



UNITED METHODIST CENTER COASTAL RESILIENCE PROJECT

Installing Living Shorelines and
Wetlands in Anne Arundel County,
Maryland

PROJECT GOALS

The West River United Methodist Center, a camp and outdoor recreation facility located in southern Anne Arundel County, Maryland, installed resilient shoreline and wetland features to combat destruction caused by flooding, extreme storm events and other climate change impacts.

COMMUNITY AND ECONOMIC BENEFITS

- Installing natural and nature-based living shoreline features will help enhance the resiliency of the center, while lowering costs related to flooding impacts.
- Provided greater and easier access to the water for recreational activities.
- The camp provides educational opportunities to help community members and students become more engaged environmental stewards.
- Planting trees and other vegetation improves community aesthetics, which promotes social interaction and recreation.

ENVIRONMENTAL BENEFITS

- Installing natural and nature-based components improves air and water quality, which enhances public health and wellness.
- Planting native vegetation decreases flooding and reduces the amount of nutrient pollution entering local waters and ultimately the Bay.
- Installing shoreline vegetation decreases flood impacts by reducing wave energy.
- Restoring native vegetation provides vital wildlife habitat.
- Adding green infrastructure features and stabilizing shorelines increases shoreline resiliency to heavy storm events.



Volunteers help with planting at living shoreline.
(Photo by Ethan Weston/Chesapeake Bay Program)

“ The living shoreline project is a win-win all around. When a camper or guest comes to The West River Center, our goal is for them to experience and grow in their love of God, self, neighbor and nature. The living shoreline helps us achieve each of these goals by enhancing the beauty of the shoreline and helping our guests feel connected with the water.”

- Chris Schliekert

*Delaware Forest Service urban and community
forestry program director*

CONSERVATION PROJECTS INSTALLED

- Regenerative stormwater conveyance with step pools.
- Cobble beach features.
- Vegetative headland breakwater.
- Low marsh, high marsh and wetland plantings.

PROJECT SUMMARY

In June 2021, the Maryland Department of Natural Resources announced the installation of resilient shoreline and wetland features at the West River United Methodist Center, a camp and outdoor recreation facility in southern Anne Arundel County, Maryland. The United Methodist Center is located on the West River in an area vulnerable to flooding, erosion and coastal storm impacts. A failing bulkhead was replaced with an 885-linear-foot living shoreline with vegetated breakwater and cobble beach components that will address rising tides, enhance wildlife habitat and help protect existing infrastructure from storm surge and coastal impacts. These natural features are complemented by a 430-linear-foot regenerative stormwater conveyance wetland that is designed to safely carry stormwater through the campus and to the shoreline. A nature center, also part of the campus, provides community members of all ages with educational opportunities that will help them to become engaged environmental stewards.

Photo monitoring posts have been installed at the project site for community scientists to monitor and track changes to the shoreline. For more information, see the MyCoast Restoration Tracker at <https://mycoast.org/md/restoration-tracker/about>.

THINGS TO CONSIDER


- Ongoing education is needed to ensure that installed protective measures are monitored and maintained, which will ensure continued resiliency.
- Include designated access paths in the living shoreline design to protect vegetation.
- Plan to reevaluate planting needs over time.


THE PARTNERS AND FUNDING SOURCES

- Chesapeake and Coastal Service, Maryland Department of Natural Resources.
- West River United Methodist Center.
- Alliance for the Chesapeake Bay.
- Underwood & Associates.
- Sustainable Science, LLC.

CONTACTS

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A living shoreline that replaced a bulkhead at West River United Methodist Center. (Photos by Ethan Weston/Chesapeake Bay Program)



Brady Bowers plants marsh grass at the center's living shoreline. (Photos by Ethan Weston/Chesapeake Bay Program)



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