rev. November 2017
Cost figures as of: December 2022

Bayou Dupont Ridge Creation and Marsh Restoration (BA-48)

Project Status

Approved Date: 2007 **Project Area:** 309 acres
Approved Funds: $36.3 M **Total Est. Cost:** $37.0 M
Net Benefit After 20 Years: 186 acres
Status: Completed
Project Type: Marsh Creation
PPL #: 17

Location

This project is located within the Barataria Basin in Jefferson and Plaquemines Parishes. The marsh creation area is located along Bayou Dupont southeast of the waterbody known as the Pen.

Problems

There is widespread historic and continued rapid land loss within the project site and surrounding areas resulting from subsidence, wind erosion, storms, and altered hydrology. Land loss data provided by the U.S. Geological Survey indicates that loss was occurring at a rate of 1.7% per year prior to construction. The natural limits of Bayou Dupont were difficult to determine in some areas because land loss was causing the coalescence of the bayou with adjacent water bodies. Natural tidal flow and drainage patterns that once existed through the bayou were circumvented by the increasing area of open water.

Vegetation covers much of the marsh creation features on BA-48. The Long Distance Sediment Pipeline Corridor stretches past the project in the background.

Restoration Strategy

Project goals included: 1) creating and nourishing approximately 390 acres of marsh through sediment pipeline delivery from the Mississippi River; and 2) creating over two miles of ridge (10.5 acres of ridge habitat) along a portion of the southwestern shoreline of Bayou Dupont. Sediment from the river was hydraulically pumped to the project site to construct both the marsh and ridge features and additional material was dredged from Bayou Dupont to cover the ridge. The ridge is designed to mimic the configuration of other natural ridges within the watershed, and includes a constructed elevation conducive for the growth of native vegetation such as live oak, hackberry, and yaupon. The ridge is helping to redefine the limits of Bayou Dupont and reestablish the natural bank that once flanked the bayou and protected adjacent marshes.

Progress to Date

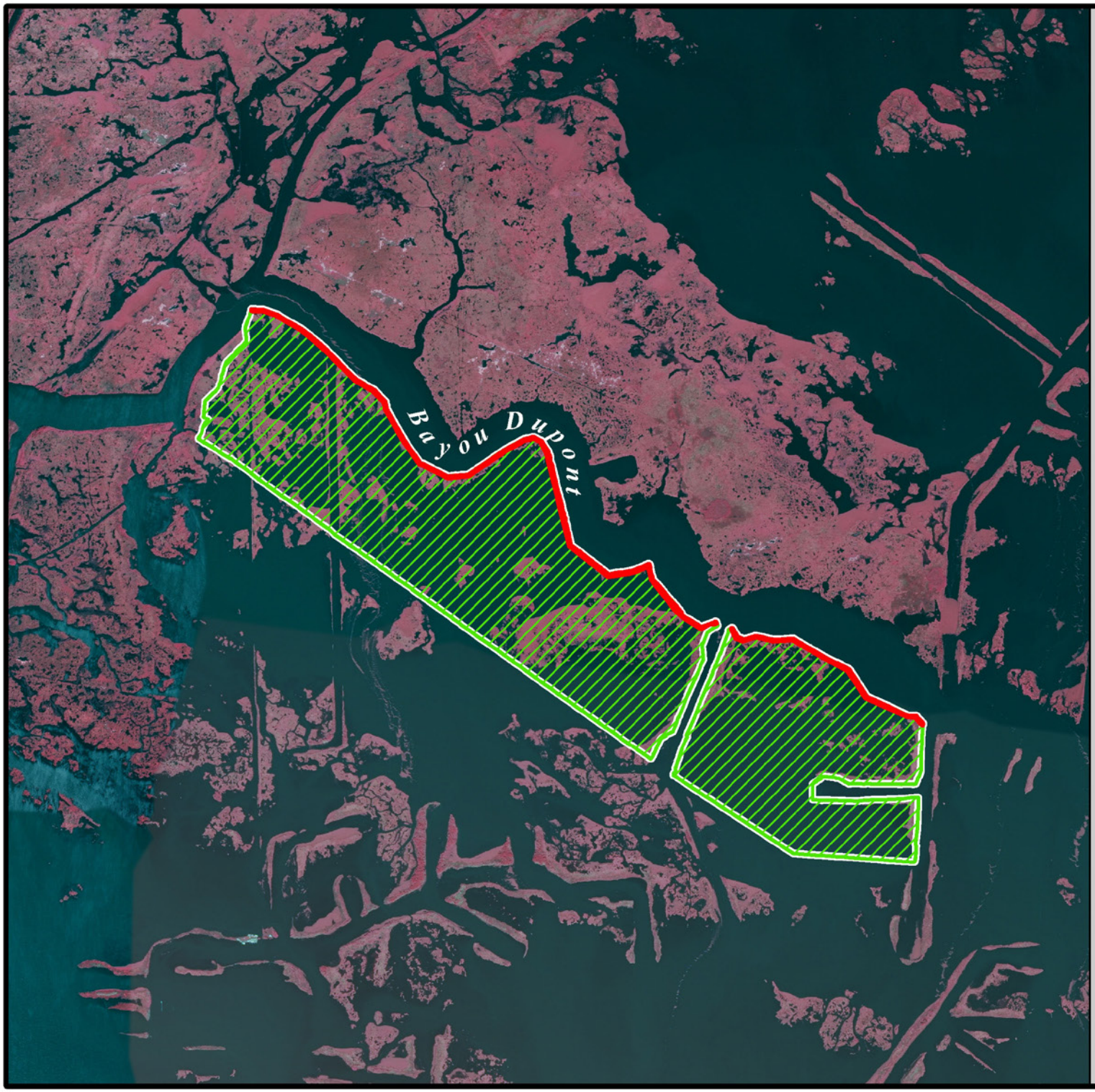
Construction began in the Fall of 2014 in conjunction with the Mississippi River Long Distance Sediment Pipeline Project (BA-43EB) and Bayou Dupont Sediment Delivery-Marsh Creation #3 (BA-164). Construction of the Bayou Dupont (BA-48) portion was completed in fall of 2015.

This project is on Priority Project List 17.

For more information, please contact:

Federal Sponsor:
National Marine Fisheries Service
Baton Rouge, LA
(225) 778-7380

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



Bayou Dupont Marsh and Ridge Creation (BA-48)

Ridge Creation
Marsh Creation
Project Boundary

USGS
science for a changing world

N

0.1 0 0.1 0.2 Kilometers

0.1 0 0.1 0.2 Miles

Map Produced by:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La.

Background Imagery:
2013 NAIP Photography

Map Date: September 28, 2015
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