rev. February 2008
Cost figures as of: December 2022

Holly Beach Sand Management (CS-31)

Project Status

Approved Date: 2002 **Project Area:** 8,901 acres
Approved Funds: $14.1 M **Total Est. Cost:** $14.1 M
Net Benefit After 20 Years: 330 acres
Status: Completed August 2003
Project Type: Shoreline Protection
PPL #: 11

Location

The project is located west of Calcasieu Pass along the Gulf of Mexico shoreline, extending between Holly Beach and Constance Beach in Cameron Parish, Louisiana.

Problems

The Chenier Plain shoreline was created with sediment transported by the Mississippi River's periodic westward oscillation. The swales that characterize the Chenier Plain were created by the deposition of these alluvial sediments, and these same sediments also served to extend the shoreline gulfward and create the area's expansive mudflats.

Chronic erosion in this area is caused by a lack of sand and sediment caused by the channelization and regulation of the Mississippi and Atchafalaya rivers to the east. In addition, the Calcasieu and Mermentau rivers are not supplying coarse-grained sediment to the area, and the Cameron Jetties associated with the Calcasieu Ship Channel deflect the little material that does exist away from the project area.

Restoration Strategy

The project's goals are: (1) to protect approximately 8,000 acres of existing, low energy intermediate and brackish marsh wetlands north of the forested ridge and (2) to create and protect roughly 300 acres of beach dune and coastal chenier habitat from erosion and degradation.

The project also provides protection for the wooded chenier to the west, which has been purchased by the Baton Rouge Audubon Society. It is being maintained as a sanctuary because of its importance as habitat for Neotropical migratory birds.

The project plan consists of placing approximately 1.7 million cubic yards of high quality sand on the beach to reestablish a more historical shoreline, as well as improve the effectiveness of the existing segmented breakwater system.

Progress to Date

This project was selected for Phase 2 (construction) funding at the August 2001 Louisiana Coastal Wetlands Conservation and Restoration Task Force meeting. Since that time, 1.75 million cubic yards of sand were added to the beach. Sand placement was completed in March 2003.

This photo shows delivery of sand material via the pipeline from the dredge "Beachbuilder" and the placement and dressing of the material by bulldozer equipment. The dredge is digging the sand material from the designated borrow area that is located approximately 5 miles offshore.

This photo shows the sand material being "dressed" and shaped by mechanical equipment. The required elevation for the "plateau" of the new beach fill is about 5 feet above mean sea level.

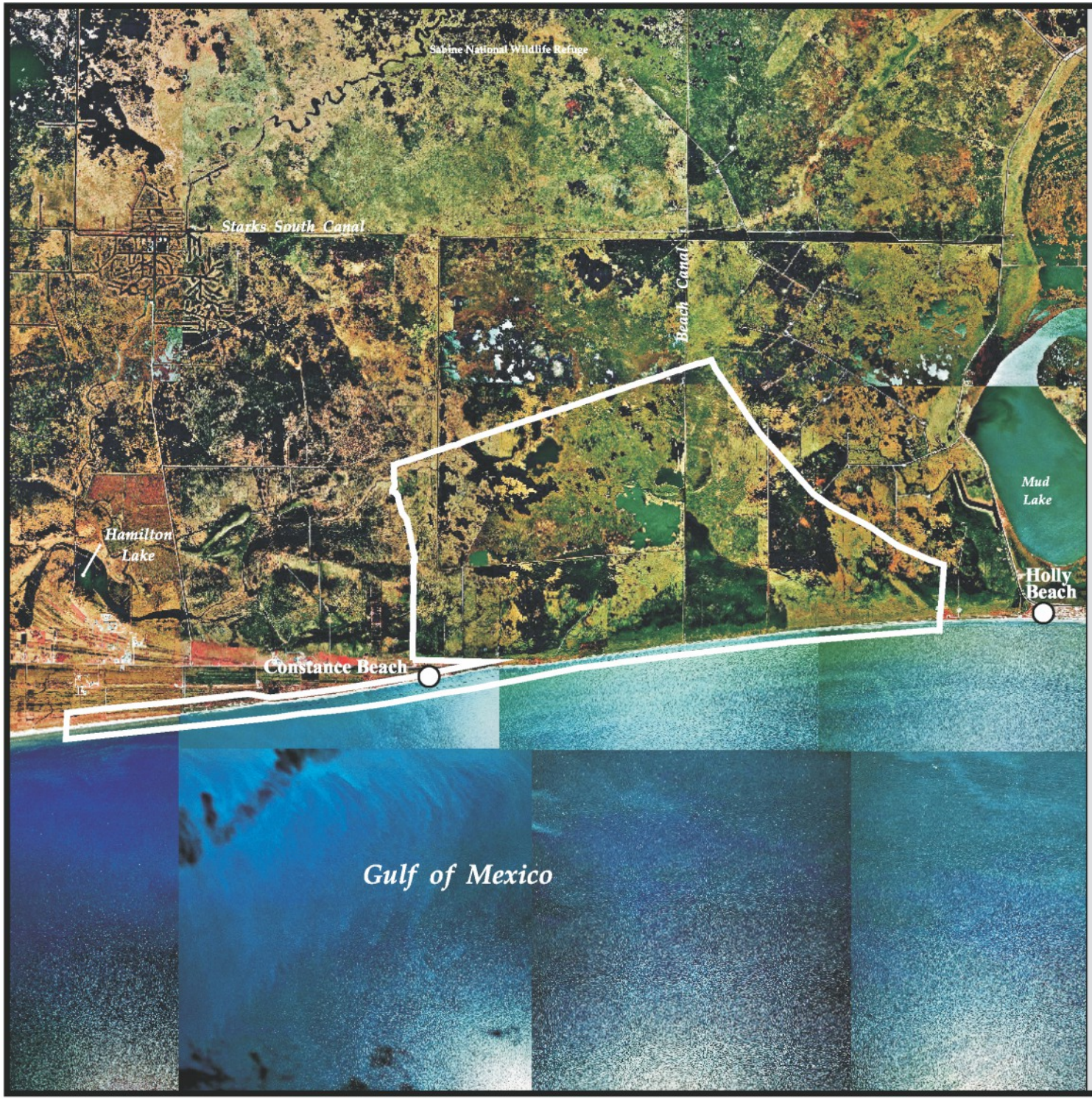
Project staff installed 102,000 linear feet of vegetative plantings at dune elevation on the Holly Beach dredge platform; 20,400 four-inch containers of bitter panicgrass (*Panicum amarum*) were planted. The installation of the plantings was completed in August 2003. Cameron Parish believes this project is what saved HWY 82 from being washed out during Hurricane Rita.

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



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Project Boundary

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

Background Imagery:
1998 Digital Orthophoto Quarter Quadrangle

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