

Shoreline Erosion Advisory Service

- Organization: Virginia Department of Conservation and Recreation
- What is Provided: free, unbiased technical assistance including site investigations, written advisory reports, design and plan reviews, construction inspections, and guidance on available financial incentive programs.



- Who Qualifies: private property owners (residential and agricultural), localities, and state and federal agencies experiencing shoreline or streambank erosion across Virginia
- <u>Contact</u>: Aaron Wendt (804) 296-1701 or <u>aaron.wendt@dcr.virginia.gov</u> http://www.dcr.virginia.gov/soil-and-water/seas







Opportunities: VCAP

Organization: Virginia Association of Soil and Water Conservation Districts; administered by individual districts

What is Provided: Financial reimbursement of 80% of the total costs, up to \$30,000

Who Qualifies: Public, private, non-profit, and commercial landowners within a participating district. Eligible shorelines must have no more than 1.5-mile fetch distances in any direction, and any structures onsite must be at least three years old

Contact: Your local district

Colonial: robyn.goad@colonialswcd.net, Northern Neck: lowery.becker@nnswcd.org





Lower James SWCDs



Colonial SWCD: James City, Charles City

James River SWCD: Prince George

Peanut SWCD: Surry, Isle of Wight, Suffolk

Virginia Dare SWCD: Chesapeake, VA Beach

No District: Newport News, Hampton, Norfolk, Portsmouth

Virginia Agricultural Cost Share Program (VACS) used for Berkeley Plantation LS





Opportunities: Elizabeth River Project

Living Shorelines on the Elizabeth River

- ERP is actively looking for subcontractors to construct living shorelines
- Projects mostly designed & permitted by ERP, subcontractors needed for install
- Projects cost shared to ease cost burden on landowners – tell your clients!
- Contractors with all levels of training welcome – Shadow an installation, volunteer, become familiar with techniques
- Contact: Phoebe Murrell, <u>pmurrell@elizabethriver.org</u>
 757-861-1821



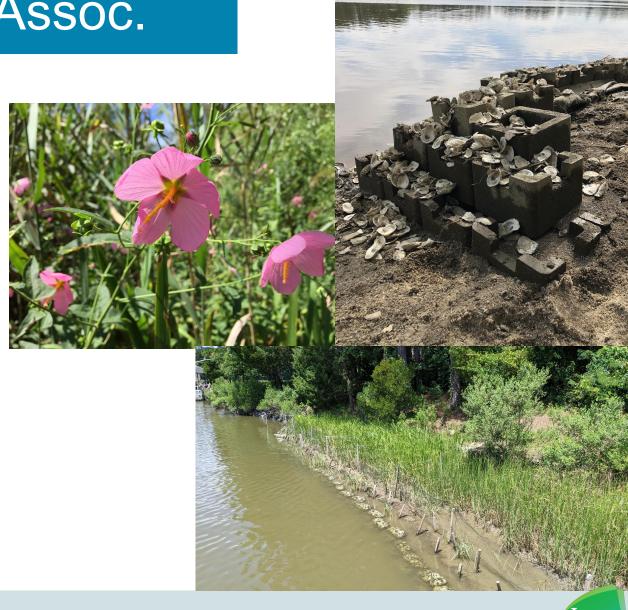




Opportunities: James River Assoc.

Living Shorelines on the Lower James

- JRA is looking for contractors!
- Living shorelines are designed and permitted by JRA staff.
- Need contractors to do installations and maintenance on existing projects!
- Grant funded cost-share program for homeowners
- We will send out an RFQ soon
- Contact: Ryan Walsh
- rwalsh@thejamesriver.org 757-703-0671







LRNow Living Shoreline Opportunities





- LRNow coordinates 1-3 residential living shorelines in Virginia Beach each year
- Subcontract for design and installation
- Funding assistance from VCAP, VBCAP
- Volunteer labor to further reduce cost to homeowners
- Contact: Vince Bowhers, Vince@LRNow.org 757-773-1636



Opportunities: Middle Peninsula

OWNERS CONTRACTORS GRANTS/LOANS ABOUT FIGHT FLOOD FYI REGISTER SOLUTIONS INVESTMENTS





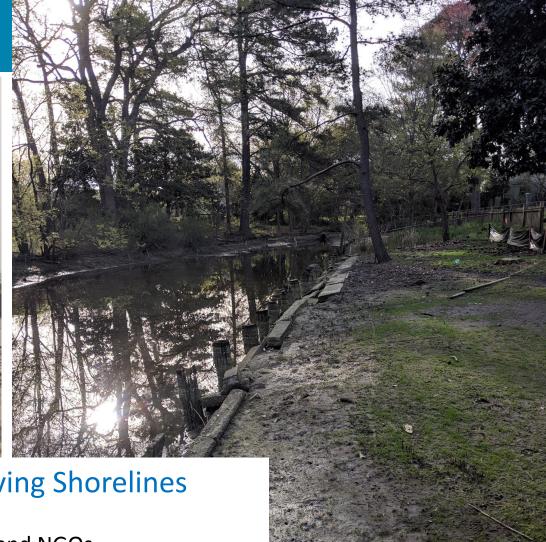






Advise & Manage





Evaluate the Site, Educate the Client, Recommend Living Shorelines

Look for need (failing bulkheads, eroding shorelines)

Vegetation assessment & management plan for shoreline contractors and NGOs Sustainable and green infrastructure practices to reduce erosion (buffers, rain gardens, etc.)





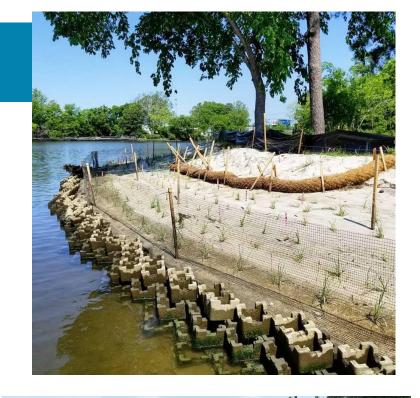
Advise & Manage

ID best approach for your client & site

Research & connect with funding sources

Connect client with technical experts & subcontractors





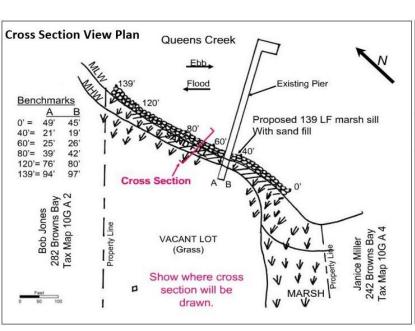


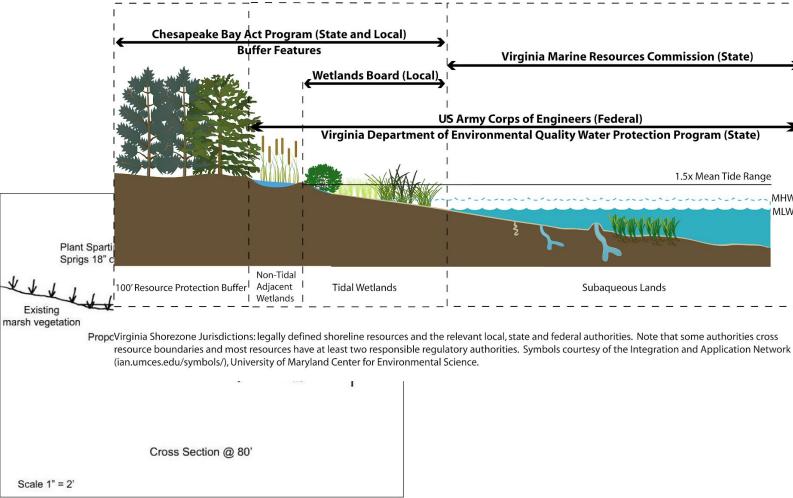




Design, Drawings, Permitting

Start with low energy site Partner with other pros









Planting Design



Glasswort Has succule with scale-li 4-20 inches July to Nove

Marsh hibis

mallow - Hill

moscheutos showy white

and alternat

up to 12 ft.

to Septemb

Marsh mall

virginica. Ha

hibiscus-like

alternate lea

dense hairs and blooms August.



Salt Meadow Plants found in areas of periodic inundation



Saltmeadow hay - Spartina patens. Leaves are in-rolled not 2-ranked with densely overlapping spikelets borne only one one side of axis. It grows from 1-3 ft. and blooms from July to September.



Salt grass - Distichlis spicata. Has a terminal spike inflorescence and 2-ranked leaves. It grows 8-16 inches and blooms from July to



Sea lavender - Limonium spp. Has basal leaves and lavender flowers that bloom from July to October. Plant grows up to 3 ft.



Salt marsh aster - Aster tenuifolius. Has alternate, flexuous linear leaves and pale purple, blue or white



conspicuous white flowers i fall. Grows up to 8 ft and blooms from September to October.



Switch grass - Panicum virgatum. Has straw-colored paniculate inflorescence. It grows up to 3 ft. and blooms from July to September.



Seaside goldenrod -Solidago sempervirens. Has dense clusters of yellow flowers and alternate lanceshaped leaves. It grows from 4-5 ft, and blooms from August to October.



Marsh elder - Iva frutescens - has opposite fleshy, lanceshaped toothed leaves, with small greenish white flowers that are not prominent. It grows 2-6 ft. and blooms in August to October.

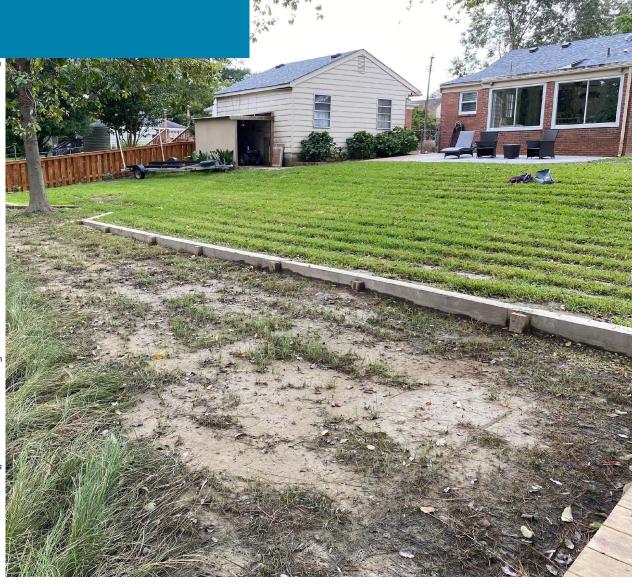












Design

Enhance Water Views Restore Buffer Provide Access













Provide Materials, Labor, Equipment

Plants Sand Coir logs Rock Fiber mats Goose fencing Wooden stakes E&S Site prep Aquatic pesticide applicator





Images: Elizabeth River Project & Bay Environmental





Monitor & Maintain



Images: Wetlands Watch Elizabeth River Project's River Star Homes Living Shorelines





Project Manager or Subcontractor







Protect Sensitive Features During Construction

- Vegetation & Soil Protection Exclusion Fencing
- Avoid soil compaction and tree root damage from vehicles & foot traffic – protect ground w/
 - 6-12" wood chips
 - ¾" thick plywood
 - 4x4" wood beams over 4"+ woodchips
 - 4-6" gravel over taut, staked geotextile fabric
 - Commercial logging or road mats on top of mulch layer.
- Make sure erosion control methods are in place and functioning at all times and remove when finished.

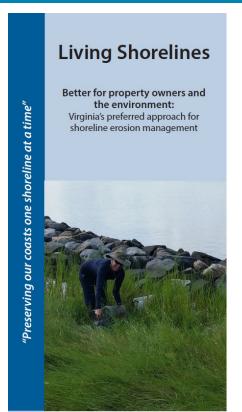








Living Shoreline Outreach





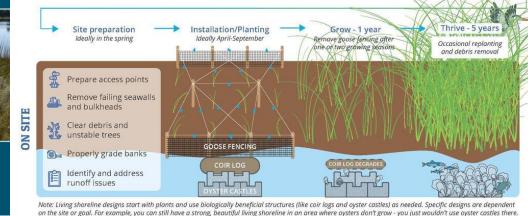
... researching shorelines for over fifty years



How long does it take to grow a living shoreline?







Bay-Wide Resources
Tool Kit
Materials
Talking Points
Various Audiences



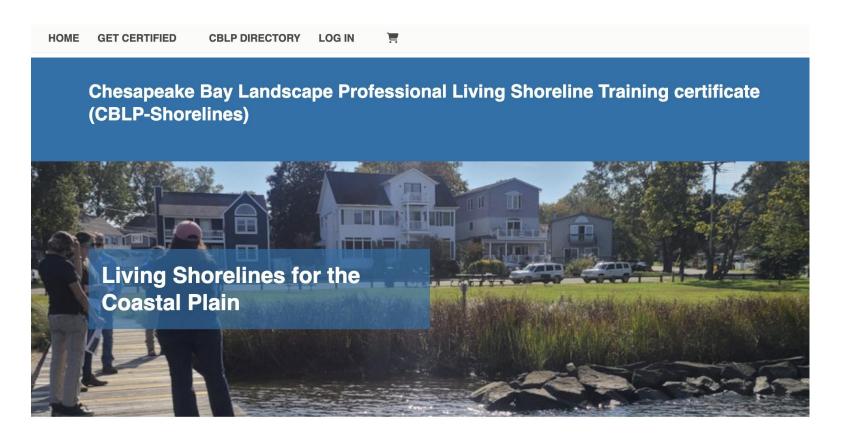
Chesapeake Bay Program

IMPLEMENTATION PLAN





Professional Standards of Conduct, How to Find a Pro



For additional details or to access a list of professionals who have completed this course, please click on the orange buttons below.

Learning Objectives

Certificate Holders

Contractor Questions

Some things to think about regarding better business practices:

Do you have the proper licensure for your work?

Does your business have necessary insurance coverage?



What does a Community of Practice look like?

How can we work together to implement and manage successful shoreline projects?

Quick Breakouts

Your Name Affiliation Living Shoreline Interest





