

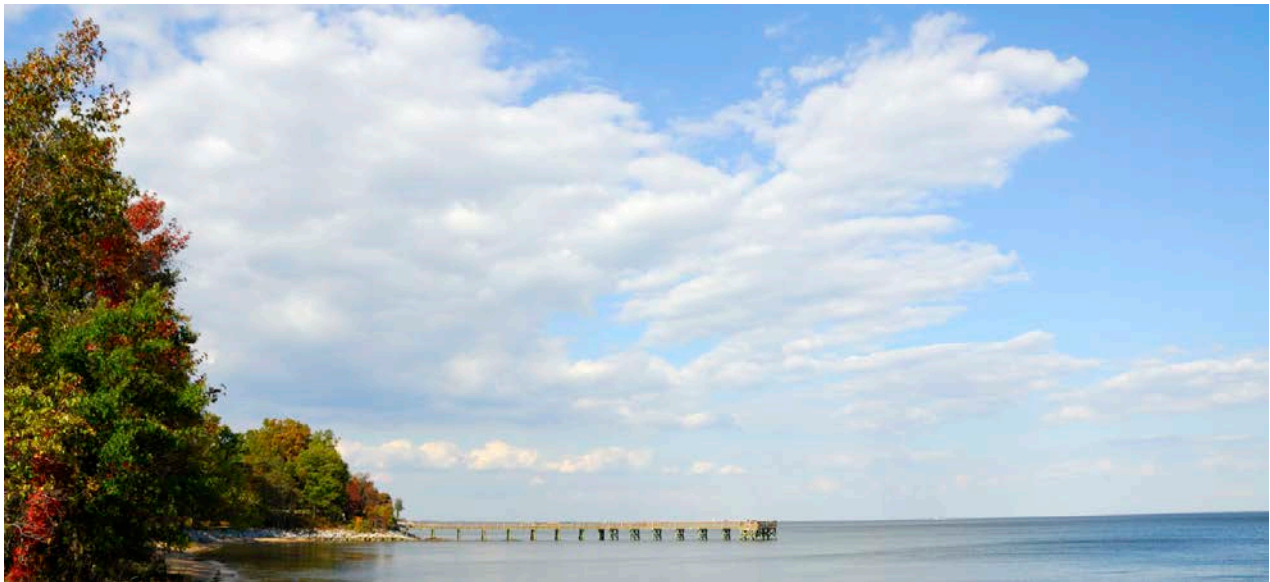
LOCAL GOVERNMENT ASSISTANCE GUIDE

Critical Area Buffer

COMAR 27.01.09.01

March 2012

Critical Area Commission
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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 regulations became effective on March 8, 2010. The regulations were amended, and the effective date of the updated regulations is March 5, 2012. 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 and searching codification number 27.01.01.01 for changes to the definitions and 27.01.09.01 for the general Buffer provisions. Most of the new Buffer standards 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 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 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 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:

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.

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. It does not include gardening or maintaining an existing grass lawn.

Fully established means the Buffer contains as much diverse, native vegetation as necessary to support a firm and stable riparian habitat capable of self-sustaining growth and regeneration.

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.

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.

Permanent disturbance means a material, enduring change in the topography, landscape, or structure that occurs as part of a development or redevelopment activity. Permanent disturbance includes construction that results in lot coverage and construction of a deck.

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.

Temporary disturbance means a short-term change in the landscape that occurs as part of a development activity. Temporary disturbance includes areas for storage of materials, construction access, and graded areas that are restored to their previous vegetative condition.

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-feet (which includes the minimum 100-foot Buffer), whichever is less.
- There is an alternative method for addressing 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. This alternative does not apply to expansion of the Buffer associated with slopes that are 15% or greater.
- 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 received 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 square footage of lot coverage outside the Buffer must be planted.
- For additions and accessory structures, an area of the Buffer equal to the square footage of the net 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, planting of the Buffer is not required until the lot(s) is developed. At the time of subdivision, a Buffer Management Plan must be prepared to address the future requirement.
- Buffer establishment of one-quarter acre to one acre may utilize natural regeneration for up to 75 percent of the area required to be established. For Buffer establishment greater than one acre, natural regeneration may be used for up to 90 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 located within the Buffer to optimize the water quality and habitat functions of the Buffer.
- Removal of a dead tree does not require mitigation.
- 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.
- The square footage of 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 of an individual tree or an area of developed woodland or forest, the area of canopy coverage that will be removed.
 - For projects involving both disturbance in the Buffer and tree removal, mitigation is calculated as the sum of both.
 - For each diseased, dying, invasive, or hazardous tree that is removed, mitigation is one ¾ -inch caliper canopy tree.

Table 1: Mitigation Ratios for Development Activities

Activity	Mitigation Ratio	
	Permanent Disturbance	Temporary Disturbance
Septic system on a lot created before local program approval if located in existing lawn or no clearing is required	Not applicable	0
Septic system on a lot created before local program approval if clearing is required	1:1	0
Shore erosion control	1:1	1:1
Riparian water access	2:1	1;1
Development or redevelopment of water-dependent facilities	2:1	1:1
Variance	3:1	1:1
Violation	4:1	Not applicable

- Before final recordation of a subdivision, the applicant must identify the limits of 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, ½-inch to one-inch container grown trees, greater than 1-inch container grown trees, and natural regeneration. 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	200	No maximum
Canopy tree	3/4-inch caliper	100	No maximum
Understory tree	3/4-inch caliper	75	No maximum
Large shrub	4 feet high	50	30%
Small shrub	18 inches high	25	20%
Herbaceous perennial	1-quart or based on the area covered by plugs or seed mix	2	10%
Planting cluster for buffer establishment or mitigation of planting less than ½ acre	1 Canopy tree; and 3 large shrubs or 6 small shrubs	300	Not applicable
Planting Cluster for buffer establishment or mitigation of planting less than ½ acre	2 Understory trees; and 3 large shrubs or 6 small shrubs	350	Not applicable

- A local government may authorize an increase in the percentage of large shrubs, small shrubs, or herbaceous perennials if the Buffer has existing canopy coverage of at least 50 percent or site constraints such as severely eroding slopes, salt water intrusion, predominately sandy soils, or unconsolidated fill preclude the planting of canopy trees.

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 up to three feet wide to a private pier or shoreline,
 - 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.

Natural Regeneration (COMAR 27.01.09.01-4)

- A local government may allow natural regeneration to be used for areas of Buffer establishment that exceed ¼- acre.
- Areas proposed for natural regeneration must include an alternative planting plan in case the natural regeneration is unsuccessful.

- If the natural regeneration fails, an applicant shall implement a supplemental planting plan containing at least 300 live trees on a per acre basis that are at least 4 feet tall.
- A natural regeneration area must be within 300 feet of a mature forest of at least 1 acre that contains a seed bank of native species adequate for natural regeneration.
- The natural regeneration plan submitted by the applicant must include the plan and financial assurance for at least 5 years.
- Five years after the date of approval of a Buffer Management Plan that includes natural regeneration, the party responsible for the development or redevelopment activity and the survival of the planting associated with that activity shall submit a report documenting that specific size, species, and quantity requirements have been met.

Fee-In Lieu of Buffer Mitigation (COMAR 27.01.09.01-5)

- 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 27.01.09.01-6)

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 27.01.09.01-7)

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