October 2007 (rev.)

Raccoon Island Shoreline Protection/ Marsh Creation (TE-48)

Project Status

Approved Date: 2002 **Cost:** $10.6 million
Project Area: 502 acres **Status:** Construction
Net Benefit After 20 Years: 167 acres
Project Type: Shoreline Protection and Marsh Creation

Location

The project is located in the Terrebonne Basin on the western-most island of the Isles Dernieres barrier island chain in Terrebonne Parish, Louisiana.

Rock breakwater construction for the prior demonstration phase of this project was completed on the east end of the island in June 1997. Taken immediately after construction was complete, this 1997 photograph shows no sand behind the breakwaters.

Sand deposits or "tombolos" have developed behind the breakwaters that protect and enhance the island. A less dramatic, however still positive effect, is expected to occur behind the 8 additional breakwaters being constructed to the west of the existing breakwaters.

Problems

The Isles Dernieres barrier island chain is experiencing some of the highest erosion rates of any coastal region in the world. Raccoon Island is experiencing shoreline retreat both gulfward and bayward, threatening one of the most productive wading bird nesting areas and shorebird habitats along the gulf coast.

Restoration Strategy

An existing demonstration project on the eastern end of the island, Raccoon Island Breakwaters Demonstration project (TE-29), has proven that segmented breakwaters can significantly reduce, and perhaps even reverse, shoreline erosion rates. The primary goal of this project is to protect the Raccoon Island rookery and seabird colonies from the encroaching shoreline by: 1) reducing the rate of shoreline erosion along the western, gulfward side and 2) extending the longevity of northern backbay areas by creating 60 acres of intertidal wetlands that will serve as bird habitat.

This project has been separated into two construction phases, Phase A and Phase B. Phase A includes the construction of eight additional segmented breakwaters gulfward of the island and immediately west of the existing breakwaters demonstration project and an eastern groin that will connect existing Breakwater No. 0 to the island. Phase B involves the construction of a retention dike along the northern shore to create a back bay enclosure that will be filled with sediments dredged from the bay and/or gulf, followed by vegetative plantings.

Progress to Date

This project was selected for engineering and design funding at the January 2002 Breaux Act Task Force meeting. Construction funding for Phase A was approved in October 2004. Request for Phase B construction funding is anticipated to occur in January 2008. This project is on Priority Project List 11.

For more project information, please contact:

Federal Sponsor:
Natural Resources Conservation Service
Alexandria, LA
(318) 473-7756

Local Sponsor:
Louisiana Department of Natural Resources
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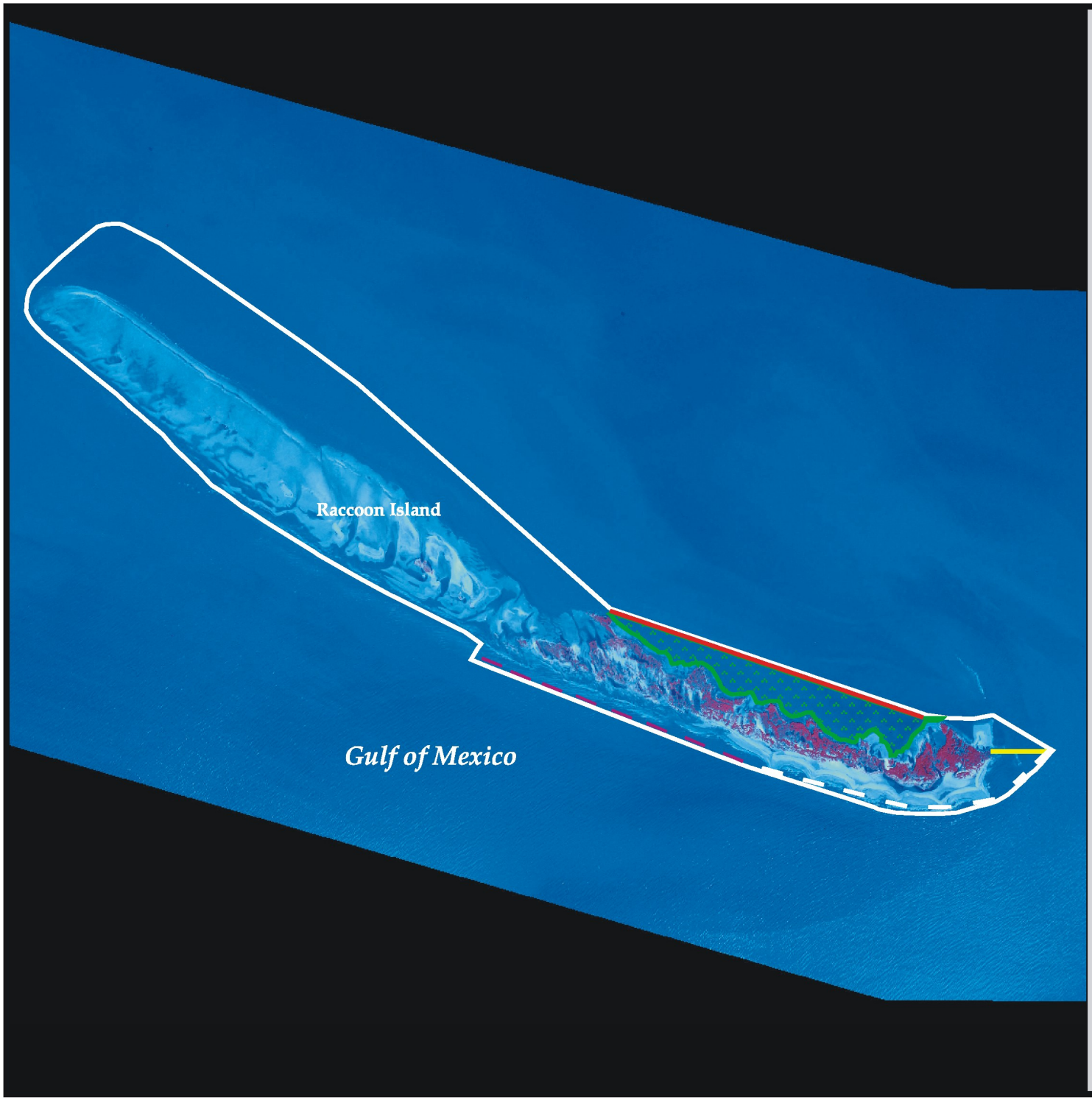
(225) 342-7308



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Existing Breakwater

Project Boundary

Phase A

Breakwater *

Groin *

Phase B

Retention Dike *

Vegetative Plantings and Dredged Backfill *

* denotes proposed features

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N

0.2 0 0.2 0.4 Miles

0.2 0 0.2 0.4 Kilometers

Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Background Imagery:
2002 Aerial Photography

Map Date: January 5, 2005
Map ID: USGS-NWRC 2005-11-0059
Data accurate as of: January 5, 2005