New Cut Dune and Marsh Restoration (TE-37)

Project Status
Approved Date: 2000  Project Area: 386 acres
Approved Funds: $10.6 M  Total Est. Cost: $10.7 M
Net Benefit After 20 Years: 102 acres
Status: Completed
Project Type: Barrier Island Restoration
PPL #: 9

Location
New Cut is the breach between East and Trinity Islands in the Isles Dernieres barrier island chain. The cut is bordered on the north by Lake Pelto, on the west by Trinity Island, on the east by East Island and on the south by the Gulf of Mexico, in Terrebonne Parish, Louisiana.

Problems
New Cut was first formed in 1974 when the eastern end of Trinity Island was breached during Hurricane Carmen. This breach was further widened by Hurricane Juan in 1985 and Hurricane Andrew in 1992.

The Isles Dernieres shoreline is one of the most rapidly deteriorating barrier shorelines in the United States. This barrier system is exhibiting a pattern of fragmentation and disintegration. With regard to longshore sediment transport systems or the movement of beach material by waves and currents, the islands have ultimately become sources of sediment themselves leading to an ever-decreasing volume of sediment.

Restoration Strategy
The purpose of this project was to close the breach between Trinity and East Islands through the direct creation of beach, dune, and marsh habitat (Area A). This project also lengthened the structural integrity of eastern Isles Dernieres by restoring the littoral drift by adding sediment into the nearshore system (Area B).

Progress to Date
Phase 2 (construction) funding was initially approved at the January 2001 Louisiana Coastal Wetlands Conservation and Restoration Task Force meeting and additional funds allocated in 2006 to account for change in borrow site and post-hurricane increased construction costs. Dredging was completed July 2007. About 8,000 linear feet of barrier island was restored by placing approximately 850,000 cubic yards of material. New Cut was closed through the construction of a dune platform matching the dune elevations on the east and west, strengthening the connection between East and Trinity Islands. Nine species of native barrier island vegetation were planted along with over 17,000 linear feet of sand fencing. No maintenance is anticipated over the 20-year design life.

This project is on Priority Project List 9.

For more information, please contact:

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Dallas, TX
(214) 665-6722

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
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Vegetative plantings and dune features on date of final project inspection.