## **Shoreline Defense - Vegetated Buffers**

We love to live right on the edge or within sight of water. Often, though, the way we develop shorelines and water views threatens the health of our ponds and rivers.

One trend has been to remove the natural vegetation along the shore and replace it with lawns, concrete walls or trucked-in sand.

The problem is that storm water runoff carries a huge amount of pollutants into a pond, unless the runoff is captured in vegetation growing along the pond or on the slopes above it.



Figure 13. Natural barriers such as beaches , dune vegetation , wetlands , coastal forests , and vegetated stream buffers protect residential areas and urban areas from flooding, erosion, and inundation. Natural barriers also protect crops and agricultural areas

Diagram courtesy of the Integration and Application Network (ian.umces.edu), University of Maryland Center for Environmental Science. Source: Boesch, D.F. (editor). 2008. Comprehensive Strategy for Reducing Maryland's Vulnerability to Climate Change Phase I: Sea-level rise and coastal storms. Report of the Scientific and Technical Working Group of the Maryland Commission on Climate Change. University of Maryland Center for Environmental Science, Cambridge, Maryland. This report is a component of the Plan of Action of the Maryland Commission on Climate Change, submitted to the Governor and General Assembly pursuant to Executive Order 01.10.2007.07.

A great solution to this problem is planting beds of plants (especially native plants) along the shoreline -- trees, shrubs, grasses, wildflowers and ground cover. These are called "vegetated buffers." These buffers slow down, trap, and filter runoff (carrying sediment, sand oil, gas, anti-freeze, pesticides, fertilizers and pet droppings) before it enters the ponds.

Green buffers also prevent shore erosion, add beauty to our yards, preserve habitat for plants and animals, and discourage geese from crossing them to graze on our lawns - just as the original, undeveloped shoreline did.



Use YardMap software to map and plan your property's habitat stewardship features.

http://content.yardmap.org/explore/the-average-american-yard/

**Another tip:** Avoid paved or straight paths from your home to the shoreline. Instead create a curved path that reduces the velocity of runoff water rushing downhill.