

# Maryland Department of the Environment

## Wetlands and Waterways Program

*Living Shorelines; State regulations, permitting and assistance*



*Alex J. Roy, M.Sc.*

*Natural Resources Planner III*

*Wetlands and Waterways Program*

*Tidal Wetlands Division*

“...Improvements to protect a persons property against erosion shall consist of non-structural shoreline stabilization measures (i.e. living shorelines) except where the person can demonstrate to MDE that such measures are not feasible, or where MDE mapping indicate areas appropriate for structural shoreline stabilization measures.”

*HB973 – Water Management Administration –  
Living Shoreline Protection Act of 2008*



*...Why do we need this?*

## Living Shorelines: Building a better Chesapeake Bay

The bill, passed into Maryland State Law **October 2008**, formalized current regulations into law.

Previously, **Living Shorelines (LS)** were 'recommended' but not required, the law provides MDE with a strong foundation to promote alternate shoreline erosion control measures.

**New regulations** concerning LS are in the process of being completed, along with a worksheet, diagrams and **waiver** to help homeowners and contractors decide if a **LS is practical for the project site**.



# Living Shorelines: The Waiver

A waiver request, which could provide an exemption from LS work, allows for **structural shoreline control measures to be used (if applicable)**.

The 'waiver' will assist homeowners in deciding if a **living shoreline is practical** on their site, *prior to the state or county application.*



Will include

- Questionnaire
- Diagram
- Application



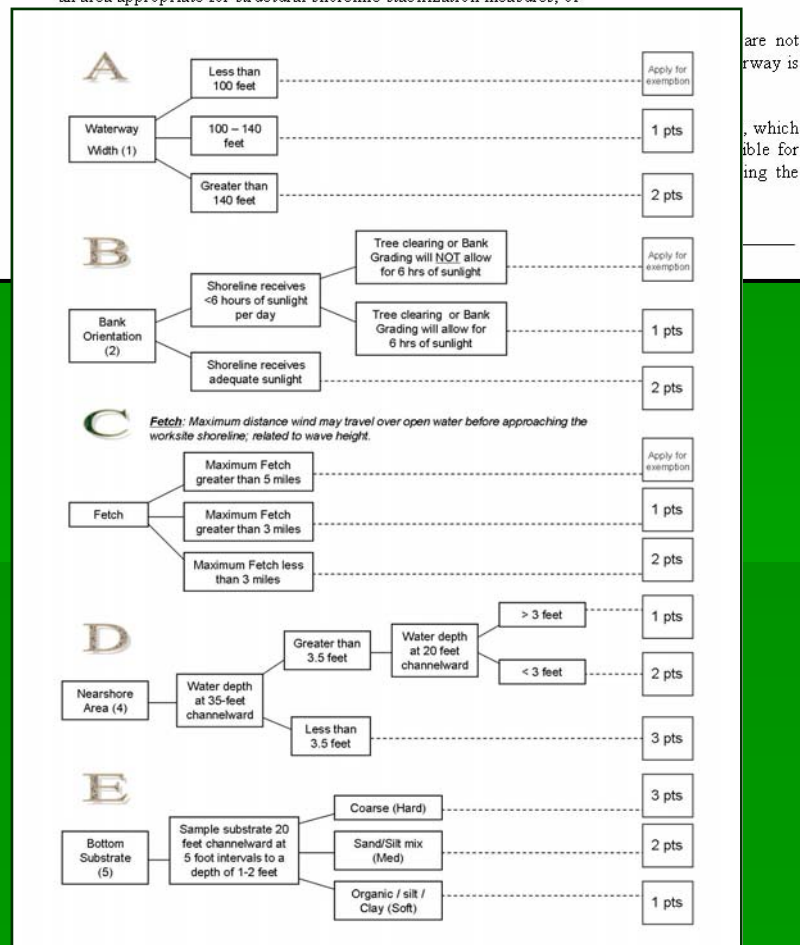
## Living Shoreline Waiver Request

Maryland Department of the Environment  
Water Management Administration



The Living Shoreline Protection Act of 2008 requires that improvements to protect a person's property against shoreline erosion consist of marsh creation or other nonstructural shoreline stabilization measures (i.e. Living Shorelines) that preserve the natural environment unless:

A) The project shoreline is mapped by the Maryland Department of the Environment (MDE) as an area appropriate for structural shoreline stabilization measures, or





# Living Shorelines: The Waiver

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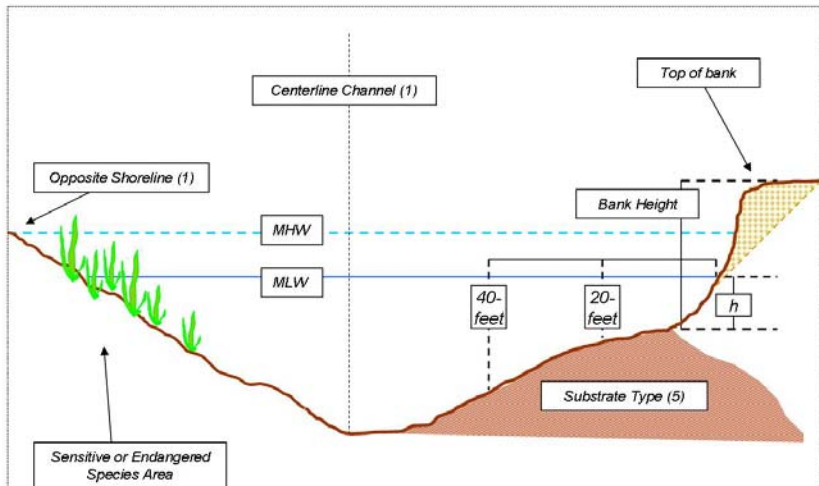
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## Living Shoreline Waiver Diagram Cross Sectional View



[www.mde.state.md.us](http://www.mde.state.md.us)

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- Bank Grading Area
- Mean Low Water line
- Mean High Water line
- Depth of Water at toe or bottom of bank

20-foot Measure water depth during low tide at approximately 20-foot channelward of the MHW line and at approximately 40-foot channelward of the MHW line

40-foot

Map/diagram is for reference only;  
map/design elements are not drawn to  
scale; January, 2010

Numbers labeled with (x) correspond to the Living Shoreline Waiver Worksheet

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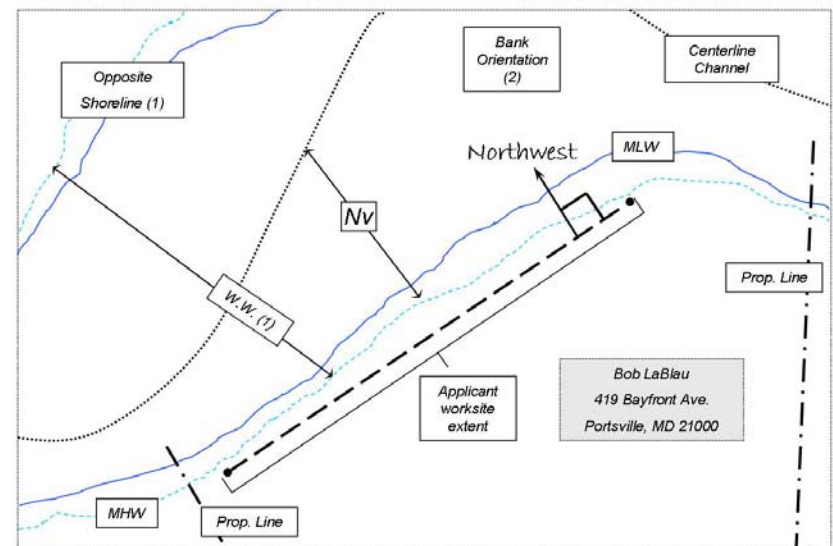
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## Living Shoreline Waiver Diagram Plan View



[www.mde.state.md.us](http://www.mde.state.md.us)

Wetland and Waterways Program  
Tidal Wetlands Division



- Mean Low Water line
- Mean High Water line
- Width of the Waterway; from MHW line
- Shoreline orientation; compass direction perpendicular to average shoreline of worksite
- Width of waterway; measured between MHW line at the worksite shoreline and average distance to the centerline of the channel

Map/diagram is for reference only;  
map/design elements are not drawn to  
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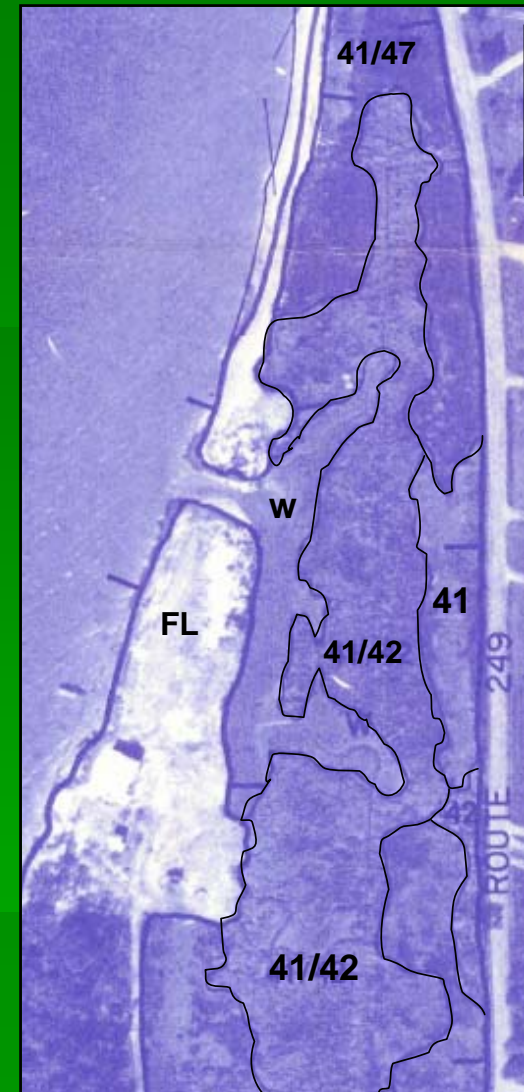
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## Living Shorelines: Site Characteristics





## Living Shorelines: Site Characteristics



*(above) A portion of the 1972 Wetland Delineation maps; (at left) a completed low-energy living shoreline project.*



## Living Shorelines: MDE funding options

### Maryland Water Quality Financing Administration (WQFA)

Water Quality Revolving Loan Fund and **Green Project Reserve**

[http://www.mde.state.md.us/programs/waterprograms/Water\\_Quality\\_Finance/index.asp](http://www.mde.state.md.us/programs/waterprograms/Water_Quality_Finance/index.asp)

- *Provides funding for non-point source pollution control projects (sediment control)*
- *Private Applicants and Local Governments*
- *Funding includes: low interest loan; loan forgiveness/grant or a combination of the two.*



### CONTACT:

Elaine Dietz; 410-537-3908 or via email at

[edietz@mde.state.md.us](mailto:edietz@mde.state.md.us)



## Living Shorelines: MDE funding options

### Maryland Water Quality Financing Administration (WQFA)

#### Linked Deposit

[http://www.mde.state.md.us/assets/document/Water/lcdqual\\_watermps.pdf](http://www.mde.state.md.us/assets/document/Water/lcdqual_watermps.pdf)

- *Provides funding for non-point source pollution control projects (sediment control)*
- *Private Applicants are allowed to apply*
- *Funding includes: below-market interest rate loan (points).*



#### CONTACT:

Larry Love; 410-537-3110 or via email at

[llove@mde.state.md.us](mailto:llove@mde.state.md.us)

# Living Shorelines: The Permitting process

MDE will aid in the review process, planning, coordination.

Permit application (short form) and other forms can be downloaded from our website:

**[www.mde.state.md.us](http://www.mde.state.md.us)**

→ Water Management Administration

→ Wetlands and Waterways Program

MDE main number: **410-537-3000**

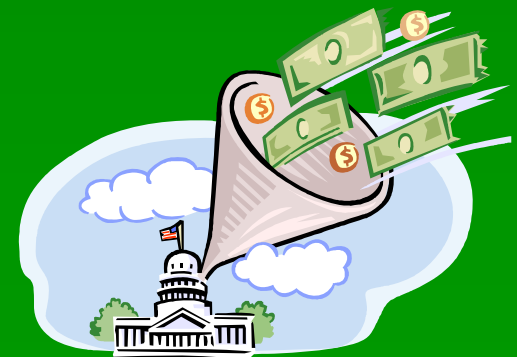
→ “Tidal Wetlands Division”

→ “Natural Resources Planner for X county”



*Remember: NO FEES for Living Shoreline Applications!\**

\*project proposal may not include any fixed or floating pier or pilings; stone revetments; or timber, plastic type bulkhead structures more than required for the stability and health of the living shoreline project.



## Living Marsh: Special Conditions; Restrictions

Use **clean substrate fill material**, no more than 10% of which shall pass through a standard number 100 sieve.

The marsh establishment area **shall be planted within one year** following completion of the filling operation.

The marsh establishment project shall be maintained as a wetland, with **non-nuisance species' aerial coverage of at least 85%** for three consecutive years.

If the fill is graded hydraulically, the licensee shall use a turbidity curtain around the perimeter of the instream work.



If the existing bank is to be cleared or graded, the licensee shall obtain any required approvals of an **erosion and sediment control plan** from the applicable sediment and erosion control agency.



# Living Marsh: Special Conditions; Restrictions; Liability

## T.O.Y.

Restrictions were **reduced by 2 months** and certain exemptions were made available during construction.

Needed to protect **Oysters, Finfish, Shellfish, SAV** and **Avian** species of the Chesapeake Bay.

## Liability

A **learning curve** must be expected.

Standards have been established; but projects are **SITE SPECIFIC!**

Parallel arguments were presented when **revetments were proposed**.



Information, help and guidance is available from a **variety of agencies and groups** here in Maryland.

## Living Shorelines: After the fact



- **Maintenance** is very important for protecting your investment.
  - One hour per season (Spring, Summer, Fall)
- The homeowner must work to help the marsh grasses first to **establish**; then to **maintain**.
- Just by **clearing debris**, **protecting new plants** from geese and **replanting if necessary**, will go a long way to establishing your marsh.
- After a few growing seasons the constructed marsh will be **as durable** as structural measures...



...but will allow for **natural processes** to flourish!





**Alex J. Roy**

**410.537.3739**

**[aroy@mde.state.md.us](mailto:aroy@mde.state.md.us)**