

Functions and Benefits of Living Shorelines

Increase habitat—Marsh grasses, trees, shrubs, provide habitat for fish, mammals, amphibians, reptiles, birds, and insects. These diverse creatures are essential for a healthy Bay ecosystem. Healthy shorelines can provide a safe haven for young and spawning fish, crabs, and birds in shallow water.

Increase property value—Prospective homebuyers are attracted to natural settings with plenty of wildlife and aesthetic beauty.

Reduce erosion—Deep root systems of marsh grasses, shrubs, and trees absorb stormwater and help to stabilize shorelines.

Minimize pollution—Naturally vegetated shorelines act as buffers to filter and absorb nutrients, such as nitrogen and phosphorus from upland landscapes, which can severely reduce water quality and available habitat

Clean air—Dust, ammonia, carbon dioxide, and other airborne pollutants that can be hazardous to human health, can be trapped by trees and other plants.

Provide a sense of place and privacy— A natural landscape can provide spaces to relax and enjoy the outdoors.

Place
Stamp
Here



LIVING
SHORELINES
*A guide for waterfront
property owners*

Why Living Shorelines?

Waterfront property owners have a special responsibility. Why? Because, the shoreline is one of the most dynamic habitats on Earth. Now more than ever, with development pressure increasing, it is critical to protect and preserve these important areas. Shorelines, which include beaches, marshes, and forests, are vital to the health of the bay and its tributaries. The transition zone between the land and water is home to many species of fish, turtles, shorebirds, and other important aquatic organisms.

When the shoreline is hardened with rock or bulkheads, not only is the habitat destroyed, but the natural ebb and flow of sediments is disrupted. The movement of these sediments is critical to maintaining stable shorelines and beaches, and productive shallow water habitat. A decision to maintain or restore natural shoreline does not preclude access or use, but rather enhances enjoyment and productivity of the waterfront environment.



The Approach

Structural shore erosion control methods may be necessary in areas with high rates of erosion and typically result in a barrier type structure or "hardening" of the shoreline. These include bulkheads, concrete walls, stone reinforcement, stone breakwaters, and jetties. Structural methods are the least encouraged means of shoreline stabilization and in many instances are overused in environments where wave energy is moderate or low.

Non-structural shore erosion control methods use vegetation and other natural materials to help protect shorelines from excessive erosion while allowing the shoreline to retain its dynamic nature and habitat features. Marsh grasses provide shallow water habitat and the deep root systems and dense foliage help reduce wave action and hold soil in place. Non-structural types of shore erosion control measures help maintain the natural function of the shoreline.

The Land and Water Interface

The Critical Area Buffer forms the transition zone between land and water along the Chesapeake Bay and its tidal tributaries. The Buffer, a 100-foot naturally vegetated area, is measured landward from the mean high water line of tidal waters and from the landward edge of tidal wetlands and tributary streams. The Buffer performs important functions, such as filtering sediment, nutrients and toxic substances from stormwater runoff and providing habitat for terrestrial and aquatic species. The Buffer also minimizes the adverse impact of human activities on the Chesapeake Bay.



WETLAND, SHORELINE, AND WATERWAY CONSTRUCTION INFORMATION
MD Department of the Environment
(410) 537-8094 (Nontidal Wetlands and Waterways Division)
(410) 537-8075 (Tidal Wetlands Division)
www.mde.state.md.us/Programs/WaterPrograms/Wetlands_Waterways
United States Army Corps of Engineers
(410) 962-5688

TECHNICAL AND FINANCIAL ASSISTANCE
MD Department of Natural Resources
Shore Erosion Control (410) 260-8523
www.dnr.state.md.us/forests/programapps/sec.html
Fisheries Service (410) 260-8269

FOREST BUFFER PLANTING
MD Department of Natural Resources
Forest Service website at www.dnr.state.md.us/forests
Critical Area Commission
(410) 260-3460 and www.dnr.state.md.us/criticalarea
BayScapes Program, Partners for Fish and Wildlife
U.S. Fish and Wildlife Service
(410) 573-4500 and www.fws.gov/r5cbfo

TO LEARN MORE ABOUT BAY-FRIENDLY LANDSCAPING
Chesapeake Bay Foundation
(410) 268-8816 and www.cbf.org
Critical Area Commission
(410) 260-3460 and www.dnr.state.md.us/criticalarea

NATIVE PLANT INFORMATION
Critical Area Commission
(410) 260-3460 and www.dnr.state.md.us/criticalarea/
MD Native Plant Society website at www.mdflora.org



Published by the Severn River Association in cooperation with the Chester River Association with support from the Fear The Turtle Fund U of MD.

