Cole’s Bayou Marsh Restoration (TV-63)

Project Status
Approved Date: 2012  Project Area: 3,840 acres
Approved Funds: $25.6 M  Total Est. Cost: aaaTEC
Net Benefit After 20 Years: 340 acres
Status: Engineering and Design
Project Type: Marsh Creation and Hydrologic Restoration
PPL #: 21

Location
This project is located in Region 3, Teche/Vermilion Basin, Vermilion Parish, east of Freshwater Bayou Canal.

Problems
Project area wetlands are undergoing loss at -0.42 %/year based on 1983 to 2011 USGS data from the extended boundary. Wetland loss processes in this area include subsidence/sediment deficit, interior ponding and pond enlargement, and storm impacts resulting in rapid episodic losses. In addition, significant interior marsh loss has resulted from salt water intrusion and hydrologic changes associated with increasing tidal influence. As hydrology in this area has been modified, habitats have shifted to more of a floatant marsh type, resulting in increased susceptibility to tidal energy and storm damages. Habitat shifts and hydrologic stress reduce marsh productivity, a critical component of vertical accretion in wetlands.

Restoration Strategy
The specific project goals are: 1) create and nourish 415 acres of brackish marsh in recently formed shallow open water and 2) increase freshwater and sediment inflow into interior wetlands by improving project area hydrology.

The project will create and nourish 415 acres of brackish marsh via dedicated dredging from Vermilion Bay and placement in three confined disposal areas. Containment dikes will be degraded or gapped to establish tidal connection and functions. A total of nine water control structures consisting of 22 culverts will be installed throughout the project area. Freshwater, nutrients, and sediment inflow from the Freshwater Bayou Channel to interior marshes will be re-established by dredging and reconnecting Cole’s Bayou to interior wetlands.

For more information, please contact:
Federal Sponsor:
National Marine Fisheries Service
Baton Rouge, LA
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Local Sponsor:
Coastal Protection and Restoration Authority
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(225) 342-4733
Coles Bayou

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Restoration Project