



## Outreach and Restoration

This program was established to provide accessible funds to organizations and agencies to implement community-led stewardship efforts that increase public understanding of environmental challenges; implement demonstration-scale, community-based, on-the-ground restoration projects; and expand the base of public support necessary to advance the restoration of Maryland's bays, tributaries, and other natural resources.



## Design and Construction of Living Shoreline at YMCA Camp Letts

The new shoreline will stop long term erosion of the site, dampen wave energy, improve water quality, and protect camp infrastructure. The camp will also use this project as a living classroom for a budding environmental education program to teach students about marshes and Bay restoration.

West/Rhode Riverkeeper, a 501(c)3 organization, works to protect families and communities by stopping pollution, enforcing environmental law, promoting restoration, and advocating for better environmental policy. The West/Rhode Riverkeeper has successfully completed numerous living shorelines in the past and has gotten the public excited and involved in all of the projects. By continuing to support living shorelines such as the one on YMCA Camp Letts property, the Riverkeeper organization can continue to work towards the goal of creating cleaner rivers and a cleaner Chesapeake Bay.

practices and furthering visitors' understanding of Bay ecology and restoration.

Camp Letts is also a hub of activity and hosts roughly 200,000 visitors throughout the year. These visitors range from youth attending the well-known camp during the summer to community events such as the SPCA Puppy Plunge, Thanksgiving Day Turkey Chase (a 5 or 10K race), Chesapeake Wingstock among others. The Camp also hosts private events such as weddings.

Projects taking place on highly visible sites such as Camp Letts will further the public's awareness of the practice, help to bolster public support of future projects and inspire waterfront landowners to install similar projects on their own property. YMCA Camp Letts is a strong partner in this effort. Camp Letts is committed to educating visitors on environmentally sound

The restoration site is located at one of the most prominent locations of the camp, immediately adjacent to main lodging cabins and the main field. This high-traffic area ensures that most visitors to the camp will see the project. The camp has also agreed to post interpretive signage detailing the project to passively educate visitors.

### Track 3: Outreach & Restoration

**5,180** sq. ft. of wetlands enhanced

**214** linear ft. of shoreline repaired

**294** sq. ft. of bank stabilized

**4,540** native plants planted

**4,500** sq. ft. of marsh grass planted



# Project Elements

**Outreach/Awareness:** 600 middle school students from local schools were involved in the planting of this portion of the project. These students planted 148 native trees and 129 native shrubs throughout the entire project. They also planted roughly 4,500 native marsh grasses in the 294 linear feet of the project that was stabilized through this grant. These students were growing Submerged Aquatic Vegetation (Redhead grass) in their classrooms, so they planted these grasses near the large breakwater. As the project was being built a group of students in a Montgomery County Schools program that targets at-risk students visited the site. The project was discussed including information about stressing factors, reasons for the stressors and the engineered plans. After discussing all these factors of the project to students were brought to the in process construction site to be shown what the process really looked like. Countless visitors also attended camp and staff discussed the project with them in a more informal fashion.

**Restoration:** This grant paid for the design of the entire project and the construction of the first portion. The design for 954 linear feet of living shoreline was completed by Sustainable Science, LLC and the entire project has been built by Environmental Concern. The first phase of construction has also been planted with the help of Anne Arundel County’s Department of Outdoor Education (Arlington Echo). The portion of the project built by this grant is a 214 linear foot long sill that was placed 50 feet off shore to height of +1ft MHW, sand was placed landward of this sill so that it would connect with the bank. This portion of the project created roughly 4,380 sq. ft. of marsh. This portion of the project also removed some dead and dying trees that were growing along 80 feet of eroding bank to prevent them from shading out a small strip of marsh. Now that the trees are removed, the existing marsh gets more sunlight. Students from Arlington Echo planted marsh grasses to help the marsh spread and also planted low growing shrubs along the bank to help stabilize it. This enhanced strip of shoreline created 800sqft of additional marsh.



**This living shoreline project restored a significantly-eroded section of the Camp Letts campus.**

CBT Funds Awarded:	\$138,120
Anne Arundel County:	\$5,350
Camp Letts:	\$165
Environmental Concern:	\$1,600
West/Rhode Riverkeeper:	\$4,260
<b>Total:</b>	<b>\$149,495</b>

## Project Partners:

