Waste Program Successes

The Pierce Marsh Restoration Project

As one of the designated Natural Resource Trustees for the state of Texas, the TCEQ acts on behalf of the public to assess injuries to natural resources caused by oil spills or hazardous substance releases, determines appropriate restoration to compensate the public for those injuries, and ensures that responsible parties implement or fund those restoration activities.

Figure 1. Pierce March in Spring 2016

The Malone Service Company (MSC) Superfund Site in Texas City began operating in 1964 as a reclamation plant for waste oils and chemicals. Hazardous substances released through improper waste storage and disposal at the site caused injury to estuarine marsh sediments, terrestrial areas, and freshwater sediments. The Texas Natural Resource Trustees, including the TCEQ, Texas Parks and Wildlife Department, General Land Office, and the United States Fish and Wildlife Service (the Trustees), recovered $3.1 million on behalf of the public from the MSC settling defendants to

restore the equivalent of natural resources injured by the release of hazardous substances from the Site.

Figure 2. Transplanting Smooth Cordgrass in 2017

To compensate the public for injuries to estuarine marsh sediments, the Trustees selected a project to construct estuarine marsh habitat in nearby Pierce Marsh. Salt marsh communities are highly productive due to the dynamic environment in which they are found. This productivity drives the beneficial export of dissolved nutrients and carbon to estuarine waters. These ecosystems also provide a valuable food source and habitat for many juvenile and adult organisms.

In late 2015, the Trustees, with TCEQ in the lead role, entered into an agreement with the Galveston Bay Foundation to use MSC settlement funds to restore 70 acres of wetlands within Pierce Marsh. In spring 2016, more than 197,000 cubic yards of dredged material generated from United States Army Corps of Engineers Gulf Intracoastal Waterway maintenance activities was placed over 80 acres in Pierce Marsh to raise sediment elevations to a level where smooth cordgrass could grow again. Smooth cordgrass seed was placed within the project areas, and seedlings began to appear and populate within four months. Additional seeding and transplanting continued over the next two years.

Figure 3. Pierce Marsh in Spring 2019

Recent photos taken in spring 2019 show the area is nearly completely covered by smooth cordgrass. The marsh appears to be expanding on its own, and no further seeding efforts are anticipated to be necessary. The Pierce Marsh restoration project is a great example of how the TCEQ Natural Resource Trustee Program and the other Texas Trustees coordinate with other state and federal agencies and their project partners to cost-effectively compensate the public for injuries to natural resources. To learn more about the program, visit our Texas Natural Resource Trustee Program web page.