Restoration Strategy

The goals of this project are to repair breaches and tidal inlets in the shoreline, reinforce the existing shoreline with sand, and increase the island width with back barrier marsh creation to increase longevity. The design approach is to maximize surface area habitat remaining after 20 years by preventing shoreline breaching through the introduction of riverine sand and offshore fine sediment that will be dredged (i.e., mined) and pumped in.

Project strategies include the construction of 429 acres of dune area, including the dune itself, dune foreslope and backslope (above-tide, sloping elevations in front of and behind the dune), and marsh platform (areas behind the dune backslope where marsh will be created). Of that acreage, approximately 278 acres would settle to intertidal back barrier marsh. A double row of sand fencing will be installed along the 12,700-foot length of dune. A tidal pond will be constructed in the marsh platform, and approximately three years after construction, containment dikes (built from material removed from the borrow canal) will be gapped as needed to ensure tidal exchange with the marsh platform. Over three years, the dune and marsh platform will be planted with bitter panicum (*Panicum amarum*), Gulf cordgrass (*Spartina spartinae*), marshhay cordgrass (*Spartina patens*), sea oats (*Uniola paniculata*), smooth cordgrass (*Spartina alterniflora*), matrimony vine (*Lycium barbarum*), and black mangrove (*Avicennia germinans*).

Previous barrier island work has found limited sand resources in the nearshore Gulf of Mexico. Additional sand sources must be identified to support barrier shoreline restoration in the Barataria Basin. Dredgable sand resources appear to exist in the Mississippi River in the form of relic sand bars and bed load. Several possible sand sources for Scofield Island have been identified in the vicinity of Empire, Louisiana.

Progress to Date

The Louisiana Coastal Wetlands Conservation and Restoration Task Force approved funding for engineering and design at their February 2005 meeting. This project is currently de-authorized.

This project is on Priority Project List 14.

For more project information, please contact:

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