Living Shorelines Benefit <u>You</u> By:

- Reducing bank erosion and property loss for you and your neighbors

- Providing an attractive natural appearance

- Opportunities for funding assistance through low-interest loans, cost-sharing grants, and other programs

- Streamlined permitting process for some projects with a general permit

- Improving water quality and clarity for safer fishing and swimming

- Improving marine habitat and nursery areas to support seafood industry

Living shorelines preserve the natural connection between water, shoreline, and upland – providing better habitat for fish, birds, and other animals.

Remember:

Every action on a single shoreline may impact neighboring shorelines, rivers, and the Chesapeake Bay.

Shoreline change should be avoided unless erosion is causing major property loss.

Preserving, creating or enhancing natural systems such as marshes, beaches, dunes, and coastal forests are the preferred methods for reducing erosion.

"Preserving our coasts one shoreline at a time"

Living Shorelines

Better for property owners and the environment:
Virginia's preferred approach for shoreline erosion management

Have a question about living shorelines?

Visit our Website:

or Email Us:
CCRMinfo@vims.edu

Managing Your Shoreline

Contact CCRM

VIMS | WILLIAM & MARY
VIRGINIA INSTITUTE OF MARINE SCIENCE
CENTER FOR COASTAL RESOURCES MANAGEMENT

... researching shorelines for over fifty years

www.vims.edu/ccrm/topics/shoreline

All About Living Shorelines

Virginia's shorelines, marshes, beaches, and tidal mudflats provide critical habitat for many Bay plants, fish, crabs, birds, and other animals that are important for local communities and businesses, and are critical for improving the health of the Chesapeake Bay.

These natural areas are threatened by sea-level rise, development, and construction of shoreline defense structures. Armoring shorelines with bulkheads and rock walls impacts the Bay by decreasing water quality, destroying fish and wildlife habitat, and increasing erosion on neighboring shorelines. As people continue to build these structures to reduce erosion on their banks, we have lost hundreds of miles of natural shorelines and the benefits they provide. Living shorelines are a way for us to reverse those impacts on the Bay.

What are Living Shorelines?

"Living shoreline treatments" are nature-based shoreline management practices that address erosion through the strategic placement of plants, stone, sand fill, and other structural and organic materials, intended to mimic a natural shoreline in looks and benefits. These methods can be used alone or in combination.

Non-Structural Options

- Shoreline Vegetation Management
- Beach Nourishment and Dune Restoration
- Tidal Marsh Enhancement
- Tidal Marsh Creation
- Bank Grading
- Fiber Logs

Structural Options

- Marsh Toe Revetment
- Marsh Sill
- Offshore Breakwater System
- Oyster Reef

Why Living Shorelines?

- Living shoreline projects can be installed on tidal shorelines as well as freshwater ponds and lakes wherever erosion is a problem.

- Virginia and other coastal states now have policies that living shorelines are the preferred way to address erosion.

- Less shoreline armoring is necessary for the future health and productivity of our estuaries.

Will a Living Shoreline Work for You?

Non-structural living shorelines, like planting and changing slopes, are best for sheltered areas with low-energy waves. If your shoreline has (or had) marsh or beach and low banks, this option may work for you.

If your property is on a creek or river with large waves or boat wakes, or if your high bank is eroding, then structural options like low-profile oyster reefs, rock sills and breakwaters can be used to protect planted marshes or new sand beaches.

Nature-based approaches are not suitable for some situations.

An easy-to-use **Shoreline Decision Support Tool** can help you choose an effective erosion control practice: just answer a series of questions about your shoreline conditions to get a recommendation.

https://cmap2.vims.edu/LivingShoreline/DecisionSupportTool/

Living Shoreline Design Alternatives: Guidelines & Pictures

www.vims.edu/ccrm/outreach/living_shorelines/design

Managing shoreline erosion is a complex subject.
Seek professional guidance for help with your project.