

# Buffer Management Plans



# House Bill 973

## Living Shoreline Protection Act

- Signed into law by Governor O'Malley on April 24, 2008
- Goals include:
  - Retention of the natural shoreline, **including its habitat and ecological function**
  - Mandates the use of wetland creation and habitat enhancement projects **where technologically and ecologically appropriate.**

Ch. 304

### CHAPTER 304

(House Bill 973)

AN ACT concerning

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

FOR the purpose of requiring certain erosion protection projects to include certain nonstructural shoreline stabilization measures, with ~~a certain exception~~ certain exceptions; requiring the Department of the Environment, in consultation with the Department of Natural Resources, to adopt certain regulations; requiring certain regulations to include a certain waiver process; and generally relating to the regulation of shore erosion control projects.

BY repealing and reenacting, with amendments,  
Article – Environment  
Section 16–201  
Annotated Code of Maryland  
(2007 Replacement Volume and 2007 Supplement)

Preamble

WHEREAS, The State of Maryland and its people, property, natural resources, and public investments will be significantly impacted by climate change and sea level rise; and

WHEREAS, Sea level rise contributes to the erosion of approximately 580 acres of shoreline per year along Maryland's Chesapeake Bay, Atlantic coastal bays, and Atlantic Ocean coast; and

WHEREAS, The Maryland Commission on Climate Change has recommended that the State begin to actively address the impacts on the natural environment of shore erosion induced by sea level rise; and

WHEREAS, Current shore protection practices used to control shore erosion and protect upland properties range from "hard" techniques such as bulkheads, retaining walls, and riprap, to more "soft" alternatives such as "living shorelines" that combine marsh plantings with sills, groin fields, or breakwaters; and

WHEREAS, "Living shorelines" are the preferred method of shore protection as they trap sediment, filter pollution, and provide important aquatic and terrestrial habitat; and



# House Bill 973

## Living Shoreline Protection Act

- The Bill required Maryland Department of the Environment (MDE) to:
  - (1) Map areas appropriate for structural shoreline stabilization measures;
  - (2) Establish a waiver process for individuals that can demonstrate that nonstructural shoreline stabilization is not feasible; and
  - (3) Adopt regulations to implement the provisions of the law in cooperation with the Maryland Department of Natural Resources.

# New Regulations – COMAR 26.24.04 Effective February 4, 2013

- 26.24.04.01-3(A)(4) & (5) – Requires:
  - Submittal at the time of application:
    - A proposed **Buffer Management Plan**
    - A signed **Buffer Notification Form**
  - The local government issues final approval of a Buffer Management Plan for all shore erosion control projects.

# Why Coordination is So Important

- MDE regulates wetlands and waterways (below mean high water (MHW))
- Local governments with Critical Area Commission oversight regulate the 100-foot Buffer (Buffer is measured from MHW or the landward edge of tidal wetlands, whichever is further landward)
- Unified, consistent, and coordinated review process needed to determine the best design for wetland, waterways, and Buffer resources and functions

# How Erosion Control Measures Affect the Buffer



- Buffer is almost always affected either for:
  - Access
  - Slope stabilization
  - Vegetative Management
  - Shoreline erosion control tie-in

# Buffer Management Plans

- Offshore Work Form
- Bulkhead Replacement Form
- Revetment Form (*Type 1 or Type 2*)
- Type 1 Living Shoreline Form
- Type 2 Living Shoreline Form





# Buffer Management Plans

**Simplified Buffer Management Plan**



**A SIMPLIFIED BUFFER MANAGEMENT PLAN  
CANNOT BE USED**





# Buffer Management Plan for Offshore Work

- Recognizes that no Buffer impacts will occur
  - No grading, clearing, disturbance, or stockpiling
- Typical projects: breakwaters, marsh edging, stone in front of an existing bulkhead
- Can only be used for projects done offshore/by barge
- A Buffer Notification Form is still required

## Offshore Work Only Buffer Management Plan

This form cannot be used if any Buffer vegetation is disturbed or removed - see other Buffer Management Plans for Living Shoreline, Revetment, or Bulkhead projects.

This form provides the requirements for submitting a draft Buffer Management Plan under the Joint Permit Application for a shore erosion control project that is accessed via the water and that does **NOT** involve clearing, grading, disturbance or stockpiling on the land.

### INSTRUCTIONS

Complete and submit Sections A & B of this form and the Buffer Notification Form (page 2) to the Maryland Department of the Environment (MDE) as part of a complete Joint Permit Application.

### SECTION A: GENERAL INFORMATION

1. Applicant Information:

Name:	
Address:	
City:	State:                      Zip:
Telephone:	E-mail address:

2. Work site address if different than above:

Address:	
City:	State:                      Zip:

### SECTION B: CERTIFICATION

I certify that all proposed work associated with the tidal wetlands application at the above property will be performed from the water. There is adequate depth of water to gain access to the site. No clearing, grading, disturbance or stockpiling will occur on the land. I understand that authorization for the project proposed, if granted, will contain a special condition that requires that all work be conducted from the water. I understand that municipal or county staff may contact me and arrange to inspect the work. I will abide by the MDE authorization and will not conduct any work outside of the scope of the authorization. **I understand that if work does occur on the land, I must apply to MDE for a modification and submit an updated Buffer Management Plan. Failure to do so is a violation of State and local laws.** I certify that the information on this form is true and accurate to the best of my knowledge and belief.

\*\*PROPERTY OWNER SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

**\*\*PLAN IS INVALID WITHOUT A PROPERTY OWNER SIGNATURE**

# Buffer Management Plan for Bulkheads



- Recognizes that not all bulkhead replacements impact the Buffer
- Mitigation is required for removal of trees and shrubs
  - Local Governments may require mitigation for Limits of Disturbance in the Buffer as well
- A Buffer Notification Form is still required

## Bulkhead Replacement Buffer Management Plan

This form provides the requirements for submitting a draft Buffer Management Plan under the Joint Permit Application for a shore erosion control project involving the replacement of a bulkhead.

### INSTRUCTIONS

Complete and submit Sections A & B of this form and the Buffer Notification Form (page 3) to the Maryland Department of the Environment (MDE) as part of a complete Joint Permit Application.

### SECTION A: GENERAL INFORMATION

1. Applicant Information:

Name:	
Address:	
City:	State:                      Zip:
Telephone:	E-mail address:

2. Work site address if different than above:

Address:	
City:	State:                      Zip:

3. The bulkhead will be accessed during construction by (select one):  Land  Water

4. Length of bulkhead replacement: \_\_\_\_\_ linear feet

5. Channelward distance of the new bulkhead's location: \_\_\_\_\_ inches

6. Attach a draft Buffer Management Plan sketch to this form that includes the following components:

- The delineated Critical Area Buffer.
- Show the location of any trees and shrubs to be removed with an "X", and where the new plantings will be relocated ("T" for tree and "S" for shrub).

# Buffer Management Plan for Revetments

- Sketch of proposed project required
- Mitigate for permanent disturbance and tree canopy coverage removed.
- Type of and amount of mitigation dependent on existing conditions and project type
  - Type 1 or Type 2
- A Buffer Notification Form must also be submitted



# Buffer Management Plan for Revetments (Mitigation – Type 1)

- Type 1 Conditions:
  - Existing Buffer is lawn or lawn interspersed with trees &
  - Permanent Buffer disturbance extends less than 10 ft. landward.

Proposed Mitigation for the LOD	
1. <ul style="list-style-type: none"> <li>a. <u>Provide a Filter Strip*</u>                Linear Length of Project ( <input type="text"/> ft) X Average 10-ft. Width Above MHW ( <input type="text"/> ft).</li> <li style="text-align: center;"><b>AND/OR</b></li> <li>b. Provide mitigation in accordance with the Planting Credit Table**</li> </ul> (NOTE: a. or b. or a combination of both must equal or exceeds B.1)	<input type="text"/> sq. ft.
Proposed Mitigation for Tree Canopy Coverage Removed	
2. Provide mitigation in accordance with the Planting Credit Table**	<input type="text"/> sq. ft.
3. <b>Total Mitigation Provided</b> (1+2+3 must equal or exceed B.3)	<input type="text"/> sq. ft.



# Buffer Management Plan for Revetments (Mitigation – Type 2)

- Type 2 Conditions:
  - Existing Buffer is densely vegetation/forested or
  - Permanent Buffer disturbance extends more than 10 ft. landward.
  
- Mitigate for any Buffer disturbance and tree canopy coverage removed in accordance with planting credit table.

# Buffer Management Plan for Living Shorelines

- Sketch of proposed project required
- Type of and amount of mitigation dependent on existing conditions and project type
  - Type 1 or Type 2
- A Buffer Notification Form must also be submitted





# Buffer Management Plan for Living Shoreline (Mitigation – Type 1)

- Type 1 Conditions:
  - ❑ Existing Buffer is lawn or lawn interspersed with trees &
  - ❑ Permanent Buffer disturbance extends less than 15 ft. landward.

When impacting the Buffer under a Type-1 shoreline project, mitigation is only required when tree canopy is removed. Mitigation can be fulfilled in the form of planting a transition zone the length of the shoreline or through tree plantings at a 1:1 ratio for the tree canopy removed, or both.			
Proposed Canopy Coverage Removed		Mitigation Type	Mitigation Provided
Area of Tree Canopy Coverage Removed	<div style="border: 1px solid black; width: 50px; height: 20px; background-color: #d9e1f2; margin: 0 auto;"></div> sq. ft.	a. Provide a Transition Zone* Linear Length of Transition ( <div style="border: 1px solid black; width: 30px; height: 15px; background-color: #d9e1f2; display: inline-block;"></div> ft) X Average Width Above MHW (15 ft.)  <p style="text-align: center;"><b>AND/OR</b></p> b. Mitigate at a 1:1 Ratio for Tree Canopy Removed**  (NOTE: a. or b. or a combination of both must equal or exceed the required mitigation)	<div style="border: 1px solid black; width: 50px; height: 20px; background-color: #d9e1f2; margin: 0 auto;"></div> sq. ft.  <div style="border: 1px solid black; width: 50px; height: 20px; background-color: #d9e1f2; margin: 0 auto;"></div> sq. ft.
<b>TOTAL MITIGATION REQUIRED</b>	<div style="border: 1px solid black; width: 50px; height: 20px; background-color: #d9e1f2; margin: 0 auto;"></div> sq. ft.	<b>TOTAL MITIGATION PROVIDED</b>	<div style="border: 1px solid black; width: 50px; height: 20px; background-color: #d9e1f2; margin: 0 auto;"></div> sq. ft.

# Buffer Management Plan for Living Shoreline (Mitigation – Type 2)

- Type 2 Conditions:
  - ❑ Existing Buffer is densely vegetation/forested or
  - ❑ Permanent Buffer disturbance extends more than 15 ft. landward.

Within the First 15 Feet of the Buffer			
1. Proposed Permanent Buffer Disturbance <sup>1</sup>		2. Mitigation Provided (Transition Zone*)	
a. Linear Length of Project ( _____ ft) X Average Width Above MHW ( _____ ft)	_____ sq. ft.	a. Linear Length of Project ( _____ ft) X Average Width Above MHW ( _____ ft)	_____ sq. ft.
Beyond the First 15 Feet of the Buffer			
Proposed Permanent Buffer Disturbance <sup>1</sup>		Mitigation Provided (Planting Credit Table**)	
b. Area of Tree Canopy Coverage Removed	_____ sq. ft.	b. Mitigation Required at a 1:1 Ratio for Tree Canopy Removed	_____ sq. ft.
c. Linear Length of Project ( _____ ft) X ( _____ ft) Width of Additional Disturbance Beyond the First 15 ft.	_____ sq. ft.	c. Mitigation in Accordance with the Planting Credit Table	_____ sq. ft.
<b>TOTAL MITIGATION REQUIRED</b> (1a + 1b + 1c)	_____ sq. ft.	<b>TOTAL MITIGATION PROVIDED</b> (2a + 2b + 2c)	_____ sq. ft.



# Revetment and Living Shoreline Buffer Management Plans

- Other requirements:
  - Monitoring and Maintenance Plan (two years)
  - Inspection agreement
  - Long-term protection plan, including a financial assurance (*for Major Buffer Management Plans only*)

# Buffer Management Plans



- Improves multi-agency review process
- Will provide clear standards
- Will facilitate clear and effective implementation
- Needed to ensure that aquatic, wetland, and riparian resources are protected, restored, and enhanced

# Buffer Notification Form



- Gives applicant and owner notice of Buffer requirements
- Requires a signature
- *Provided on the last page of each Buffer Management Plan form*

**CRITICAL AREA BUFFER NOTIFICATION FORM**  
**NOTICE TO SHORE EROSION CONTROL APPLICANTS**

**WHEN submitting a shore erosion control application to the Maryland Department of the Environment (MDE)**, the riparian property owner or their representative shall include this form along with the draft Buffer Management Plan.

Examples of Buffer Management Plans can be obtained by contacting the local government or the Critical Area Commission. This information is also available on the Commission's website found [here](#).

1. MDE may determine the application is incomplete if a **COMPLETED** DRAFT Buffer Management Plan or this form is not included with the application.
2. In addition to a federal or State authorization, a local government approval is required before you begin your project.
3. Before beginning any work, including site preparation and stockpiling of materials, the riparian property owner or their representative must obtain:
  - a. An authorization from MDE and the U.S. Army Corps of Engineers to construct and install a shore erosion control measure;
  - b. Approval of the Buffer Management Plan from the local jurisdiction; AND
  - c. Any other required local permits.
4. Buffer disturbance without a locally approved Buffer Management Plan or buffer disturbance that is not consistent with a locally approved Buffer Management Plan is a violation of State and local laws.

**CERTIFICATION:**

I have read and understand the requirements described in this NOTIFICATION FORM. I will abide by these requirements and the conditions of any State authorization and/or local approval. I will not begin any work without all required proper authorizations. Upon reasonable notice, I authorize the right to enter for periodic on-site evaluation by official representatives of the local Critical Area permitting authority.

SIGNATURE OF RIPARIAN PROPERTY OWNER OR REPRESENTATIVE:

\_\_\_\_\_

PRINTED NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

ADDRESS OF SHORE EROSION CONTROL PROJECT (Include city and zip):

\_\_\_\_\_

CRITICAL AREA COMMISSION FOR THE CHESAPEAKE AND ATLANTIC COASTAL BAYS  
1804 West Street, Suite 100 • Annapolis, MD 21401 • 410-260-3460



# Commission's Website

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

- Includes Links to:

- Offshore Buffer Management Plan
- Bulkhead Buffer Management Plan
- Revetment Buffer Management Plan
- Type 1 Living Shoreline Buffer Management Plan
- Type 2 Living Shoreline Buffer Management Plan
- MDE's website