



Calvert County Department of Planning and Zoning
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LIVING SHORELINES IN CALVERT COUNTY



A GUIDE FOR PROJECT SELECTION

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WHY ARE SHORELINES IMPORTANT?

A shoreline is the interface between the land and the water. Nutrient/sediment runoff and habitat for fish/wildlife are affected by the characteristics of a shoreline. Many studies have shown that the coastal areas are declining in both water quality and habitat. One way to reverse the trend is to change the way we control shoreline erosion.

WHAT IS A LIVING SHORELINES APPROACH?

It is a shoreline management practice that provides erosion control by protecting, restoring or enhancing natural shoreline habitat. Standard erosion control practices generally uses rock or concrete to "harden" the shoreline. This approach is often effective at controlling erosion, but can increase nutrient and sediment run-off into the bay, and reduce habitat for fish and wildlife. The *Living Shorelines* approach controls erosion and maintains natural coastal characteristics through the strategic placement of plants, stone, sand fill and other materials.

ARE LIVING SHORELINES EFFECTIVE AT EROSION CONTROL?

Yes, *Living Shorelines* can be very effective, especially if designed and built to address the site's specific issues and dynamics. To receive a copy of *Assessing the Effectiveness of Non-structural and Hybrid Erosion Control Measures* contact the Maryland Coastal Program at 410-260-8732. *Living Shorelines* can be implemented on virtually any shoreline property. There are some instances however, where erosion control is best achieved with standard methods. The "energy environment" (strength of waves and exposure to storms) plays a large role in determining what method is most appropriate for a site. The three categories of shore erosion control are outlined below.

NON-STRUCTURAL

Energy Environment: Low

Project Types: Marsh plantings on existing substrate or fill, beach nourishment

Project Aspects: Habitat restoration/creation achieved without structures; limited erosion control.

HYBRID

Energy Environment: Medium

Project Types: Continuous sills, low profile & segmented sills, marshy islands, coir fiber log or stone edging, and groins with planting

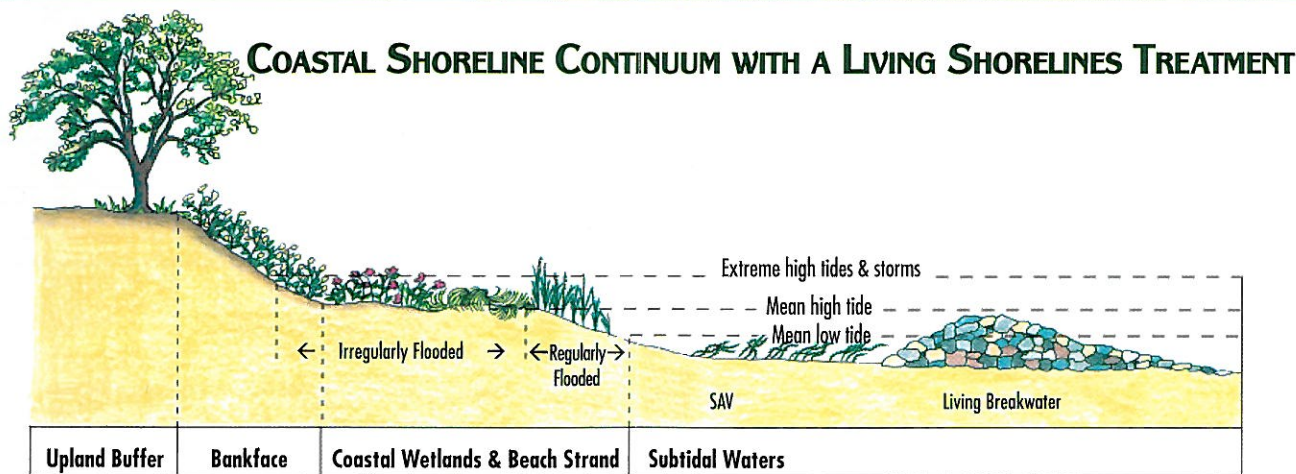
Project Aspects: Habitat restoration/creation assisted with structures; erosion control & habitat benefits variable depending on project selected.

STRUCTURAL

Energy Environment: High

Project Types: Headland control and breakwaters with sand fill and/or plantings.

Project Aspects: Primarily address erosion control concerns; habitat enhancements are limited, but can be achieved through careful design.



Burke Environmental Associates

REQUEST MORE INFORMATION

- I would like to know if my shoreline is suitable for a *Living Shoreline* project.
- I would like to know about financial assistances available to construct *Living Shorelines* project on my property.
- I would like a list of consultants who can construct a *Living Shoreline* project on my property.
- I would like to manage my bluff.
- I would like to learn about tiger beetles.

Comments: _____

Name: _____

Address: _____

Telephone: _____

Email: _____

Typical Project Costs Per Linear Foot

Low Energy \$150 - \$250

Medium Energy

Minor Tributary \$150 - \$300

Major Tributary \$450 - \$600

High Energy \$750 - \$1,200