

Galveston Bay Foundation, Inc.
Galveston Bay "Marsh Mania" Restoration Program
SEP No. 2011-45

Project Description:

In the Galveston Bay area, historical subsidence and subsequent erosion have resulted in elevations that are too low to support marsh vegetation. The Galveston Bay Foundation, Inc. ("GBF") shall reestablish marsh habitat to Galveston Bay by restoring marsh elevations to those that will support marsh vegetation and protect marsh habitats from the threat of erosion. GBF shall also plant salinity-appropriate marsh grasses to reestablish the habitat. SEP Funds will be used for on-the-ground site preparation and construction of marsh restoration sites, including supplies/materials, equipment, and contractual labor costs. Following construction, GBF shall use community volunteers to transplant emergent marsh vegetation to the marsh restoration sites during annual "Marsh Mania" restoration and education events.

Implementation of marsh restoration is dependent upon site conditions (water depth, substrate type/firmness, shoreline type, erosion rates, erosional forces, habitat goals, etc.), and each site requires a site assessment to determine the optimal methods for restoration. GBF shall hire a contractor to conduct the necessary site assessments and complete the appropriate restoration activities. Common restoration methods include: shoreline grading; construction of berms, terraces, mounds or unconsolidated fill using in-situ or other materials; and installation of wave breaks (rock/rip-rap, geotextile tubes, concrete bags, reef domes, ReefBLK, fencing, coir logs, oyster bags, etc.). After completion of marsh restoration activities, native marsh vegetation will be transplanted at the restoration site by GBF's personnel and volunteers. GBF shall use SEP Funds for travel expenses and equipment for use by GBF personnel and volunteers but will not use SEP Funds to compensate personnel or volunteers for time spent on SEP activities. SEP Funds will also be used to hire a contractor to complete any necessary coastal bounds surveys that may be required by the Texas General Land Office.

Restoration work will take place in and around Galveston Bay, its sub-bays, and its tributaries throughout Harris, Galveston, Chambers, and Brazoria Counties. The specific locations will be determined based on local prioritization and needs. GBF, at its own expense, shall work with local steering committees comprised of leaders from government agencies and local organizations to identify and prioritize sites.

Marsh restoration activities occur within submerged lands that are generally under the jurisdiction of entities such as the Texas General Land Office, local Navigation Districts, and the Army Corps of Engineers. If required, GBF, at its own expense, shall obtain leases, easements, or other permissions from these entities in order to perform marsh restoration work.

Environmental Benefit:

Coastal wetland loss in the Galveston Bay system is a significant and continuing concern because of the essential roles that wetlands perform. Wetlands loss in the Galveston Bay system is greater than in many other areas of the state. It is estimated that between 1950 and 1990, Galveston Bay experienced a net loss of approximately 35,000 acres of wetlands. Research indicates that wetland loss is continuing at rapid rates. Because of this loss, habitat degradation has been identified as the most critical of all the problems currently facing Galveston Bay (*Galveston Bay Plan*, 1995). Due to the alarming loss of wetlands in the Galveston Bay system, the Galveston Bay National Estuary Program identified wetland restoration, creation, and protection as the number one priority in the *Galveston Bay Plan*.

Marshes along coastal Texas, including Galveston Bay, serve as nursery grounds for over 95% of the recreational and commercial fish species found in the Gulf of Mexico as well as many varieties of shrimps and crabs. These habitats also provide breeding, nesting, and feeding grounds for more than one-third of all threatened and endangered animal species, support

many endangered plant species, and provide permanent and seasonal habitat for a great variety of wildlife, including finfish and shellfish and 75% of North America's bird species. Marshes also result in the reduction of pollution by filtering particulates and excess nutrients from runoff and serve to protect shorelines from erosion and help reduce the effects of flooding and storm surges on more upland areas.

Texas Coastal wetlands are also extremely important economically. In Galveston Bay alone, the recreational and commercial fishing industries combined are valued at over \$3 billion annually and support over 40,000 jobs in the area (EPA, 2005).

Eligible Counties for Contributions:

This project may receive contributions from the following:

Anderson, Archer, Austin, Bailey, Bastrop, Baylor, Borden, Bosque, Brazoria, Brazos, Brown, Burleson, Burnet, Callahan, Castro, Chambers, Clay, Cochran, Collin, Colorado, Comanche, Cooke, Coryell, Crosby, Dallas, Dawson, Denton, Dickens, Eastland, Ellis, Erath, Falls, Fannin, Fayette, Fisher, Floyd, Fort Bend, Freestone, Galveston, Garza, Grayson, Grimes, Hale, Hamilton, Hardin, Harris, Haskell, Henderson, Hill, Hockley, Hood, Houston, Hunt, Jack, Jefferson, Johnson, Jones, Kaufman, Kent, King, Knox, Lamb, Lampasas, Lee, Leon, Liberty, Limestone, Lubbock, Lynn, Madison, Matagorda, McLennan, Milam, Mills, Montague, Montgomery, Navarro, Nolan, Palo Pinto, Parker, Parmer, Polk, Robertson, San Jacinto, Scurry, Shackelford, Somervell, Stephens, Stonewall, Swisher, Taylor, Terry, Throckmorton, Travis, Trinity, Van Zandt, Waller, Walker, Washington, Wharton, Williamson, Wise, and Young Counties

Minimum Contribution Amount:

\$250

Total Project Budget:

\$180,000