



Oyster Lake Marsh Creation and Nourishment (CS-79)

Project Status

Approved Date: 2016
Approved Funds: \$4 M
Net Benefit After 20 Years: 250 acres
Status: Engineering and Design
Project Type: Marsh Creation
PPL #: 25

Project Area: 413 acres
Total Est. Cost: \$38 M

Location

The project is located immediately south of Calcasieu Lake and west of the Calcasieu Ship Channel in Regional Planning Unit No. 4, Calcasieu-Sabine Basin, Cameron Parish, Louisiana.

Problems

Altered hydrology, drought stress, and saltwater intrusion have caused the area to undergo interior marsh breakup. Impacts from Hurricane Rita in 2005, Hurricane Ike in 2008, and recently Hurricane Laura in 2020 have resulted in the coalescence of Oyster Lake with interior water bodies increasing wave/wake related erosion. Based on USGS hyper-temporal data analysis (1984 to 2019), land loss rate for the area is -0.52% per year. The subsidence rate is estimated at 4.3 mm per year or 0.28 feet per 20 year project life.

Restoration Strategy

The specific goals of the project are: 1) Create 255 acres of saline marsh; 2) Nourish 158 acres of existing saline marsh, and (3) Maximize the amount of time the created marsh platform is intertidal throughout the 20 year design life of the project.

This project will construct approximately 383 ac of marsh with confined disposal marsh creation and 30 ac with unconfined disposal marsh creation. Four marsh creation areas will have temporary containment dikes constructed to contain the fill, and one marsh creation area will be unconfined. In order to achieve these goals, sediment would be hydraulically dredged from an offshore disposal area to create approximately 413 acres of saline marsh. Disposal areas would be constructed next to the Oyster Bayou Restoration Project (CS-59) marsh creation areas and terrace field depicted on the concept map (yellow polygon).



Example of the shallow open water receiving areas within the Oyster Lake project.

Progress to Date

This project was approved for Phase I Engineering and Design in January 2016.

This project is on Priority Project List 25.

For more information, please contact:

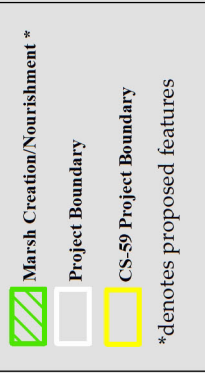


Federal Sponsor:
 National Marine Fisheries Service
 Baton Rouge, LA
 (225) 389-0508



Local Sponsor:
 Coastal Protection and Restoration Authority
 Baton Rouge, LA
 (225) 342-4733

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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

Gulf of Mexico

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