

HABITAT RESTORATION



COLLABORATIVE

The Port Aransas Nature Preserve, located along the western portion of Port Aransas, Texas, bordering the Corpus Christi Ship Channel, features a diverse collection of habitats including freshwater and brackish marshes, estuarine areas, and wind tidal flats. Unfortunately, prior to a recent shoreline protection project, the preserve suffered from severe erosion, resulting in as much as 17 feet of shoreline retreat per year, according to reports commissioned by the Texas General Land Office (GLO).

If shoreline erosion were to continue at this pace, a breach of the uplands would quickly result in the permanent alteration of hundreds of acres of wetlands, destroying essential habitat for numerous species of finish, shellfish, migratory and shore birds, wading birds, waterfowl, and four species of sea turtles. Further destruction would also threaten coastal and nature tourism—a crucial element of the community's economy.

THE NATIONAL ESTUARY PROGRAM IN ACTION

To ensure the long-term protection of the area, the Coastal Bend Bays & Estuaries Program (CBBEP) forged a partnership to take action. Together, the group pooled funds and expertise to launch a \$6.35 million effort to protect more than 1,000 acres of wetlands.

To start, \$2.9 million was issued to the CBBEP by the National Oceanic & Atmospheric Administration (NOAA), which was used to leverage additional funding from the Texas General Land Office's Coastal Erosion Planning and Response Act. The GLO

EFFECTIVE

matched the NOAA funding with \$2 million and management assistance.

With \$4.9 million in hand, an engineering firm developed a feasibility, assessment and design plan, but the project as proposed would require an additional \$1.5 million. They turned to the city of Port Aransas, which had already initiated its own project to preserve the eroding shoreline. The city provided \$250,000 for this effort. The Airport and Channel Corporation also got involved with a \$1.2 million contribution. The corpo-

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Coastal Bend Bays & Estuaries Program



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ration's members, which include many property owners near this shoreline, have a vested interest in preventing shoreline erosion and keeping a public waterway to the ship channel from silting in. The collaboration between the CBBEP and its partners re-

sulted in a cost-effective, efficient and ecologically sound plan. The plan called for installation of rocky barriers to preserve the shoreline and provide housing structures for marine organisms and places for algae and other food sources to grow.

The project also includes the installation of carefully selected erosion-control structures adjacent to the Corpus Christi Ship Channel near Piper Channel. Engineers built two 800-foot jetties of rock and steel sheet pile at the mouth of Piper Channel and a 6,000-foot rock revetment along the shoreline. The revetment has low areas to maintain natural water flow to the wetlands in the nature preserve.

This unique project completed in June 2008 demonstrates how successful NEP efforts can be when local, state, and Federal organizations collaborate to achieve a common goal.

Visit **www.cbbep.org** to learn more about this and other CBBEP efforts.

EPA's National Estuary Program (NEP) is a unique and successful coastal watershed-based program established in 1987 under the Clean Water Act Amendments. The NEP involves the public and collaborates with partners to protect, restore, and maintain the water quality and ecological integrity of 28 estuaries of national significance located in 18 coastal states and Puerto Rico.

For more information about the NEP go to www.epa.gov/owow/ estuaries.



EPA-842F09001