



Proposed Amendments to the Chesapeake Bay Preservation Ordinance

Environmental Quality Advisory Council
June 12, 2024

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Background

- 2020 - Legislation ([Ch. 1207 of Acts of Assembly](#)) Amended Virginia Code §62.1-44.15:72 of the Chesapeake Bay Preservation Act
- 2021 - State Water Control Board (SWCB) adopted two amendments to the Regulations
 - Preservation of Mature Trees
 - [9VAC25-830-130 and 140](#)
 - Coastal Resilience and Adaptation to Sea Level Rise
 - [9VAC25-830-155](#)
- Follow-up to presentation on December 13, 2023



Mandated changes

- Preservation of Mature Trees
 - Trees can only be removed where necessary for project
 - Where removed, replaced with trees where practicable
- Coastal Resilience and Adaptation to Sea Level Rise
 - Require assessment of sea level rise and storm surge
 - Allow nature-based approved adaptation measures in the RPA
 - Allow fill only under limited circumstances
 - Maximize preservation of existing natural vegetation
 - Comply with all federal, state and local requirements



DRAFT proposed CBPO Amendment

- Article 1 – Add definitions

- Adaptation measure means a project, practice, or approach to mitigate or address an impact of climate change, including sea-level rise, storm surge, and flooding, including increased or recurrent flooding.
- Canopy tree means a tree that typically reaches 35 feet in height or taller when mature.
- Mature tree means a canopy tree with a diameter at breast height (DBH) of 12 inches or greater or an understory tree with a DBH of four inches or greater.
- Nature-based solution means an approach that reduces the impacts of sea-level rise, flooding, and storm events through the use of environmental processes and natural systems.
- Understory tree means a tree that typically reached 12 to 35 feet in height when mature.



DRAFT proposed CBPO Amendment (cont.)

- Article 2, Section 118-2-1(f) – Add new Allowed Use
 - (f) Adaptation measures, subject to compliance with the performance criteria in Article 3 of this Chapter.
- Article 2, Section 118-2-4(b) – Add new general performance criteria
 - (b) Exceptions to the requirements of Articles 3, 4, 5 or 6 will not be granted where:
 - (1) The assessment of climate change and sea-level rise as outlined in Section 118-4-3(g) has not occurred; or
 - (2) The proposed adaptation measure allows for the use of fill in a Resource Protection Area in contravention to the requirements of Section 118-3-3(g)(3).



DRAFT proposed CBPO Amendment (cont.)

- Article 3, section 118-3-2(b) – Edit general performance criteria
 - (b) Indigenous vegetation ~~shall~~ must be preserved to the maximum extent practicable consistent with the use, development, or redevelopment proposed. Mature trees must be protected during development and redevelopment and only removed where necessary, including to provide for the proposed use or development. Compliance with Chapter 122 of the Code may be relied on during the land development process to comply with this subsection.
- Article 3, section 118-3-3(d) – Edit RPA performance criteria
 - (d) Buffer area requirements: To minimize the adverse effects of human activities on the other components of the RPA, state waters, and aquatic life, a buffer area that is effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff ~~shall~~ must be retained, if present, and established where it does not exist. Notwithstanding permitted uses, encroachments, and vegetation clearing, authorized by this Chapter, the buffer area ~~is~~ cannot be reduced in width. Where land uses such as agriculture or silviculture within the area of the buffer cease and the lands are proposed to be converted to other uses, the full buffer ~~shall~~ must be reestablished in accordance with Section 118-3-3(f). Where the buffer must be established or reestablished, the planting of trees must be incorporated as appropriate to site conditions and in such a manner to maximize the buffer function. Inclusion of native species in tree planting is preferred.



DRAFT proposed CBPO Amendment (cont.)

- Article 3, section 118-3-3(~~e~~) – Edit RPA performance criteria
 - (1 i) Trees may be pruned or removed as necessary to provide for sight lines and vistas, provided that where removed, they ~~shall be~~ are replaced with other vegetation that is equally effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff. Mature trees must be preserved and trimmed or pruned in lieu of removal as site conditions permit and any removal should be limited to the fewest number of trees feasible. When trees are removed to provide for sight lines and vistas, they must be replaced with trees that are appropriate for site conditions and in such a manner as to maximize the buffer function and to protect the quality of state waters. Inclusion of native species in tree replanting is preferred. Trees may be pruned or removed from the RPA buffer in an area no greater than 5,000 square feet or 25% of the buffer area, whichever is less, for all sight lines and vistas combined. The bounds of this area ~~shall~~ must be determined in a manner acceptable to the Director and be based on identified vantage points and the portion of the shoreline to be viewed. Trees may not be removed where reasonable sight lines or vistas can be created by pruning trees alone. Pruning ~~shall~~ must be performed in accordance with the Public Facilities Manual. No more than 25% of the trees 6 inches or greater in diameter at breast height (4.5 feet) may be removed from



DRAFT proposed CBPO Amendment (cont.)

- Article 3, section 118-3-3~~(d)~~(4)(e)(iv) – Edit RPA performance criteria
 - (4 iv) For shoreline erosion control projects, trees and woody vegetation may be removed, necessary control techniques employed, and appropriate vegetation established to protect or stabilize the shoreline in accordance with the best available technical advice and applicable permit conditions or requirements. Mature trees may be removed only as necessary for the installation and maintenance of the projects consistent with the best available technical advice, project plans, and applicable permit conditions or requirements. Trees must be utilized in the project when vegetation is being established as appropriate to the site conditions and the project specifications. Inclusion of native species in tree planting is preferred. Shoreline ~~For shoreline~~ erosion control projects in tidal wetlands must be consistent with Chapter 13 Title 28.2, of the Code of Virginia and the accompanying Tidal Wetlands Guidelines in conjunction with the requirements of this Chapter, including Section 118-3-3(h) projects which propose the use of sea walls, rip-rap, groins or other structural means of stabilization, it shall be demonstrated to the satisfaction of the Director that vegetative techniques cannot be effectively utilized.



DRAFT proposed CBPO Amendment (cont.)

- Article 3, section 118-3-3(g)(1)-(2) – Add RPA performance criteria

(g) Adaptation measures: Where allowed in the RPA, in addition to the criteria above, the adaptation measures must:

(1) Be a nature-based solution adaptation measure that uses environmental processes, natural systems, or natural features, is appropriate for site conditions, and is:

(i) A Best Management Practice approved by the Chesapeake Bay Program Partnership;

(ii) An approved Virginia Stormwater Best Management Practice listed in the Virginia Stormwater Best Management Practice Clearinghouse;

(iii) An approved Shoreline Protection Strategy in accordance with the Tidal Wetlands Guidelines as determined by the Virginia Marine Resource Commission; or

(iv) A project that is an eligible activity for funding by the Virginia Community Flood Preparedness Fund as determined by the Virginia Department of Conservation and Recreation.

(2) Be designed, installed, and maintained in accordance with the applicable adaptation measure specifications in accordance with the type of the adaptation measure identified in Section 118-3-3(g)(1).



DRAFT proposed CBPO Amendment (cont.)

- Article 3, section 118-3-3(g)(3) – Add RPA performance criteria

(3) Allow for the use of fill only under the following conditions:

- (i) The grading and slope created by the use of fill must not be greater than necessary based upon the project specifications and implemented in a manner that minimizes the impact of run-off;
- (ii) The fill must have the necessary biogeochemical characteristics, including sufficient organic content, to support the growth of vegetation and adequate permeability to allow infiltration consistent with the project specifications;
- (iii) The use of fill shall not enhance stormwater runoff from the Resource Protection Area, and any lateral flow onto adjacent properties must be controlled;
- (iv) Any impacts on the management of stormwater upland of the Resource Protection Area created by the use of fill must be mitigated as necessary;
- (v) The use of fill must not negatively impact septic systems and drainfields; and
- (vi) The use of fill must be consistent with any applicable federal or state law, including floodplain management requirements in 44 C.F.R. Part 60



DRAFT proposed CBPO Amendment (cont.)

- Article 3, section 118-3-3(g)(4)-(6) – Add RPA performance criteria
 - (4) Maximize preservation of existing natural vegetation, including mature trees, and minimize land disturbance consistent with the adaptation measure specifications.
 - (5) Comply with all federal, state, and local requirements, including any required permits and conditions.
 - (6) Nothing in this provision authorizes the approval or allowance of an adaptation measure in contravention of floodplain management requirements, including the National Flood Insurance Program and established floodplain ordinances, nor does it require a locality to approve or allow an adaptation measure in contravention of its participation in the National Flood Insurance Program Community Rating System.



DRAFT proposed CBPO Amendment (cont.)

- Article 3, section 118-3-3(h)&(i) – Add RPA performance criteria

(h) Any activity in the Resource Protection Area must be consistent with Chapter 13 Title 28.2, of the Code of Virginia and the accompanying Tidal Wetlands Guidelines which provide for “minimum standards for the protection and conservation of wetlands,” and “ensure protection of shorelines and sensitive coastal habitat from sea level rise and coastal hazard.” Shoreline management and alteration projects should be coordinated to address the requirements of the most updated Tidal Wetlands Guidelines in conjunction with the requirements of this Chapter, including Section 118-3-3(e)(1)(iv).

(i) The Director may exempt a living shoreline, as defined in Va. Code § 28.2-104.1, from additional performance criteria requirements, including a Water Quality Impact Assessment, when the County otherwise approves of the project, the project minimizes land disturbance and maintains or establishes a vegetated buffer inland of the living shoreline, complies with the fill conditions in Section 118-3-3(g)(3), a Resilience Assessment, as described in Section 118-4-3(g)(1)-(6), is conducted to access the impacts of climate change and sea-level rise, and receives approval from the Virginia Marine Resources Commission of the Fairfax County Wetlands Board as applicable.



DRAFT proposed CBPO Amendment (cont.)

- Article 3, section 118-4-3(g) – Add to WQIA components

(g) Include a Resilience Assessment that assesses the impacts of climate change and sea-level rise on any proposed land development in the Resource Protection Area during the plan of development or project review process. Such assessment must be based on the Resource Protection Area as delineated at the time of the proposed land development. Such assessment must at a minimum:

- (1) Be based upon a potential impact range of 30 years or the lifespan of the project if less than 30 years;
- (2) Utilize a model or forecast developed by or on behalf of the Commonwealth.
- (3) Identify potential impacts:
 - (i) From projected sea-level rise using the 2017 National Oceanographic and Atmospheric Administration (NOAA) Intermediate–High scenario projection curve or any subsequently updated version thereof, on the project site;
 - (ii) From storm surge based upon the most updated NOAA hydrodynamic Sea, Lake, and Overland Surges from Hurricanes model on the project site; and
 - (iii) From flooding based upon the most updated Special Flood Hazard Area and the Limit of Moderate Wave Action on the project site. Such assessment of flooding should be in conjunction with the requirements and application of floodplain management requirements and programs



DRAFT proposed CBPO Amendment (cont.)

- Article 3, section 118-4-3(g)(4)-(6) – Add to WQIA components

- (4) Assess the potential impacts of the proposed land development on buffer function, including loss of riparian buffer vegetation and vegetation migration; water migration; and the potential impacts of additional future land disturbance or development in the Resource Protection Area connected to the proposed land development;
- (5) Identify conditions, alterations, or adaptation measures for the proposed land development that address these potential impacts as necessary and appropriate based upon site conditions; nature, type, and size of proposed land development, including whether such proposed land development is in an Intensely Developed Area; extent of potential impacts; and the necessity to minimize future land disturbance.
- (6) Based upon the assessment, the Director, Board or Exception Review Committee will, as necessary and appropriate, require conditions, alterations, or the installation of adaptation measures as part of the proposed land development consistent with the requirements of this chapter; and



Other draft minor changes and edits

- Updates to names and code citations of various federal, state and county codes and regulations to reflect other amendments
- The term “shall” is changed to “must”
- Removing the requirement for four [paper] copies of WQIA be submitted
- Adding a clarification regarding appealing a decision of the Board
- Other formatting and grammatical edits



Timing



- Ongoing – Follow-up Outreach
- July 30, 2024 – Authorization to Advertise
- September 11, 2024 – Planning Commission Public Hearing
- September 24, 2024 – Board Public Hearing
- September 29, 2024 – Target effective date

