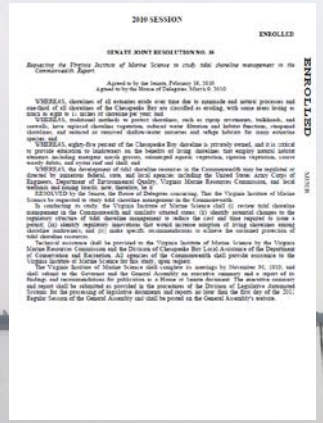

VMRC Living Shoreline
General Permits
Chip Neikirk - VMRC
Tidal Wetlands Workshop
May 2, 2017

Legislation

Senate Joint Resolution 35 (2010)



2010 SESSION

ENROLLED

SENATE JOINT RESOLUTION NO. 16

Requesting the Virginia Institute of Marine Science to study tidal shoreline management in the Commonwealth. Report.

Agreed to by the Senate, February 10, 2010
Agreed to by the House of Delegates, March 9, 2010

WHEREAS, shorelines of all estuaries erode over time due to manmade and natural processes and one-third of all shorelines of the Chesapeake Bay are classified as eroding, with some areas losing as much as eight to 11 inches of shoreline per year; and

WHEREAS, traditional methods to protect shorelines, such as riprap revetments, bulkheads, and seawalls, have replaced shoreline vegetation, reduced water filtration and habitat functions, elongated shorelines, and reduced or removed shallow-water nurseries and refuge habitats for many estuarine species; and

WHEREAS, eighty-five percent of the Chesapeake Bay shoreline is privately owned, and it is critical to provide education to landowners on the benefits of living shorelines that require natural habitat elements including emergent marsh grasses, submerged aquatic vegetation, riparian vegetation, coarse woody debris, and oyster reef and shell; and

WHEREAS, the development of tidal shoreline resources in the Commonwealth must be regulated in accordance with federal, state, and local agencies including the United States Army Corps of Engineers, Department of Environmental Quality, Virginia Marine Resources Commission, and local wetlands and zoning boards; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Virginia Institute of Marine Science be requested to study tidal shoreline management in the Commonwealth.

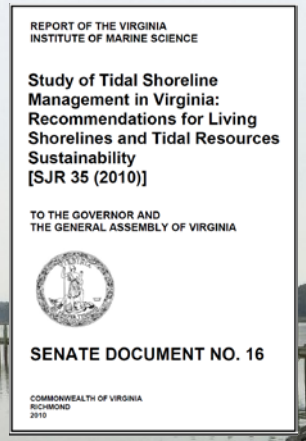
In conducting its study the Virginia Institute of Marine Science shall: (i) review tidal shoreline management in the Commonwealth and similarly situated states; (ii) identify potential changes to the regulatory structure of tidal shoreline management to reduce the cost and time required to issue a permit; (iii) identify regulatory impediments that would increase adoption of living shorelines among property owners; and (iv) make specific recommendations to enhance the continued protection of tidal shoreline resources.

Technical assistance shall be provided to the Virginia Institute of Marine Science by the Virginia Marine Resources Commission and the Division of Chesapeake Bay Local Assistance of the Department of Conservation and Recreation. All agencies of the Commonwealth shall provide assistance to the Virginia Institute of Marine Science for this study, upon request.

The Virginia Institute of Marine Science shall complete its meetings by November 30, 2010, and shall complete its work in time to submit its findings and recommendations for publication as a House or Senate document. The executive summary and report shall be submitted as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents and reports no later than the first day of the 2011 Regular Session of the General Assembly and shall be posted on the General Assembly's website.

ENROLLED

Senate Document 16 (2010)



REPORT OF THE VIRGINIA
INSTITUTE OF MARINE SCIENCE

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 Bill 964 (2011)

VIRGINIA ACTS OF ASSEMBLY -- 2011 RECONVENED SESSION

CHAPTER 885

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 15.2-2223.2 and 28.2-104.1, relating to Marine Resources Commission; Virginia Institute of Marine Science; coastal resource management.

[S 964]

Approved April 29, 2011

Be it enacted by the General Assembly of Virginia:

1. That § 28.2-1100 of the Code of Virginia is amended and reenacted and that the Code of Virginia is amended by adding sections numbered 15.2-2223.2 and 28.2-104.1 as follows:

§ 15.2-2223.2. Comprehensive plan to include coastal resource management guidance.

Beginning in 2013, any locality in Tidewater Virginia, as defined in § 10.1-2101, shall incorporate the guidance developed by the Virginia Institute of Marine Science pursuant to subdivision 9 of § 28.2-1100 into the next scheduled review of its comprehensive plan. The Department of Conservation and Recreation, Virginia Marine Resources Commission, and the Virginia Institute of Marine Science shall provide technical assistance to any such locality upon request.

§ 28.2-104.1. Living shorelines; development of general permit; guidance.

A. As used in this section, unless the context requires a different meaning:

"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.

B. The Commission, in cooperation with the Department of Conservation and Recreation and with technical assistance from the Virginia Institute of Marine Science, shall establish and implement a general permit, regulation that authorizes and encourages the use of living shorelines as the preferred alternative for stabilizing tidal shorelines in the Commonwealth. In developing the general permit, the Commission shall consult with the U.S. Army Corps of Engineers to ensure the minimization of conflicts with federal law and regulation.

C. The Commission, in cooperation with the Department of Conservation and Recreation and with technical assistance from the Virginia Institute of Marine Science, shall develop integrated guidance for the management of tidal shoreline systems to provide a technical basis for the coordination of permit decisions required by any regulatory entity exercising authority over a shoreline management project. The guidance shall:

1. Communicate to stakeholders and regulatory authorities that it is the policy of the Commonwealth to support living shorelines as the preferred alternative for stabilizing tidal shorelines;

2. Identify preferred shoreline management approaches for the shoreline types found in the Commonwealth;

3. Explain the risks and benefits of protection provided by various shoreline system elements associated with each management option; and

4. Recommend procedures to achieve efficiency and effectiveness by the various regulatory entities exercising authority over a shoreline management project.

§ 28.2-1100. Virginia Institute of Marine Science continued, duties.

The Virginia Institute of Marine Science shall hereafter be referred to as the Institute. The Institute shall:

1. Conduct studies and investigations of the seafood and commercial fishing and sport fishing industries;

2. Consider ways to conserve, develop and replenish fisheries resources and advise the Marine Resources Commission and other agencies and private groups on these matters;

3. Conduct studies of problems pertaining to the other segments of the maritime economy;

4. Conduct studies of marine pollution in cooperation with the State Water Control Board and the Department of Health and make the data and their recommendations available to the appropriate agencies;

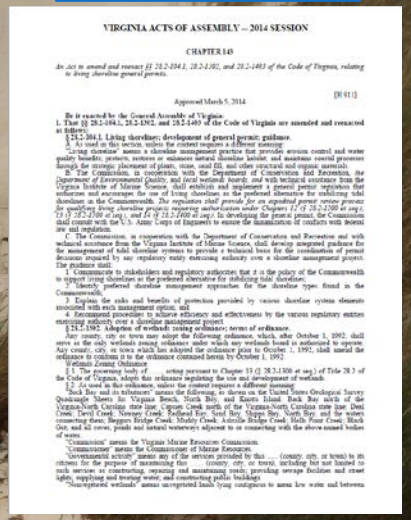
5. Conduct hydrographic and biological studies of the Chesapeake Bay, its tributaries, and all the tidal waters of the Commonwealth and the contiguous waters of the Atlantic Ocean;

6. Engage in research in the marine sciences;

7. Conduct such special studies and investigations concerning these subjects as requested by the Governor; and

8. Engage in research and provide training, technical assistance and advice to the Board of Conservation and Recreation on erosion along tidal shorelines, the Soil and Water Conservation Board

House Bill 911 (2014)



VIRGINIA ACTS OF ASSEMBLY -- 2014 SESSION

CHAPTER 143

An Act to amend and reenact §§ 28.2-104.1, 28.2-1302, and 28.2-1403 of the Code of Virginia, relating to living shoreline general permits.

[H 911]

Approved March 5, 2014

Be it enacted by the General Assembly of Virginia:

1. That §§ 28.2-104.1, 28.2-1302, and 28.2-1403 of the Code of Virginia are amended and reenacted as follows:

§ 28.2-104.1. Living shorelines; development of general permit; guidance.

A. As used in this section, unless the context requires a different meaning:

"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.

B. The Commission, in cooperation with the Department of Conservation and Recreation, the Department of Environmental Quality, and local wetlands boards, and with technical assistance from the Virginia Institute of Marine Science, shall establish and implement a general permit regulation that authorizes and encourages the use of living shorelines as the preferred alternative for stabilizing tidal shorelines in the Commonwealth. The regulation shall provide for an expedited permit review process for qualifying living shoreline projects requiring authorization under Chapters 12 (§ 28.2-1200 et seq.), 13 (§ 28.2-1300 et seq.), and 14 (§ 28.2-1400 et seq.). In developing the general permit, the Commission shall consult with the U.S. Army Corps of Engineers to ensure the minimization of conflicts with federal law and regulation.

C. The Commission, in cooperation with the Department of Conservation and Recreation and with technical assistance from the Virginia Institute of Marine Science, shall develop integrated guidance for the management of tidal shoreline systems to provide a technical basis for the coordination of permit decisions required by any regulatory entity exercising authority over a shoreline management project. The guidance shall:

1. Communicate to stakeholders and regulatory authorities that it is the policy of the Commonwealth to support living shorelines as the preferred alternative for stabilizing tidal shorelines;

2. Identify preferred shoreline management approaches for the shoreline types found in the Commonwealth;

3. Explain the risks and benefits of protection provided by various shoreline system elements associated with each management option; and

4. Recommend procedures to achieve efficiency and effectiveness by the various regulatory entities exercising authority over a shoreline management project.

§ 28.2-1302. Adoption of wetlands zoning ordinance; terms of ordinance.

Any county, city or town may adopt the following ordinance, which, after October 1, 1992, shall serve as the only wetlands zoning ordinance under which any wetlands board is authorized to operate. Any county, city, or town which has adopted the ordinance prior to October 1, 1992, shall amend the ordinance to conform it to the ordinance contained herein by October 1, 1992.

Wetlands Zoning Ordinance

§ 1. The governing body of ..... acting pursuant to Chapter 13 (§ 28.2-1300 et seq.) of Title 28.2 of the Code of Virginia, adopts this ordinance regulating the use and development of wetlands.

§ 2. As used in this ordinance, unless the context requires a different meaning:

"Back Bay and its tributaries" means the following, as shown on the United States Geological Survey Quadrangle Sheets for Virginia Beach, North Bay, and Knotts Island: Back Bay north of the Virginia-North Carolina state line; Capuse Creek north of the Virginia-North Carolina state line; Deal Creek; Devil Creek; Nimney Creek; Redhead Bay; Sand Bay; Shipps Bay; North Bay; and the waters connecting them; Beggars Bridge Creek; Muddy Creek; Adamsville Bridge Creek; Hells Point Creek; Black Gut; and all ponds, ponds and natural watercourses adjacent to or connecting with the above-named bodies of water.

"Commission" means the Virginia Marine Resources Commission.

"Commissioner" means the Commissioner of Marine Resources.

"Governmental activity" means any of the services provided by the ..... (county, city, or town) to its citizens for the purpose of maximizing the ..... (county, city, or town), including but not limited to such services as constructing, repairing and maintaining roads; providing sewage facilities and street lights; supplying and treating water; and constructing public buildings.

"Nonvegetated wetlands" means unvegetated lands lying contiguous to mean low water and between

"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 Development Considerations

General Permit Considerations

- Won't cover all types of living shoreline projects
- Two types 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 GP Overview

Components

- Designed to allow for enhancement of intertidal area to support establishment wetlands vegetation
- Fiber logs, fiber mats and shell bags
- Sand fill to enhance planting area
- Maximum fetch of ½ mile
- Confined to areas above mean low water

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.

Group 1 Specific 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.

Living Shoreline Group 1 GP Procedures

Applicant submits complete JPA

LWB and VMRC review to determine if complete and appropriate for GP

LWB or VMRC determines project doesn't qualify or inappropriate for GP

LWB reviews via normal process

LWB approves, modifies, or denies project

LWB and VMRC determine project qualifies and is appropriate for GP

LWB notifies VMRC of their concurrence to use the GP process

VMRC issues GP

Living Shoreline Group 1 General Permit in action

Ingredients

Group 2 GP Concepts

- Intended for the construction of certain riprap sills and marsh toe revetments and for the placement of sand to create or enhance tidal wetland areas

- Project may extend channelward of MLW

- Permit processing fee may be required

- APOs will be required to be notified and must not object

- No public notice requirement

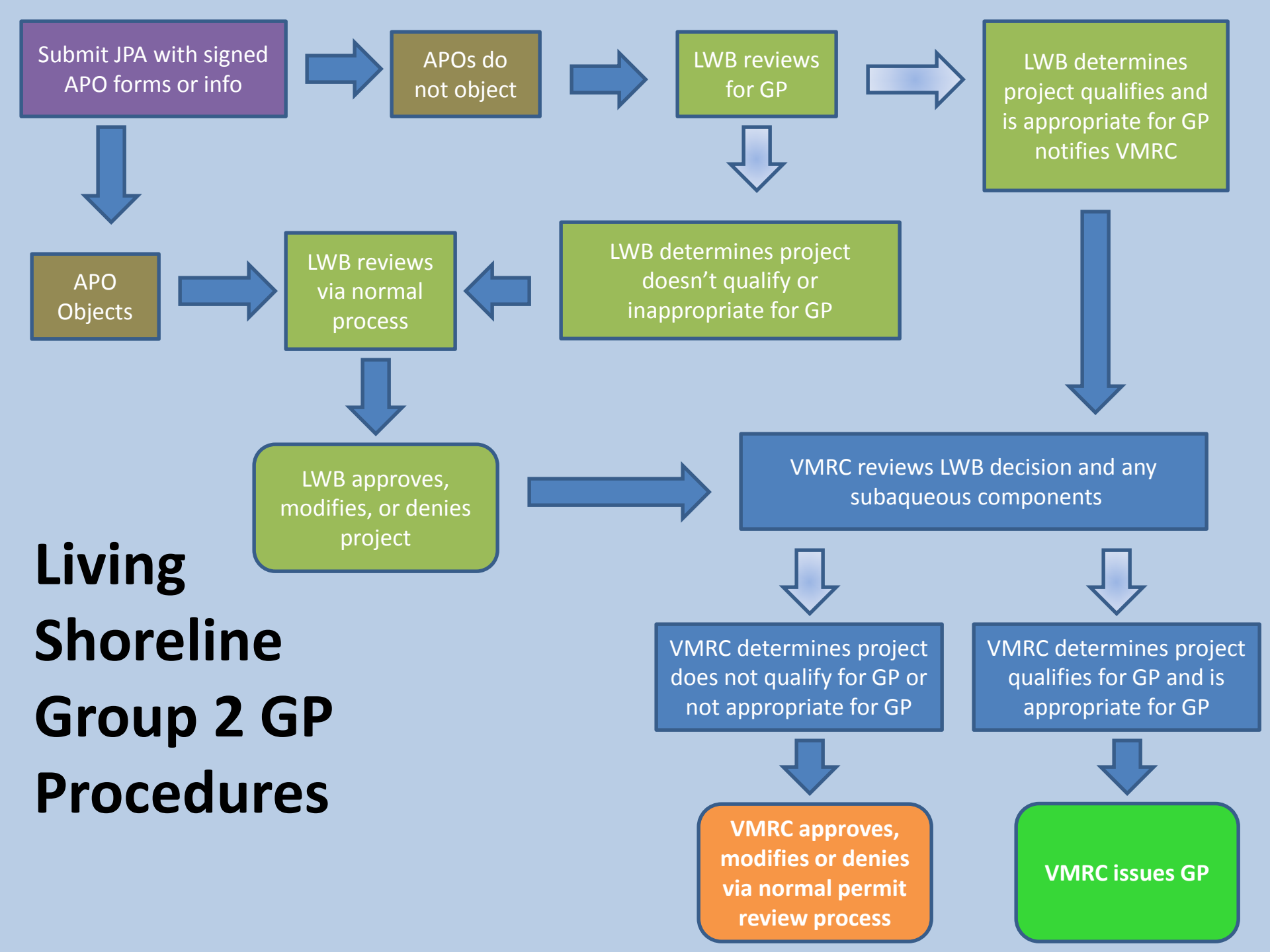
- Some simple monitoring required

Group 2 GP Design Criteria

- Minimum fetch of ½ mile or evidence of active detrimental erosion
- Maximum fetch of 1 ½ miles
- Maximum depth of – 2’ at MLW
- Maximum of 30’ channelward of MLW
- Maximum height of +1’ MHW
- Slopes shall be no flatter than 2:1
- Broken concrete may be used for core material only
- Filter cloth shall be used under the structure

Group 2 GP Design Criteria (Continued)

- Sand may be placed on existing vegetation to enhance the wetland substrate provide there is a net gain in wetland vegetation
- The sill is the only proposed structure unless there is an existing shoreline structure landward of an existing fringe marsh
- Sills may not be placed on vegetated wetlands or SAV
- Filter cloth shall be used under the structure
- Requirement for gaps or windows every 100’ (minimum of 1 per property)
- Ability for the Wetlands Board and VMRC to approve an alternative material



Living Shoreline Group 2 GP Procedures

Group 2 GP Status?