## ESSEX SKYPARK LIVING SHORELINE

# Bayeand

#### **DESCRIPTION**

### Essex, Baltimore County, MD

Baltimore County Department of Environmental Protection and Sustainability (DEPS) completed a Shoreline Enhancement Feasibility Report in 1998 and the Back River Rural Legacy Ecological Assessment Report in 2005. Both reports identified portions of the shoreline at Essex Skypark along the east shore of Back River as an area that would significantly benefit from shoreline stabilization and enhancement. In 2009, DEPS initiated the project to protect and enhance 2,610 linear feet of severely eroded shoreline. Many trees along the shoreline have toppled over exposing the clay soils and causing bank recession. The project included off-shore stone sills and breakwaters to dissipate wave energy combined with bioengineering and tidal wetland creation. The project helped to achieve sediment and nutrient reduction goals for Back River and ultimately the Chesapeake Bay. Funding partners for this project include the Chesapeake Bay Trust, the National Oceanic and Atmospheric Administration and the Maryland Department of the Environment.

BayLand was hired to collect necessary field information; obtain Federal, State and County permits; provide a complete and functional design including construction plans and bid documents; and provide construction management services. The permitting and design phases of the project included topographic and hydrographic survey, geotechnical investigation, State and Federal permits, and preliminary, prefinal and final design and construction documents.

This project was showcased by the Expert Panel to define Total Maximum Daily Loads Pollutant Removal Rates for Shoreline Management Projects. The pollutant load reduction for this project was calculated to be 755, 193 and 462,596 pounds per year removal of Total Nitrogen, Total Phosphorous and Total Suspended Solids respectively.

 Client | Baltimore County Department of Environmental Protection and Sustainability

Engineer | BayLand

Completed | 2012

Construction Cost | \$1,100,000

#### **PHOTOS**







BayLand Consultants & Designers, Inc.