rev. November 2016 Cost figures as of: February 2017



Caminada Headlands Back Barrier Marsh Creation (BA-171)

Project Status

Approved Date: 2014 **Project Area:** 385 acres **Approved Funds:** \$3.35 M **Total Est. Cost:** \$31.0 M

Net Benefit After 20 Years: 165 acres Status: Engineering and Design Project Type: Marsh Creation

PPL#: 23

Location

The project area is defined as the area south of Louisiana Highway 1 between Belle Pass and Caminada Pass, directly behind Caminada Headland beach covering areas in and around Bay Champagne and areas east of Bayou Moreau. The Caminada Headlands Back Barrier Marsh Creation project is located along the Louisiana coastline in LaFourche Parish in CWPPRA Planning Region 2.

Problems

The Caminada Headland has experienced some of the highest shoreline retreat rates in Louisiana. Historically the shoreline has migrated landward at about 40 feet per year. Between 2006 and 2011, shoreline migration increased dramatically, exceeding 80 feet per year in near Bay Champagne and 110 feet per year in the Bayou Moreau area. The increased losses occurred in the wake of Hurricanes Katrina and Rita in 2005 as the breaches remained open for an extended length of time. The losses were exacerbated by Tropical Storm Fay and Hurricanes Gustav and Ike in 2008. Significant prolonged breaches greatly increase the net export of sediment from the headland.

In addition to the shoreline migration, the area is also experiencing high loss rates of interior marshes. As the beach and dune continue to migrate landward, overwashed sediment will be lost into newly formed open water and land loss rates will be exacerbated. The continued deterioration of Caminada Headland threatens thousands of acres of wetland habitat as well as critical infrastructure, including Port Fourchon, LA Highway 1, and the lower Lafourche levee system.

Restoration Strategy

The goals of this project are to: 1) Create and/or nourish 385 acres of back barrier marsh, by pumping sediment from an offshore borrow site; 2) Create a platform upon which the beach and dune can migrate, reducing the likelihood of breaching, improving the longevity of the barrier shoreline, and protecting wetlands and infrastructure to the north and west. The proposed project is expected to slow the current trend of degradation in the headland.



Dredge material from the Gulf of Mexico will be pumped into the project area to create 210 acres of back barrier marsh and nourish 175 acres of emergent marsh behind 3.5 miles of the Caminada beach.

This project would create 210 acres of back barrier intertidal marsh and nourish 175 acres of emergent marsh behind 3.5 miles of the Caminada beach using material dredged from the Gulf of Mexico. The marsh creation and nourishment cells are designed to minimize impacts on existing marsh and mangroves. Assuming some natural vegetative recruitment, vegetative plantings are planned at a 50% density, with half planned at project year one and half planned at project year 3. Containment dikes will be degraded or gapped by year three to allow access for estuarine organisms.

Progress to Date

A kick-off meeting was held in June 2014. The project team has completed preliminary engineering and design, environmental compliance, real estate negotiations, operation & maintenance and monitoring planning, and a cultural resources investigation, all to the 95% design level as required by the CWPPRA standard operating procedures. The 30% design review meeting was held July 28, 2016 and the 95% design review was held on October 28, 2016. The Phase II Request for construction funding will be presented to the CWPPRA Tech Committee on December 7, 2016.

This project is on Priority Project List 23.

For more information, please contact:



Federal Sponsor:

U.S. Environmental Protection Agency Dallas, TX (214) 665-2712



Local Sponsor:

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



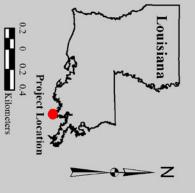
Caminada Headlands Back Barrier Marsh Restoration (BA-171)



*denotes proposed features

Marsh Creation *
Project Boundary





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: 2012 DOQQ

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