

Money Point Revitalization - Chesapeake, Virginia

Project Summary: Money Point is one of the first large-scale examples in Hampton Roads of how green infrastructure can reduce flooding. The project restored seven acres of tidal marsh along the Kinder Morgan Elizabeth River Terminal industrial shoreline by adding a three-acre oyster reef, natural shoreline, and a marsh with marsh sill. It accomplished the goal of habitat-based resiliency and reduced flooding, an important secondary benefit.

Project Name: Money Point Revitalization Project

Location: Kinder Morgan Elizabeth River Terminal in Chesapeake, VA

Description: Money Point was a highly contaminated part of the Elizabeth River due to a defunct creosote wood treatment plant. But with the help of The Elizabeth River Project, Money Point is now a thriving, living community. The finished project has three different components that create a continuum of habitat from an oyster reef in the river to an upland forest. The oyster reef slopes up to a restored marsh, which rises to a ten foot forested berm planted with native shrubs and trees. The berm was formed from the soils bulldozed to create the marsh. The invasive plant *Phragmites* was eradicated during the marsh creation and planted with native saltmarsh cordgrass.



The rocky shoal and ten-foot berm help reduce flooding and erosion from storm surges and wave action from the Elizabeth River.

Approximate cost of the project: \$1.2 million

Resource challenges addressed: Sediment contamination from creosote, lack of fish diversity in the river, increased levels of fish cancer, erosion, flooding of the terminal, and *Phragmites* invasion

Key partners (public and private): The Elizabeth River Project, Kinder Morgan Elizabeth River Terminal, South Norfolk Civic League, Hess, Citgo, and Coastal Design and Construction

Types of jobs created: While there were no specific jobs created, this project provided work for Coastal Design and Construction during the recession, keeping their employees working.

Results and accomplishments: The former industrial shoreline at the Kinder Morgan Elizabeth River Terminal is now a fully functioning living shoreline. Even though the project did not target flood control, Kinder Morgan has seen a dramatic reduction in flooding since it was completed in 2009. Additionally, 90 percent of the wetland plants survived after the first year, surpassing the goal of 80 percent. Fish biodiversity also has rebounded from four species to twenty-six species in the river. Another great benefit for fish was the significant reduction of cancer rates in mummichog fish from 40 percent to 6 percent. After the project PAH (polycyclic aromatic hydrocarbons) contamination was reduced from over 1,000 parts per million to around 5 parts per million.

Website: <http://www.elizabethriver.org/money-point-revitalization>

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*Photo and content courtesy of The Elizabeth River Project