Enhancement of Barrier Island Vegetation Demonstration (TE-53)

Project Status

Approved Date: 2006  
Project Area: N/A  
Approved Funds: $0.59 M  
Total Est. Cost: $0.59 M  
Net Benefit After 20 Years: N/A  
Status: Completed  
Project Type: Demonstration: Barrier Island Vegetative Enhancement  
PPL #: 16

Location

This project involved greenhouse studies and the testing of technologies at two previously planted CWPPRA project sites. The CWPPRA projects involved were New Cut Dune and Marsh Restoration (TE-37) and Whiskey Island Back Barrier Marsh Creation (TE-50). Both sites are located in Terrebonne Parish in the Isles Dernieres Barrier Island area.

Problems

Barrier Islands provide critical habitat and are the first line of defense to not only daily-day coastal erosion but also to the destructive forces of major storm events. There remains a critical need to develop cost-effective improvements to existing restoration methodologies that will enhance the successful establishment and spread of vegetation in these important restoration projects. Developing methodologies to enhance vegetation establishment and growth in barrier island restoration projects is important in this very stressful environment because healthy vegetative cover traps, binds, and stabilizes sand and sediment, thereby improving island integrity during storm and overwash events.

Restoration Strategy

The purpose of this demonstration project was to test several technologies and/or products to enhance the cost-effective establishment and growth of key barrier island and salt marsh vegetation. Humic acid and broadcast fertilization regimes were applied. The humic acid amendment and broadcast fertilization regime techniques are intended to “jump start” and facilitate the rapid establishment and expansion of vegetation. Humic acid benefits were demonstrated in both intertidal and supratidal plantings, whereas broadcast fertilization benefits were only demonstrated in supratidal plantings.

Progress to Date

The project has been completed.

This project is on Priority Project List 16.

For more project information, please contact:

Federal Sponsor:  
U.S. Environmental Protection Agency  
Dallas, TX  
(214) 665-6608  

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

Whiskey Island Back Barrier Marsh Creation (TE-50) vegetative plantings test site.