

# Ostermayer Bayou Wetland Conservation Project

## TCEQ #582-10-90505



**Final Report**  
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## **INTRODUCTION**

West Galveston Bay (West Bay) is a highly biologically productive area, featuring extensive tidal and brackish marshes, coastal prairies pockmarked with freshwater depressional wetlands created by ancient stream meanders, and forested wetland areas associated with its numerous small bayous and streams. Because of its rich natural features and relatively high water quality, West Bay and its watershed support an abundance and diversity of fish and wildlife, including recreationally and commercially important fish and shellfish, resident and overwintering birds and waterfowl, and neotropical migratory birds. Its extensive wetlands and grassland prairies help to protect water quality in the bay and its tributaries. Accordingly, the area is used extensively for recreation, and contributes greatly to the overall productivity of the Galveston Bay system, and to vital nature-based sectors of the Houston economy. In fact, the Galveston Bay recreational fishing industry alone is valued at \$2.8 billion (Environmental Protection Agency, 2005).

However, the health and productivity of West Bay watershed is threatened by continued rapid population growth. Since the 1950s, the Galveston Bay estuarine ecosystem lost a net of 35,000 acres of wetlands due to human influence, at least half of which was concentrated in the West Bay watershed (White et al, 1993). During that time, West Bay lost nearly all of its seagrasses to shoreline development, water quality deterioration, and other human factors (Pulich and White, 1991). Continued wetland loss and increased pollutant loadings are likely within the West Bay area, as Galveston County and Brazoria Counties are growing rapidly, with populations expected to increase by about 40% by 2025 (Houston-Galveston Area Council, 2003). Much of this growth will likely be concentrated along bay and bayou shorelines, impacting fringing marshes vital to water quality protection and wildlife. The Galveston Bay Estuary Program has identified wetlands loss as the number one priority problem facing Galveston Bay.



This project protects a significant parcel of that habitat. The project site comprises 83.5 acres on West Galveston Bay, and is located roughly three-quarters of the way down (toward the west) the length of Galveston Island, a 32-mile barrier island about three miles off the Texas mainland.

The Ostermayer Bayou project is significantly enhanced through the concerted efforts of local partners who are restoring wetlands along the West Bay shoreline, as part of a \$6.1 million-federal coastal restoration stimulus project. Combined with past wetland restoration/protection efforts at Delehide Cove, Jumbile Cove, and the Galveston Island State Park, this effort will help to protect the integrity of the entire marsh ecosystem along the southern shoreline of West Bay for years to come.

## **ENVIRONMENTAL SIGNIFICANCE**

The Ostermayer Bayou tract is largely wetlands – estuarine emergent marsh – and coastal prairie. Year-round and migrant birds, including sandhill cranes, shore birds, wading birds, waterfowl, and grassland birds depend on these Island marshes as well as the upland prairie buffering the intertidal flats. And the fragile, estuarine emergent marsh, palustrine emergent marsh, and estuarine wetlands surrounding the bayou offer a refuge for fisheries. Highlighted as a high-priority conservation site in the West Galveston Island Greenprint for Growth, the protection of this property will serve to create new educational and tourism opportunities.

All of these habitats are under threat of imminent losses, due primarily to erosion, in combination with subsidence and development pressures. The most recent National Wetland Inventory (NWI) information, specifically for the area, shows that between 1956 and 2002 there has been a loss of approximately 80 acres of fringing, estuarine emergent marsh, 11 acres of palustrine emergent marsh, and 35 acres of seagrass over the last 46 years. Overall, erosion, subsidence, and saltwater intrusion have contributed to wetland and adjacent habitat loss in the project area.



Additionally, less than one percent of the original 9.4 million acres of coastal prairie on the Gulf Coast from Corpus Christi to Lafayette, LA, remains in a largely natural state. The coastal prairie in the project area represents an area that, with protection, can be maintained with significant wildlife habitat values. Without protection, winter storm winds and waves will continue to erode this portion of Galveston Island, converting and losing valuable habitats.

Furthermore, all of the undeveloped land and associated habitats on Galveston Island are under significant development pressures, with numerous permits applied for and issued to allow the placement of fill into wetlands and the development of large tracts of coastal prairie and wetland habitats.

## **RESULTS**

This land purchase preservation project, which was executed between the Trust for Public Land and the County of Galveston on August 25, 2010, protected 83.5 acres of habitat which is classified in the table below. The table provides the habitat classification and acreage for this land purchase at Ostermayer Bayou on west Galveston Island. Further information, including explicit descriptions and photos of the following land classification system, can be found at <http://www.csc.noaa.gov/crs/lca/techcls.html> . In addition, please refer to Figure 1 shown immediately after Table 1 below - “Habitat Type by Acreage”.

There are five general vegetation communities within the project site including herbaceous upland, scrub-shrub upland, palustrine emergent wetland, estuarine emergent wetland, and estuarine scrub-shrub wetland. There is approximately 21 acres of upland, which consists of a combination herbaceous upland and scrub-shrub upland. Very little palustrine emergent wetland is present, and the remainder of the property is estuarine emergent wetland and estuarine scrub-shrub wetland. Keep in mind, based on the surveys we have seen, mixed into these three wetland types are somewhere between 31-35 acres of open water/submerged lands, which in essence is Ostermayer Bayou.

| HABITAT CLASSIFICATION        | ACREAGE  |
|-------------------------------|----------|
| Palustrine Emergent Wetland   |          |
| Estuarine Scrub/Shrub Wetland |          |
| Estuarine Emergent Wetland    |          |
| Open Water                    | 31-35 ac |
| Grassland/Herbaceous          |          |
| Semi/Shrub                    |          |
| Other                         |          |

**TABLE 1: HABITAT TYPE BY ACREAGE**



**FIGURE 1: AERIAL VIEW OF OSTERMAYER BAYOU ACQUISITION.** Red lines indicate the boundaries of the tract.

## Summary of Benefits

- Represents one of the few large tracts of undisturbed land remaining on the island.
- Features most all the representative barrier island habitats: algal flat, intertidal marsh, brackish marsh, freshwater marsh, and coastal prairie.
- Attracts and feeds a wide variety of birds, including wading birds, shore birds, waterfowl, and grassland birds, both year-round and migrants.
- Offers a refuge for wildlife, such as Sandhill Cranes, in the face of the inevitable development engulfing the west end of the island.
- Provides drinking sources for wildlife of the area, through the shallow, freshwater depressional wetland areas of the natural hydrology on the site.
- Able to support many of the 33 species of animals that live on the Island – reptiles, amphibians, mammals, and birds – through its habitats and water sources.
- Offers excellent potential for habitat restoration: prairie plants in the uplands, wetlands in the intertidal fringe area, and submerged aquatic vegetation in the subtidal area.



## **METHODOLOGY**

A broad consortium of partners collaborated to plan and implement this project. It began with a discussion in 2003, at which several local resource experts met at the Estuary Program's offices to identify some of the best natural areas remaining on Galveston Island, Follets Island, and Brazoria County. These prospective partners contrived a mechanism to conduct planned wetland restoration and erosion protection, leveraging funds for these activities to secure local, state, and federal funding for the conservation of key habitat areas. Galveston County agreed to serve as the ultimate owner of the site, and maintain it as a county park.

In January 2006, The Trust for Public Land (TPL) contracted to purchase this property on the west end of Galveston Island. The landowner, Five-O Family, Ltd., accepted TPL's offer of \$5,000,000 (matching his lowest offer from a developer). Once the contract was fully executed, intense fundraising efforts began, and the community began to galvanize around the effort to protect what it described as Texas's "Cape Cod." TPL considered protecting the entire 127-acre parcel as its most successful conservation scenario. However, at the close of TPL's inspection period, just \$1.8 million of the needed funds were pledged. With this in mind, and with the assistance of TPL supporter Sidney McClendon, TPL met with the Texas Land Commissioner to seek a creative conservation solution through a partnership with the Texas General Land Office and the Permanent School Fund (PSF). TPL negotiated an agreement to buy 127 acres (which we did on April 14, 2006) and convey the entire property to the PSF (which we did on April 20, 2006), with the requirement that the PSF grant TPL a one-year option on 55.9292 acres closest to Galveston Bay (at the same price per acre originally paid by TPL). TPL would have a right of first refusal on any additional acres conveyed to PSF, which would be subject to a new re-purchase price - the greater of either a revised appraised value or a 10% escalator. Over the year, TPL continued to privately fundraise, identify additional public funds, and gather existing pledged funds; and by July 2007, had enough funding to acquire 60.4 acres under this agreement (approximately \$2,671,325).

During 2009 and 2010, project partners secured public funding for a Galveston Island project, including approximately \$400,000 from the Coastal Management Program (CMP), \$72,877 from the Galveston Bay

Estuary Program, and \$204,195 from various other sources. Simultaneously with applying for these funds, project partners began the endeavor of land acquisition on Galveston Island, utilizing TPL's capacity and expertise in conservation land acquisition. Completing the land acquisition component of the project has proven to be challenging, as Galveston Island is a competitive and aggressive real estate market. When negotiations for the remaining portion of McAllis Point fell through, project partners worked to identify alternate sites with particular conservation value. TPL, acting as lead, came very close to contract on a number of properties, only to lose them to deep-pocketed developers who could pay much higher prices. The land was identified as a high priority for protection by the 2007 West Galveston Island Greenprint for Growth. It is located just east of Indian Beach and can be reached via water from Galveston Bay or by land from a 60-foot-wide right-way from San Luis Pass road to the southern edge of the bayou. The General Land Office granted TPL an amendment to redirect CMP funds to Ostermayer Bayou and complete the transaction by August 31, 2010. The transaction mirrored the McAllis Point Acquisition in that the property was conveyed and is owned in fee by Galveston County, who will enter into an agreement with a local entity to manage and maintain the site as a nature park.

TPL and closed the land acquisition with Land America Charter Title Company and conveyed the property to Galveston County on August 25, 2010.

**USE AND MANAGEMENT**

The project site is owned in fee by Galveston County, which will enter into an agreement with a local entity to manage and maintain the site as a nature park. Galveston County will select a contractor to develop plans for the development of access and low-impact recreational features on the site, as well as a contractor(s) to implement the plan. Galveston County and its partners will ensure management of the property in a manner consistent with the requirements of the funding entities to protect the natural resource benefits of the site. Finally, a legal instrument (e.g. conservation easement, deed restrictions) will be developed for the property to ensure its protection in perpetuity.

Plans for public use and access will be considered in cooperation with Galveston stakeholders, including representatives of state and federal resource agencies and nonprofit conservation organizations, along with other local residents. Among the features that could be included are: a nature trail with boardwalks, fishing access, canoe/kayak access and trail, birding observation platforms, interpretative signage, and tree plantings for shade and for migratory bird habitat. All the parties who have been involved in the project are sensitive to the environmental values of the project area, and will develop a plan that provides access with the least possible disturbance, including avoiding especially sensitive areas such as bird rookeries.

**PROJECT TIMELINE**

The contract began August 24, 2010 and ended December 31, 2010, but project progress precedes the contract. Benchmarks include the following:

|                     |   |
|---------------------|---|
| 2007-2010           | The Trust for Public Land (TPL) pursued negotiations with various landowners on West Galveston Island |
| Jan 2010 - Aug 2010 | Project partners completed fundraising for Ostermayer Bayou   |
| Mar 2010 - Jul 2010 | TPL works to complete requirements for re-programming of the CMP funding to Ostermayer Bayou          |
| Feb 2010            | Appraisal of Ostermayer Bayou is completed by Bay Area Real Property Appraisers & Consultants, Inc    |

|          |   |
|----------|---|
| Jun 2010 | Survey of Ostermayer Bayou completed by HDR Engineering firm  |
| Jul 2010 | The Galveston County commissioners' court approved a cooperative agreement with the U.S. Fish & Wildlife Service Region 2 for financial and technical assistance to support the department's development and implementation of a conservation management plan, benefitting the McAllis Point property and the Ostermayer Bayou property |
| Aug 2010 | The Galveston County commissioners' court approved a \$72,877 agreement with the Commission on Environmental Quality for its participation in the Ostermayer Bayou acquisition  |
| Aug 2010 | TPL closed on the property and conveys 83.5 acres to Galveston County   |

### **FUNDRAISING**

Federal funds, including a \$400,000 grant from the Coastal Management Program (CMP) administered by the Texas General Land Office and NOAA, provided a substantial portion of the funding for the project. Over the course of the year, TPL worked furiously to assemble state and local funds to serve as match for the federal funds, and an additional grant for Galveston County from the Texas Commission on Environmental Quality in the amount of \$72,877. To secure the CMP funding required re-programming of the funds from McAllis Point to Ostermayer Bayou. The General Land Office granted TPL an amendment to redirect funds to Ostermayer and complete the transaction by August 31, 2010.

### **BUDGET INFORMATION**

The total acquisition cost was \$677,072, which represents \$400,000 from the Coastal Management Program (CMP), \$72,877 from the Galveston Bay Estuary Program (GBEP), and \$204,195 from other funding sources.

### **PROJECT CONTRIBUTIONS**

|   |                  |
|---|------------------|
| CMP Portion of Land Acquisition               | \$400,000        |
| GBEP Portion of Land Acquisition              | \$72,877         |
| Other Non-Federal Funding of Land Acquisition | \$204,195        |
| <b>Total Purchase Price</b>                   | <b>\$677,072</b> |

### **PARTNERS**

#### ***Funding***

Coastal Management Program Grant from GLO

National Oceanic and Atmospheric Administration (NOAA)

Galveston Bay Estuary Program (GBEP)

Texas Commission on Environmental Quality (TCEQ)

US Environmental Protection Agency (EPA)

The Trust for Public Land (TPL)

Galveston Bay Natural Area Acquisition & Conservation SEP (TCEQ) \$96,221

Foundations \$75,000

Individuals \$26,902

Estimated Closing Costs (escrow fee, recording costs, etc.) \$500

Cost for County's Title Policy \$5,572

## **LESSONS LEARNED**

At its surface, land acquisition for conservation purposes would seem to be a fairly straightforward proposition. Galveston Bay resource managers and parks professionals would argue that it is one of the most challenging approaches to conservation, however. Project partners faced many difficult challenges in implementing the project. Among these challenges:

1. The cost of land has increased dramatically in recent years, presenting enormous challenges to raising funds sufficient to conserve large tracts on Galveston Island;



2. Galveston Island, and indeed many areas immediately adjacent to the coast are highly fragmented and altered, leaving relatively few large tracts with high conservation value;
3. Negotiations with private landowners can be perilous and very transient, especially with intense competition for lands available for development;
4. State and federal grant programs can significantly limit project managers' flexibility to pursue multiple options, especially as targeted tract(s) are taken off the market;

5. The knowledge that there will be a lag time between establishing agreements and completing transactions may be a deterrent to landowners in selling to conservation interests.

There is little that can be done to address items 1 and 2 above. The conservation community has begun targeting outlying, largely rural areas to secure larger, more ecologically significant parcels for conservation. However, preserving small parcels in urban settings is still a high priority especially for organizations such as The Trust for Public Land, as they serve as valuable refugia for wildlife, support public recreation, and provide excellent public outreach and education opportunities.

To better address items 3 through 5, we might suggest an entirely different approach in developing conservation projects. Instead of focusing on a single tract, we might identify and prioritize several tracts with conservation value, leaving considerable flexibility in negotiations with landowners. This will afford project managers with much greater leverage in negotiations with landowners.