stable and experienced very little interior marsh loss. Shell deposits along Little Lake shoreline provided for a stable shoreline feature with low erosion rates. A land change analysis conducted by USGS for 254 coastal subunits indicates a 1985-2020 land change rate of +0.09% per year for the Delta Farms Subunit, which encompasses the project site. However, in August 2021, the central and western Barataria Basin experienced thousands of acres of land loss with the passage of Hurricane Ida. One of the areas hardest hit by the storm was the northwestern shoreline of Little Lake. The extensive flotant marsh that previously carpeted the area was removed by the storm, converting the area to vast expanses of open water. Based on analysis conducted by the USGS for the Northwest Little Lake Marsh Creation Extension, which includes Hurricane Ida marsh loss and shoreline erosion, loss rates in the area are estimated to be -1.76% per year (1984 to 2022).

Restoration Strategy

The primary goals of the project are to restore marsh habitat in an area significantly impacted by Hurricane Ida and restore the western Little Lake shoreline. The specific project goals are: 1) create 225 acres of marsh, 2) nourish 87 acres of marsh, 3) restore approximately 1.9 miles of the Little Lake and Bay L'Ours shorelines with the construction of earthen beams, and 4) reduce shoreline erosion by armoring 4,471 linear feet of lakeshore containment with marine mattress revetment.



Shallow open-water at project site.

Sediment from Bay L'Ours will be hydrologically dredged and pumped via pipeline to create/nourish approximately 312 acres of marsh. A full containment system will be utilized with containment dikes gapped at the end of construction or no later than three years post-construction. Dewatering and compaction of dredged sediments should produce elevations conducive to the establishment of emergent marsh and within the intertidal range. Marine mattresses will be placed along 4,471 linear feet of the lakeshore containment dike.

Progress to Date

This project was approved for Phase I Engineering and Design in January 2024.

The Project is on Priority Project List (PPL) 33.

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) 342-4733

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Marsh Creation *

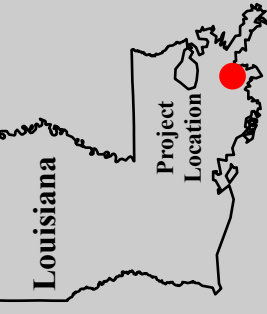


Project Boundary *

* denotes proposed features



USGS
science for a changing world



Louisiana

Project
Location



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
Lafayette, La.

Background Imagery:
2023 NAIP Photography

Map Date: February 21, 2024
Map ID: USGS-NWRC 2024-11-0005
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