

Talisman Plantation: Living Shoreline Restoration & Protection of Hoghole Creek

Project History

In 2020, during a routine annual stewardship visit to Talisman Plantation, the property manager (*Brian Lowery*) expressed concern with how much shoreline had been lost to erosion over recent years - a catalyst that led to the later foundation of an Enhanced Stewardship initiative at ESLC. In late 2022, ESLC brought ecological restoration companies to view the site and eventually began working with **Ecotone, LLC** to address the farm's shoreline erosion and proactively protect the important habitat of Hoghole Creek. Through a Clean Water Commerce Act (CWCA) award, Ecotone was able to complete construction of this project in May 2025. ESLC will act as the long-term steward of this restoration project for program and permit compliance for the next 20 years.

Restoration Details by Numbers

- 2,445 linear feet of shoreline restored
- 2,435 tons of total suspended solids reduced per year*
- 6,396 pounds of total nitrogen removed per year*
- 2,101 pounds of total phosphorus removed per year*
- 280 trees and shrubs planted
- 1.24 acres of marsh habitat planted

Functional meets Beneficial

Rock sills and sand fill provide protection and a substrate for marsh planting along Prospect Bay. The sills provide necessary protection from wave energy to allow the vegetation to establish, which will provide further dissipation of wave energy. Areas between sills provide unvegetated beach habitat for horseshoe crabs and terrapins to nest.

*Nutrient reductions calculated using recommendations of the Expert Panel to define terms (Amended 2019), and the 2020 MS4 Accounting Guidance Document. management projects

The Where and How

Talisman Plantation, located in Grasonville, was protected with a 650-acre ESLC conservation easement donated by the Kudner family in 1998.

Below shows an original concept plan developed by Ecotone for addressing the shoreline erosion. In addition to creating rock sills to break incoming wave energy, the plan includes enhancement of existing habitats through treatment of invasive *Phragmites australis* and plantings of native trees and shrubs.





The shoreline of Talisman Plantation experiences significant wave action from storm surges and boat traffic. This photo shows the nearly 2,500 linear feet of bay-facing shoreline protected by this project.



- This project protects 13,232 feet of shoreline experiencing erosion along Prospect Bay and within Hoghole Creek with just 2,445 feet of living shoreline.
- The stretch of shoreline just north of Hoghole was experiencing **erosion at an average rate of 7.57 feet per year**, according to transect data provided by Digital Shoreline Analysis System (DSAS). The highest transect was a rate of 8.82 feet per year.
- In the last five years (2020-2025), Hoghole Creek has provided around 7 acres of submerged aquatic vegetation (SAV) habitat.
- Ecotone staff surveyed, designed, and permitted the project, and subcontracted Environmental Construction Company to install the living shoreline.

Protected from the open waters of Prospect Bay in Grasonville, Hoghole Creek is a calm, tidal cove of important SAV nursery habitat for crabs, fish, and waterfowl.

Project Timeline From securing funds and permits to construction, this project took 2.5 years.

July 1, 2021: Restoration

(now under the umbrella

Stewardship) initiative

December 2022 - 2023: Grant funding is pursued for the project. Ecotone is

granted funds through

the CWCA in May 2023.

January - May 2025: Ecotone constructs the project in early 2025, finishing with a spring planting of the marsh.

July 9, 2020: Erosion issue identified during annual stewardship visit to the property.

of Enhanced

begins at ESLC.

May - October 2022: Restoration firms were invited by ESLC to view the site. Ecotone elects to pursue the project.

June 2023-2024:

Ecotone performs design and permitting services for the project.

May 2025:

ESLC begins long-term monitoring duties for performance and permit compliance of the project.

ESLC's Role in the Project

ESLC was responsible for securing an ecological restoration firm who could address the shoreline erosion. ESLC also assisted with early grant applications to fund the project. When Ecotone was able to secure CWCA funding for the project, ESLC helped with landowner coordination and review of the project during its design and permit phase to ensure compliance and consistency with the property's conservation easement and conservation values.

Because this project is considered "Pay for Performance" through the CWCA, this has provided a unique opportunity for ESLC to act as a long-term steward of the restoration site. For the first time, ESLC will be a subcontract to Ecotone to perform long-term site stewardship, which consists of monitoring the site for compliance with permit and program requirements. Data will be collected and reports will be written by ESLC for Ecotone to submit to applicable permit and program agencies for the next 20 years.

Living shorelines provide adaptive resiliency, becoming stronger over time as marshes respond to sediment deposition and grow with changes in tides - providing long-term resiliency for this protected property.