



City of Annapolis
Planning and Zoning Department
 145 Gorman Street, 3rd Fl
 Annapolis, Maryland 21401-2535

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APPROVED

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Critical Area Buffer Management Plan

A permit for tree removal from the Department of Neighborhood and Environmental Programs must be obtained after this form is approved and before any trees are removed.

Property information

Owner of property _____
 Address _____
 Phone number _____
 Other contact _____
 Address _____
 Phone number(s) _____
 Project address (if different) _____
 Critical Area designation _____ Zoning _____

Proposed Buffer disturbance

- New development/redevelopment (e.g. new building, addition to home, replacement of structures)
- Shore erosion control
- Shore access
- Other, please explain: _____

Is the property in a designated Buffer Exemption Area (BEA)? Yes No

Note: If the property is BEA, a public notice sign must be posted on the property for 15 days before work can begin.

Are there any special plat notes or restrictions concerning your Buffer (e.g., wetlands, conservation easements)?
 Yes No If yes, please explain: _____

Please provide a brief explanation of your proposed project in the space below. Include area and/or number of trees cleared as well as the type of equipment that will be used. Two examples follow:

1. *600 square feet partially cleared for shore access with hand tools; canopy will be maintained; disturbance will be limited to three saplings and several shrubs; and path will consist of wood chips.*
2. *Removal of poison ivy from 2,000 square feet area along shore access path; method of removal includes hand-pulling and chemical spraying of individual plants with an approved herbicide; any resulting bare areas will be mulched to prevent soil erosion and to prevent re-establishment of invasives. There will be no removal of trees or shrubs.*

Proposed project

Justification

What are the long-term management plans for this area?

Calculation of mitigation

The following process is used to compute the amount of mitigation needed for impacts to the Buffer. For the purposes of this Buffer Management Plan, mitigation is defined as plantings or similar offsets that will help to negate the effect of the Buffer disturbance. To determine the amount of mitigation for your Buffer disturbance, you need to determine the following:

1. Number of trees removed on-site

Determine the size and number of trees to be removed. Use the table below to calculate the number of required replacement trees. This number is based on the size of the tree, whether the property is in the Buffer Exemption Area, and whether the tree is dead, dying, or hazardous.

Plant material size	Number of trees to be replaced for number of trees removed in 100-ft Buffer		
	New Development/ Redevelopment		Dead, Dying Trees, or Hazardous Trees
	Non-BEA	BEA	
Scrub shrub - sapling < 1" DBH	1 for every 10 sq ft	1 for every 20 sq ft	No replacement
Trees 1 to < 4" DBH	3 for 1	2 for 1	1 for 1
Trees 4 to < 12" DBH	4 for 1	3 for 1	1 for 1
Trees 12 to < 18" DBH	5 for 1	4 for 1	1 for 1
Trees 18 to 24" DBH	6 for 1	5 for 1	1 for 1
Trees > 24" DBH	7 for 1	6 for 1	1 for 1

Number of trees to be removed: _____

Tree	Size	Mitigation ratio	Number of replacements required
1			
2			
3			

Total number of replacement trees required _____

2. Amount of disturbance: Buffer disturbance is based on the area disturbed and is the second part of calculating your mitigation requirements.

Area of Buffer cleared or disturbed _____ square feet

Mitigation ratio for the type of Buffer impact:

Different types of Buffer management activities require different mitigation ratios. Higher ratios are used for activities that have a greater impact upon the Buffer. The purpose of the mitigation is to improve the Buffer functions where possible. The table below provides the mitigation ratio for different types of Buffer management activities.

Type of Buffer disturbance	Mitigation ratio
New development/redevelopment	
Non-BEA	3:1
BEA	2:1
Shore erosion control	1:1
Shore access	2:1
Other: Please contact Planning & Zoning	

Mitigation amount calculated by multiplying the area disturbed by the mitigation ratio.

Square feet _____ by ratio above _____ = _____ square feet

Buffer planting plan

This section is to help you provide more specific details on your mitigation location and plantings.

Planting Location

All mitigation should be located within the Critical Area in the following order of preference:

1. On-site within the Buffer
2. On-site adjacent to the Buffer
3. On-site within the Critical Area
4. Off-site (follow order of preference 1-3 above)
5. Fee-in-lieu payment (only if options 1-4 cannot be met)

Plant spacings and mitigation credits for various size trees and shrubs

Credit square feet	Plant size	Plant spacing
100 sq ft	1 small tree (2-inch caliper): ornamental or flowering trees	10 foot center
400 sq ft	1 large tree (2-inch caliper) and understory vegetation (minimum: 2 small trees or 3 shrubs)	Tree: 20-foot center Understory: 10-foot center
50 sq ft	1 tree (seedlings)	7 foot center
50 sq ft	1 shrub	3-7 foot center
2 sq ft	1 quart-sized perennial	

Schematic Drawing

All Buffer Management Plans must include a schematic drawing identifying areas of impact to the Buffer and vegetation that will be removed. On the plan, indicate existing trees and shrubs and the proposed location for replanting. Show the location of the Critical Area Buffer. Include the specific types of vegetation that will be used for mitigation and the amount of mitigation credit for each type.

Authorization

I certify these statements to be true and accurate and that any trees to be removed are on my property. I hereby grant City of Annapolis officials permission to enter my property for inspections of this Buffer Management Plan.

Owner signature _____ Date _____

September 2008