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Partnering to Protect Wetlands and Public Infrastructure at Indian Point Park



Lanmon Aerial Photography

Coastal Bend Bays & Estuaries Program (CBBEP), the Texas General Land Office (GLO) and the City of Portland have completed construction on the first phase of the project to protect Indian Point Park from shoreline erosion. Indian Point Park encompasses 55 acres and is a prime location for fishing, birding, and nature watching. This popular nature park is immediately adjacent to the City of Portland's Sunset Lake Park.

The General Land Office Coastal Erosion Planning and Response Act Program implements erosion response projects through collaboration and a matching funds partnership with project partners. Over the years CBBEP and GLO-CEPRA have partnered on several successful erosion control projects. "This project will provide long-term protection to many acres of sensitive marsh habitat as well as important park infrastructure. The marsh provides habitat for fish, shrimp, birds, and many other estuarine organisms while the park provides public access for fishing, bird watching, and hiking", said Michael Weeks Project Manager with Texas General Land Office's Coastal Erosion Planning and Response Act Program.

HDR Engineering was engaged to conduct an alternatives analysis and to develop plans and permits for the project. Indian Point Peninsula is constantly impacted by waves from wind blowing across Corpus Christi Bay and the shoreline has retreated about 85 feet in the time period between 2005 and 2011. A review of historical imagery showed that erosion has been an ongoing process and is not limited to major storm events.

After considering a variety of erosion control options "a structure consisting of a combination of shoreline revetment and off-shore breakwaters was determined to provide the most functional and cost-effective solution with minimal environmental impacts" said Rosario Martinez, a Senior Project Manager with the CBBEP. After requesting proposals, Lester Contracting out of Port Lavaca, TX, was selected to construct the project. This phase of the project was successfully completed on budget and ahead of schedule during the period of October - December 2014.



Constructing the breakwaters.

This first phase of the project included the crushing and recycling of old broken concrete previously used as shoreline protection and the construction of approximately 1,040 linear feet of limestone revetment and offshore breakwaters. The rock revetment and breakwaters are designed to lessen the impact of the waves on shorelines and structures behind them. As waves hit the rock structures, they will break and dissipate energy. The reduction in wave energy lessens erosion along the shoreline, protecting any structures, parking areas and wetland habitats.



“Protecting the wetland habitat at Indian Point will not only benefit the wildlife but will also continue to provide the community with a high quality nature park” said Martinez. It is expected that over a period of time a more stable wetland marsh will develop behind the rock breakwaters.

Although this first phase of the project has been completed the partners are anxious to finish the entire 2,800 linear feet project by constructing an additional six segments of offshore breakwaters just as soon as more funding can be secured.

Photos: CBBEP File unless otherwise indicated.



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 the Texas Coastal Bend. CBBEP is partially funded by the Texas Commission on Environmental Quality and the U.S. Environmental Protection Agency.

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