



August 2024

Mission River Delta Circulation Restoration

Bayside, TX- The Coastal Bend is home to several well-known bay systems that lure locals and visitors in with their recreation opportunities and natural beauty. While many folks flock to the bigger bodies of water that border the barrier islands, such as Aransas, Corpus Christi, and Matagorda bays, further inland lie smaller bays and complex estuary systems that help support productive ecosystems and provide valuable habitat. These back lakes and tributaries create a colorful mosaic of coastal life, the shallow water and vegetation providing shelter for juvenile fish species to grow and migrating birds a place to rest and fuel up along their intercontinental journey. CBEP has been engaged in a wide variety of projects in these bay systems, from breakwater construction to seagrass monitoring and waterbird surveying to wetland restoration, and in the fall of 2024 will venture into the marsh of the Mission River Delta.



Sunrise over Mission River mouth and Mission Bay



Ermis Remainder Tract Footprint

The waters of the Mission River originate from the confluence of the Blanco and Medio creeks in Refugio County, before it meanders southeast to meet the salt water of Copano Bay through Mission Bay. Like most river deltas, as the waters flow closer to the river mouth they begin to disperse into the lower elevation marsh, introducing new sediment while also flushing the salt marsh with fresh water that is scrubbed of pollutants as it filters through the vegetation and soils of the delta. The lower stretch of the Mission River snakes through 24 miles of rural communities and agriculture fields, which can impact water quality through chemical runoff and altering hydrology. In this context, the estuary's water cleansing function becomes paramount.



Aerial view of marsh complex.

In 2016, acquired this tract at the end of Ermis Road in Bayside, Texas, bringing the total of protected land in the Mission River Delta to over 13,000 acres. This habitat consists of a mosaic of tidally influenced estuarine wetlands and shallow saltwater lakes with a riparian corridor running alongside the Mission River. An old windmill and crude road bases remind us of the cattle operation that ran along this 375-acre parcel not long ago. Channels full of juvenile redfish and speckled trout in the spring and summer and Bluewing teal and Gadwall bursting from a hidden pocket of water in the fall paint the picture of the diverse ecosystem potential. Just 12 miles away lies a similar habitat protected for its annual use by endangered Whooping Cranes that call the coastal prairies home during the late fall and early winter.

“The Mission River Delta is an integral part of the Aransas Bay complex. Conserving wetlands and habitats surrounding the Mission River Delta helps support the health and function of Mission, Copano, and Aransas Bays. This purchase is not only important for the wintering Whooping Cranes but helps ensure healthy wetlands for the production of juvenile fish, shrimp, and crabs.” says CBBEP Land Conservation Program Director, Jake Herring,

This wetland habitat contributes to the productivity of resident and non-resident wildlife species. These habitats play a significant role in fulfilling the life-cycle requirements of all wildlife species that travel through. Along with providing valuable habitat for wildlife, these wetlands also help improve water quality, reduce pollution, control coastal erosion, reduce the impacts of coastal flooding, and improve recreational and commercial fishing opportunities.

Along the one roadway on the property, three culverts failed when they were destroyed by Hurricane Harvey in 2017, disrupting flow through the marsh and into the bay. Through the collaborative effort from CBBEP, Coastal Impact Assistance Program, USFWS Coastal Program, and Whooping Crane Conservation Association, these culverts are scheduled to be replaced and improved in the fall of 2024. By restoring the pathway to the bay, the hydrologic function of the estuary will improve and be able to further support the Aransas Bay complex.



One of three culverts destroyed by Hurricane Harvey.

The Coastal Bend Bays & Estuaries Program is a non-profit organization dedicated to protecting and restoring bays and estuaries in the 12-county region of Texas Coastal Bend. CBBEP is partially funded by the Texas Commission on Environmental Quality and the U.S. Environmental Protection Agency. For more information about the Coastal Bend Bays & Estuaries Program, contact Quinn Hendrick, 361-336-0305 or qhendrick@cbbep.org. Published in May 2023.

www.cbbep.org - www.facebook.com/CBBEP

