

# **LOCAL GOVERNMENT ASSISTANCE GUIDE**

## **Critical Area Buffer**

**COMAR 27.01.09.01**

Effective Date: March 8, 2010

### **Critical Area Commission**

#### **Chesapeake and Atlantic Coastal Bays**

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### **Purpose:**

The purpose of this Local Government Assistance Guide is to convey information about the Critical Area Commission's Buffer Regulations. The effective date of the regulations is March 8, 2010. This guide is a general summary of the provisions. It is not intended as a substitute for the specific requirements that are found only in the official regulations. The Commission's Buffer regulations can be accessed on the internet at [http://www.dsd.state.md.us/comar/subtitle\\_chapters/27\\_Chapters.aspx](http://www.dsd.state.md.us/comar/subtitle_chapters/27_Chapters.aspx) and searching codification number 27.01.01.01 for changes to the definitions and 27.01.09.01 for the new Buffer provisions. Most of the new Buffer provisions are found in subsections 27.01.09.01-1 through 27.01.09.01-7.

The Buffer Regulations establish comprehensive standards and procedures for the treatment of the Critical Area Buffer. The original Critical Area Criteria included provisions for measuring, establishing, maintaining, and protecting the Buffer. However, these provisions were often subject to different interpretations, and emphasized mitigating for adverse impacts to the Buffer as opposed to improving and enhancing the Buffer. The original provisions were considered insufficient to adequately protect the Buffer, especially in light of continued development pressure along the shoreline of Maryland's tidal waters, wetlands, and tributaries.

The new regulations create standards for delineating the Buffer, measuring the Buffer, and mandatory expansion for contiguous sensitive areas. All aspects of Buffer implementation, including Buffer establishment, protection, maintenance, mitigation, and enforcement are covered. The specificity now included in the regulations will allow for consistent, equitable, and efficient application of the regulations throughout the 64 Critical Area jurisdictions.

The new regulations include mitigation ratios, establishment methodologies, planting standards, a planting credit system, planting timetables, and maintenance and survival requirements. Different types of development activity on property that includes the Critical Area Buffer will require different types of Buffer planting which will be addressed through local approval of a Buffer Management Plan. The regulations describe the three types of Buffer Management Plans, when each type of Plan is required, and what needs to be included in these plans. The regulations also include provisions that authorize a local government to collect a fee in lieu of mitigation and specify how the money collected can be spent.

The adoption of State regulations allows for clear, specific, and uniform standards to be applied in response to development activities. Under the new regulations, the goals of minimizing adverse impacts to water quality and conserving and enhancing habitat are comprehensively addressed. Improving the functions of the Buffer is now required as part of all development activities on waterfront properties and other lands affected by the Buffer. It is anticipated that these regulations will enhance the effectiveness of the Critical Area Program and accelerate the restoration of Maryland's fragile shoreline resources.

## Applicability:

These regulations apply to all projects, approved on March 8, 2010 or thereafter, for development activity within the Critical Area where the property that is the subject of the application includes land identified as Critical Area Buffer or any required expansion. In accordance with the recently amended provisions of COMAR 27.01.01.03, regardless of any provision in a local law or ordinance, or the lack of a provision in a local law or ordinance, all of the requirements of the Buffer regulations shall apply to, and be applied by, a local jurisdiction. In the event that a provision of this title conflicts with a provision of a local program, the stricter provision applies.

The Buffer Regulations include provisions that allow local governments to develop alternatives to the regulations in order to provide flexibility and address local plans and policies. Alternative Buffer provisions must be reviewed and approved by the local government and the Critical Area Commission before they can become effective and be used at the local level.

## Summary:

### Important Definitions (COMAR 27.01.01 and COMAR 27.01.09)

Within the Buffer regulations, these terms are defined as follows:

Buffer means the area immediately adjacent to the mean high water line of tidal waters, the edge of each bank of tributary streams and the landward edge of tidal wetlands. It includes areas that are not naturally vegetated and may be developed or disturbed.

Development activity means human activity that results in disturbance to land, natural vegetation, or a structure.

Disturbance means any alteration or change to the land. Disturbance includes any amount of clearing, grading, or construction activity. Disturbance does not include gardening or maintenance of an existing grass lawn.

Accessory means a structure that is detached from a principal structure, located on the same lot, and clearly incidental and subordinate to the principal structure.

In-kind replacement means the removal of a structure and the construction of another structure that is smaller than or identical to the original structure in use, footprint area, width, and length.

Substantial alteration means a repair, reconstruction, replacement, or improvement of a principal structure, with a proposed total footprint that is at least 50 percent greater than that of the structure that is the subject of the application.

Native means species that are indigenous to the physiographic area in Maryland where the planting is proposed. Species types have been defined as follows:

- Canopy tree means a tree that, when mature, reaches a height of at least 35 feet.
- Understory tree means a tree that, when mature, reaches a height of 12 to 35 feet.
- Large shrub means a shrub that, when mature, reaches a height of at least six feet.
- Small shrub means a shrub that, when mature, reaches a height of up to six feet.

### Buffer Measurement and Buffer Expansion (COMAR 27.01.09.01.D)

- The Buffer is measured landward from the mean high water line of tidal waters, the edge of each bank of tributary streams, and the landward edge of tidal wetlands.
- The Buffer is expanded when one or more of the following conditions exist:



- Steep slopes at a rate of four feet for every one percent of slope or to the top of the slope, whichever is greater,
  - Nontidal Wetlands of Special State Concern to include the wetland and its regulated (by MDE) 100-foot buffer,
  - Nontidal wetlands to the upland boundary of the nontidal wetland, and
  - Highly erodible soils and hydric soils to the landward edge of the soil or 300-foot (which include the minimum 100-foot Buffer), whichever is less.
- There is an alternative method for Buffer expansion for lots or parcels that existed prior to January 1, 2010 that have highly erodible or hydric soils. A development activity may be located in the expansion area, without a variance, provided that the Buffer and any expansion for hydric or highly erodible soils occupies at least 75 percent of the lot or parcel and mitigation occurs at a 2:1 ratio based on the lot coverage of the proposed development activity.
  - In accordance with the provisions enacted by the Maryland General Assembly in 2008, a 200-foot Buffer is required for new subdivisions and certain site plan approvals in the Resource Conservation Area. This requirement does not apply if:
    - The application was submitted before July 1, 2008 and receives final approval before July 1, 2010;
    - The application involves the use of growth allocation; or
    - A jurisdiction adopts provisions allowing a reduction in the Buffer when the strict application would prevent development of the property at the allowed density or preclude an intra-family transfer.

#### **Buffer Establishment (COMAR 27.01.09.01-1)**

- The regulations require planting to establish the Buffer when development activities take place on properties that include land within the Buffer, even if all development is outside the Buffer.
- The amount of Buffer establishment is dependent on the type of proposed development activity and whether the proposed development activity is on a new lot or an existing lot.
- The Buffer must be fully established when new subdivisions are platted, new development takes place on a lot created after local program adoption, or when a property is converted from one land use to another.
- For new development on a lot created before local program adoption or substantial alterations on any lot, an area of the Buffer equal to the total amount of lot coverage must be planted.
- For additions and accessory structures, an area of the Buffer equal to the increase in lot coverage must be planted.
- Buffer establishment is not required when the Buffer is already fully established in woody, forest, or wetland vegetation or when the project involves the in-kind replacement of principal structure.
- When the Buffer and adjacent lands will remain in agricultural use after subdivision, Buffer establishment is not required until the lot(s) is developed.
- Buffer establishment of more than one acre may utilize natural regeneration to satisfy up to 50 percent of the area required to be established.

#### **Mitigation and Planting Standards (COMAR 27.01.09.01-2)**

- New areas of lawn or turf grass are not permitted in the Buffer, and the area of the Buffer required to be planted must be covered with mulch or ground cover or both until understory is established.
- All plantings must be native species and evenly distributed throughout the Buffer.

- Buffer mitigation will be calculated according to the following standards:
  - The area of the limits of disturbance in the Buffer multiplied by a mitigation ratio in Table 1 below.
  - For removal on an individual tree that is at least two inches in diameter when measured 4.5 feet above the ground, mitigation will be at a rate of 100 square feet for every one inch of diameter. (For example, removal of a five-inch diameter tree would require 500 square feet of mitigation.)
  - For projects involving both disturbance in the Buffer and tree removal, mitigation is calculated as the sum of both.
  - For each dead, diseased or dying tree that is removed, mitigation is one one-inch caliper canopy tree.

**Table 1: Mitigation Ratios for Development Activities**

Activity	Mitigation Ratio
Shore erosion control	1:1
Riparian water access	2:1
Development or redevelopment of water-dependent facilities	2:1
Variance	3:1
Violation	4:1

- Variances may not be granted to planting and mitigation standards.
- Final use and occupancy permits can be issued only after the implementation of a Buffer Management Plan is complete, or the applicant has provided financial assurance (such as a bond) to cover the costs for materials, installation, and the survivability terms specified in the regulations.
- Before final recordation of a subdivision, the applicant must mark the Buffer in the field with a permanent sign that prohibits clearing or disturbance. There must be at least one sign per lot or for each 200 linear feet of shoreline. Concurrent with the recordation of the subdivision, the applicant must record a protective measure (deed restrictions or equivalent) within the Buffer Management Plan.
- Planting credit for landscape stock must be calculated in accordance with the credits included in Table 2 below. For planting requirements that are ¼ acre or greater, portions of the required planting can be comprised of bare-root seedlings or whips and ½-inch to one-inch container grown trees. The required number of plants and the required survival term depends on the stock size of the trees as specified in the regulations.

**Table 2: Planting Credits**

Vegetation Type	Minimum Size Eligible for Credit	Credit Allowed (Square Feet)	Maximum Percent of Credit
Canopy tree	2-inch caliper and 8 feet high	200	No maximum
Canopy tree	1-inch caliper and 6 feet high	100	No maximum
Understory tree	1-inch caliper and 6 feet high	75	No maximum
Large shrub	1-gallon and 4 feet high	50	30%
Small shrub	1-gallon and 18 inches high	25	20%
Herbaceous perennial *	1-quart	2	10%
Planting cluster 1 *	1 Canopy tree; and 3 large shrubs or 6 small shrubs	300	Not applicable
Planting Cluster 2 *	2 Understory trees; and 3 large shrubs or 6 small shrubs	350	Not applicable

\* These options can only be used for Buffer establishment or mitigation of less than one acre.

### **Buffer Management Plans (COMAR 27.01.09.01-3)**

- Local governments will require the submittal of a Buffer Management Plan for any project that involves establishment of the Buffer or mitigation for disturbance in the Buffer. Final subdivision approval cannot occur until a Buffer Management Plan has been submitted and approved.

- An applicant must submit a Buffer Management Plan to the local government for review and approval when establishment of all or a portion of the Buffer is required in accordance with these regulations or when disturbance to the Buffer will result from issuance of a variance, permit, or other project approval.
- A Buffer Management Plan is not required for maintenance of an existing grass lawn or for gardening.
- A Simplified Buffer Management Plan is required for the following activities:
  - Providing access to a private pier or shoreline that is up to three feet wide,
  - Manually removing invasive or noxious vegetation,
  - Filling to maintain an existing lawn, or
  - Cutting a tree that is in imminent danger of falling and causing damage or accelerating shore erosion. (For an emergency situation, the Plan may be filed after the tree has been cut.)
- A Minor Buffer Management Plan is required when the area of Buffer establishment or the area of Buffer mitigation required is less than 5,000 square feet. A Minor Buffer Management Plan must include:
  - A plan showing the limit of disturbance, total number and size of trees to be removed, and the proposed arrangement of planting,
  - A landscape schedule that includes species, quantity, size of all plantings and the planting date,
  - A maintenance plan with provisions for two years of monitoring and replacement planting,
  - An inspection agreement that allows a local government to inspect the plantings, and
  - Calculations as necessary to determine the required area of Buffer mitigation or Buffer establishment.
- A Major Buffer Management Plan is required when the area of Buffer establishment or the area of Buffer mitigation required is 5,000 square feet or greater. A Major Buffer Management Plan must include:
  - A plan showing the limit of disturbance, total number and size of trees to be removed, and the proposed arrangement of planting,
  - A landscape schedule that includes species, quantity, size of all plantings and the planting date,
  - A maintenance plan with provisions for two years of monitoring and replacement planting,
  - A long-term protection plan that includes financial assurance that covers the planting and required survival term, provisions for monitoring, and an anticipated planting date (with planting required to take place prior to construction on the property or sale of the property),
  - An inspection agreement that allows a local government to inspect the plantings,
  - Calculations as necessary to determine the required area of Buffer mitigation or Buffer establishment, and
  - Signature of the party responsible for the proposed activity and survival of the planting.

#### **Fee In Lieu of Buffer Mitigation (COMAR 27.01.09.01-4)**

- A local government must collect a fee in lieu of planting if the mitigation planting requirements cannot be met. A fee in lieu cannot be collected as an alternative to Buffer establishment.
- Fee-in-lieu monies must be collected in a special fund, which may not revert to the jurisdiction's general fund. The funds collected must be used to establish the Buffer on sites where planting is not a condition of development or redevelopment, for water quality and habitat enhancement projects as described in a local Critical Area program, or in an agreement between the local jurisdiction and the Commission.
- The fee in lieu collected must be at a rate of \$1.50 per square foot of required mitigation. A local jurisdiction may propose to use a greater or lesser fee as necessary to implement these regulations. If a jurisdiction opts to use a lesser fee, the jurisdiction must demonstrate that the fee is adequate to cover the costs associated with all aspects of implementing Buffer mitigation, and the Commission must approve the lesser alternative.



## **Agricultural Activities (COMAR 27.01.09.01-5)**

These provisions were recodified, but no changes were made to the Buffer provisions as they apply to agricultural activities.

## **Tree Cutting and Timber Harvesting (COMAR 27.01.09.01-4)**

These provisions were recodified and the development-related provisions concerning cutting trees for personal use were deleted.

## **Frequently Asked Questions:**

### **Do I need to comply with these provisions just to install a 300 square foot prefabricated shed on my waterfront property outside the Buffer?**

Yes, unless the Buffer on your property is fully established in forest vegetation, you will need to plant two trees and two large shrubs (or plantings that provide 300 square feet of credit) within the Buffer on your lot.

### **Why do I have to do this when my project does not affect the Buffer?**

Human activity associated with residential development on waterfront property, or on lands affected by the Buffer, has impacts on the water quality and habitat of Maryland's Bays. Septic systems, lot coverage, stormwater runoff, and the creation of new lawn areas may be part of standard residential development, but these activities adversely affect Maryland's waters and wetlands. Planting trees and protecting existing forests near or immediately adjacent to tidal waters, tidal wetlands, and tributary streams offset these impacts.

### **If my local government hasn't adopted the new Buffer regulations, can I use the standards in the current zoning ordinance?**

No. Your local government will require that you comply with the regulations as set forth in COMAR 27.01.09.01 as of March 8, 2010, which is the effective date of the regulations. The regulations have the full force and effect of law. Local governments can adopt their own Buffer provisions, subject to Commission review and approval. In the case of conflicting State and local provisions, the stricter provisions would apply.

### **Who can prepare a Buffer Management Plan?**

Simplified and most Minor Buffer Management Plans can be prepared by a property owner. While the regulations do not require minimum credentials for a person preparing a Major Buffer Management Plan, those preparing the plans will need knowledge and experience relating to plan preparation, plant selection, plant installation and maintenance, and protective agreements.

### **How do I know if a certain plant species is considered "native" and therefore acceptable to use in the Buffer?**

The Critical Area Commission and most local governments use the U.S. Fish and Wildlife Service publication, *Native Plants for Wildlife Habitat and Conservation Landscaping – Chesapeake Bay Watershed*, as a guide for selecting plants for Buffer mitigation and establishment. The publication includes over 400 species of canopy trees, understory trees, shrubs, and herbaceous plants and is accessible on-line at [www.nps.gov/plants/pubs/chesapeake/](http://www.nps.gov/plants/pubs/chesapeake/). Other plant species may be acceptable. Contact your local government or the Critical Area Commission to make sure.