"Living shoreline" means a shoreline management practice that provides erosion control and water quality benefits; protects, restores or enhances natural shoreline habitat; and maintains coastal processes through the strategic placement of plants, stone, sand fill, and other structural and organic materials.
Living Shoreline Advisory Groups

Technical Workgroup
VMRC
VIMS (CCRM, Shoreline Programs and Advisory Services)
DCR (SEAS and CBLAD) - DEQ
Corps of Engineers

Advisory Committee
Local Staff
Wetlands Board Members
Agents and Contractors
General Permit Concepts

• Won’t cover all types of living shoreline projects
• 2 Groups of permits with different levels of review
  • Group 1 (Wetlands enhancement)
  • Group 2 (Sills)
• Streamlined procedure
• Eliminated or reduced fees
• Some level of review at local level
• Kick-out clause
Group 1 Overview

**Components**
- Fiber logs, fiber mats and shell bags
- Maximum fetch of ½ mile
- Confined to areas above mean low water
- Sand fill to enhance planting area limited to height of adjacent wetlands
- Identify source and utilize clean sand material with no more than 10% passing a #100 sieve.
- Designed to allow for improvements to enhance an intertidal area for vegetative plantings.

**Procedures**
- Standard application submitted (may develop an abbreviated application)
- Reviewed concurrently by VMRC and Wetlands Board
- If Wetlands Board and VMRC determine the application is sufficiently complete, meets the permit conditions and concur with the use of the abbreviated process VMRC shall issue the permit (21 days)
- Some minimal monitoring required
- No processing or permit fee
- Maintenance provision
- Given the limited potential to adversely impact the environment, adjoining neighbors of the general public, there is no public notice or notification of adjoining property owners proposed
Application submitted.

Application forwarded to Corps of Engineers and reviewed concurrently by VMRC and LWB.

LWB and VMRC concurrently review application for completeness and to determine if the project meets the criteria and is appropriate. LWB has 21 days to review.

If VMRC and LWB determine the application is complete, meets the criteria, and is appropriate, VMRC shall issue the GP.

If either VMRC or the LWB determine the application is incomplete or doesn’t meet the criteria or is not appropriate for any reason, the GP shall not be issued. Requests for additional information may be made. If GP is not issued the application may be considered in accordance with the standard process for a regular permit.

If LWB does not comment with 21 days, VMRC may assume there is no objection to the issuance of the GP.
Group 1 Specific Criteria

- authorizes placement of fiber logs, fiber mats, shell bags, and sand to support the planting of wetlands vegetation. Logs, mats, and shell bags shall not be placed on existing vegetation.

- coarse sand containing less than 10% fine material (passing a #100 sieve) shall be utilized for any required fill.

- sand placement is limited to areas within the wetland jurisdiction and may not raise the elevation above 1.5 times the mean tide range above mean low water. Sand may be placed on existing wetlands vegetation if deemed necessary to improve wetlands habitat or resiliency provided there is no net loss in aerial coverage of vegetation.

- appropriate wetland vegetation shall be planted in all wetland areas where sand is placed where the resulting substrate elevation is appropriate to support wetland vegetation growth. Wetlands vegetation are those species listed in the code however *Phragmites sp.* is not typically considered an appropriate species for planting purposes.

- temporary grazing protection may be utilized (and is encouraged) to protect wetland vegetation and ribbed mussels. Protection should be depicted in the design.
I. AUTHORIZED ACTIVITIES:

Activities authorized by this Regional Permit (RP) include living shorelines, riprap revetments, bulkheads, breakwaters, groins, jetties, spurs, baffles, aquaculture activities and boat ramps. A living shoreline is defined as a shoreline management practice that provides erosion control and water quality benefits; protects, restores, or enhances natural shoreline habitat; and maintains coastal processes through the strategic placement of plants, stone, sand fill, and other structural and organic materials. The Norfolk District encourages the use of living shorelines as the preferred alternative for stabilizing tidal shorelines where viable.

13-RP-19, Regional Permit 19, authorizes the following activities, subject to the conditions, limitations, and descriptions set out further herein:

1. Living Shoreline Group 1: Non-structural activities that provide substrate necessary to support wetland vegetation.
2. Living Shoreline Group 2: Sill with tidal marsh.
3. Low breakwaters and associated sandy fill material.
4. Bulkheads, riprap, and associated backfill and/or excavation, including bulkhead repair and/or replacement.
5. Groins, jetties, spurs and/or baffles and associated sandy fill material.
6. Aquaculture or mariculture activities.
7. Boat ramps and accessory structures, including any fill or excavation for installation.

II. AUTHORITIES:

The people of the Commonwealth of Virginia are hereby authorized by the Secretary of the Army and the Chief of Engineers pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 403) and Section 404 of the Clean Water Act (33 U.S.C. § 1344) to perform certain work in waters of the Commonwealth as described further herein strictly subject to the conditions and limitations set out further herein.
Group 2 – (Sills)

**Components**

- Maximum fetch of 1.5 miles
- Demonstrable evidence of active detrimental erosion
- Maximum distance offshore of 30’ channelward of mlw
- Existing or created marsh must be at least 8 feet wide
- Maximum water depth of -2’ MLW
- Maximum sill height +1’ MHW
- Slopes no flatter than 2:1
- Appropriate concrete may only be used as core material
- Filter cloth required under sill
- Some provision for gaps or windows (every 100’ or at least one per structure)
- Sill is the only proposed structure. Sill may still qualify if revetment is already present and sill is protecting an existing marsh of at least 8’ in width.
- Utilize clean sand material with no more than 10% passing a #100 sieve
- Must include a vegetative planting plan
- Must be a net gain in aerial vegetative coverage.
- Riparian bank modifications – grading, tree removal, and terracing should be allowed to establish wide gradual slopes landward of intertidal area with an integrated wetland-upland vegetation buffer. (Standard E&S conditions, WQIA, landscape agreements as required under CBPA)
Group 2 – (Sills)

Procedures

• VMRC and LWB review - each with option to require a regular permit if conditions dictate (Kick-out provision)
• Site visit would likely be necessary
• VMRC could possibly issue a single “joint” permit
• Reduced or eliminated fees and royalties
• Some simple monitoring requirement – photos?
• Maintenance provision
• Eliminate or abbreviated public notice?
• Adjoining Property Owner notification??
An Act to amend the Code of Virginia by adding a section numbered 62.1-229.5, relating to loans for the creation of living shorelines.

Approved March 23, 2015

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding a section numbered 62.1-229.5 as follows:

§ 62.1-229.5. Loans for living shorelines.
Loans may be made from the Fund, in the Board's discretion, (i) to a local government for the purpose of establishing living shorelines, as defined in § 28.2-104.1, to protect or improve water quality and prevent the pollution of state waters or (ii) to a local government that has developed a funding program to provide low-interest loans or other incentives to individual citizens of the Commonwealth to facilitate the establishment of living shorelines to protect or improve water quality and prevent the pollution of state waters. The Board shall develop guidelines for the administration of such loans.

DEQ – Clean Water Financing and Assistance Program
Virginia Clean Water Revolving Loan Fund
Group 2 Permit Requirements

• Permittee is required to notify VMRC upon completion of the project and shall provide brief monitoring report at the end of the first full growing season and after the second year of establishment. The monitoring shall be conducted between June and September and shall include at a minimum the project number, representative photos and a brief statement concerning the success of the project.

• Wetlands planted under the general permit shall not be cut and areas shall be replanted to ensure there is at least no net loss of wetland vegetation within the project area during the term of the permit. If necessary, additional sand may be placed to restore the originally proposed grade.

• Any measures undertaken to eradicate invasive wetlands vegetation (such as *Phragmites sp.*) shall be noted in the application or conducted in accordance with a plan approved by the wetlands board or locality. Such plans should include measures to revegetate the area with appropriate native wetlands vegetation.
Study of Tidal Shoreline Management in Virginia: Recommendations for Living Shorelines and Tidal Resources Sustainability

[SJR 35 (2010)]

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

SENATE DOCUMENT NO. 16

COMMONWEALTH OF VIRGINIA
RICHMOND
2010

Senate Joint Resolution 35 (2010)
Senate Bill 964 (2011):  

An Act to amend and reenact § 28.2-1100 of the Code of Virginia and to amend the Code of Virginia by adding sections numbered 15.2-2232.2 and 28.2-1061.1, relating to Marine Resources Commission; Virginia Institute of Marine Science; coastal resource management.

Approved April 29, 2011

House Bill 911 (2014):  


Approved March 5, 2014