



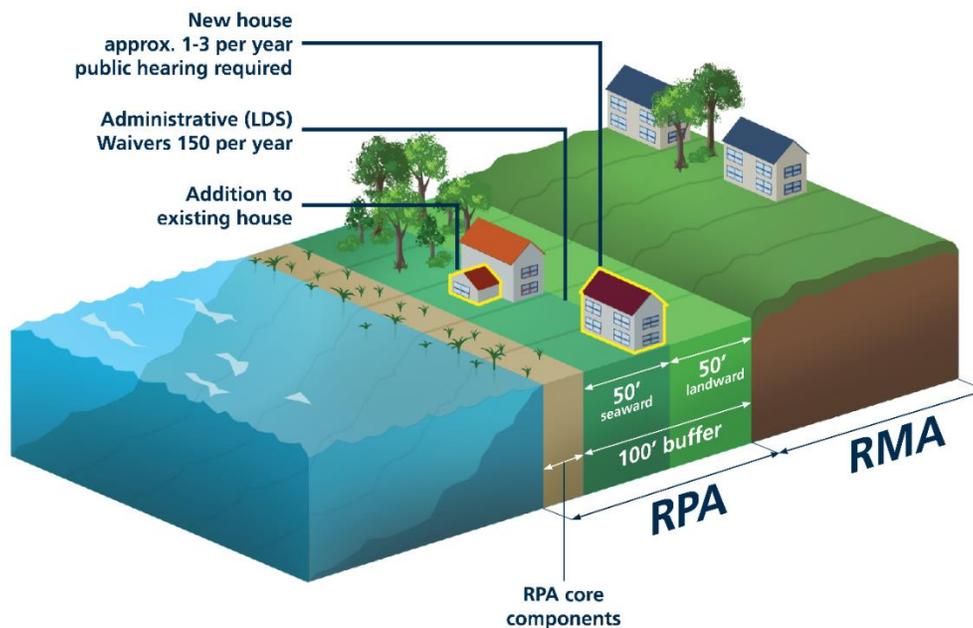
County of Fairfax, Virginia

Summary of Department of Environmental Quality (DEQ) Proposed Amendments to the Chesapeake Bay Regulations

In accordance with state legislation passed in 2020 to amend the Chesapeake Bay Preservation Act § 62.1-44.15:72, the Department of Environmental Quality (DEQ) under the authority of the State Water Control Board (SWCB) has proposed two amendments to the Chesapeake Bay Preservation Area Designation and Management Regulations (Regulations). The first amendment focuses on the preservation of mature trees. The second addresses coastal resilience and adaptation to sea-level rise and climate change. The Regulations, if approved, will necessitate changes to our local Chesapeake Bay Ordinance and will limit discretionary authority that the county currently holds.

Fairfax County adopted its Chesapeake Bay Preservation Ordinance in 1993 and updated it in 2003. The ordinance designates portions of the county adjacent to waterbodies and sensitive areas as Resource Protection Areas (RPAs) and the remainder of the county a Resource Management Area (RMA). Within the RPA, the 50-feet closest to a water body is deemed “seaward.” Similarly, the remaining portion of the RPA is identified as “landward.” The ordinance restricts building and development activities within RPA.

Staff seeks the board’s input in preparing to submit comments to these proposed regulations due by May 3, 2021.



Mature Trees Preservation: The preservation of mature trees amendment proposes to revise Virginia Administrative Code sections [9VAC25-830-130 and 140](#) to add regulatory language for the preservation and protection of mature trees. It also provides that, where removed, trees must be replanted to the maximum extent practicable, and where vegetation or buffers must be established, trees must be planted where practicable. An excerpt from DEQ’s presentation to the SWCB, including the full text of the proposed preservation of mature tree amendment is included as Attachment 1. Staff support the proposed amendment. However, staff will request clarification of language, such as defining mature trees and the term “maximum extent practicable.” Clear language will help avoid unintended consequences, such as focusing on retaining a single tree in a precarious condition over the retention of a group of younger trees. To address this, staff will develop comments seeking clarity in the language to prioritize the health and safety of trees throughout preservation.

Coastal Resilience and Adaptation to Sea-Level Rise and Climate Change: This amendment proposes a new subsection in Regulations ([9VAC25-830-155](#)) including several provisions:

- requires that localities consider resiliency and the impacts of climate change, such as sea-level rise and storm surge, on land development in the RPA;
- mandates the model or forecast to be used when evaluating climate change impacts;
- allows conditions based on a consideration of climate change impacts, including the use of best management practices;
- permits adaptive measures and practices as an Allowed Use in the RPA;
- prohibits approval of exceptions within the 50 seaward feet of the RPA buffer;
- prohibits projects solely based on fill within the RPA or within 100 feet of the RPA; and
- requires the locality to adopt the ordinance within 3 years.

An excerpt from DEQ’s presentation to the SWCB, including the full text of the proposed adaptation to coastal resilience and adaptation to sea-level rise and climate change amendment is included as Attachment 2.

Staff seeks Board input to guide staff through two competing policy desires: retention of local control over development and preparing the county for resiliency in the face of climate change and sea level rise, considered a goal of the Board’s Environmental Vision and the Climate Adaptation and Resilience Plan (CARP) currently under development. The Regulations, if approved, will necessitate changes to our local Chesapeake Bay Ordinance that will limit existing discretionary authority that the county currently holds to approve certain land development within the county. Specifically, this proposal severely limits current local authority in three distinct Chesapeake Bay Management Areas:

- (1) the seaward 50 feet of an RPA;
- (2) the landward 50 feet of the RPA if a project is built solely on fill; and
- (3) within the first 100 feet of the RPA in the RMA.

Currently under specific criteria and through a public hearing, the county holds authority to grant exceptions to build within the seaward 50 feet of the RPA to accommodate a property owner's "loss of buildable area" or construction of an accessory structure (i.e., shed). The county typically entertains one to three such applications annually. Moreover, the county allows "minor additions" to existing homes within the 50 seaward feet through administrative approval for homes built before the RPA designation. The proposed regulations would also eliminate this authority. County staff administratively considers roughly 150 such exceptions each year. However, tracking data does not distinguish between additions that are within 50 seaward feet or 50 landward feet of the RPA. Based on a review of a small sample size, staff estimate that 20 to 30 percent of these minor additions would be prohibited under this new regulation.

The second proposed limitation, the prohibition of fill, only projects in the 50 landward feet of the RPA, or within 100 feet of the RPA, focuses on the method of construction of the structure in the RPA, specifically where earth material is placed on the ground to elevate the ground above flooding risk. Staff note that if the county grants an exception to build in the RPA then building/flood safety requirements necessitate elevating buildings above potential flooding hazards. Fairfax County already considers major floodplains as part of the RPA core components. As a result, the mapped RPA accounts for climate resiliency because it includes the major floodplains.

The third proposed limitation, instituting building restrictions within 100 feet of the RPA, further restricts building beyond the RPA into the RMA for projects elevated by fill previously described. The Board should consider that this limitation on building carries building restrictions beyond the area of the RPA and may have wide-scale impact on construction within the county.

Finally, beyond the three above considerations, the Regulations would require the county to consider the future impacts of climate change or sea-level rise in development applications. Staff would prefer funding be made available from the state to provide the financial resources necessary to restudy the floodplains and rainfall changes.

Attachments:

- Attachment 1 – Excerpt from DEQ presentation on Proposed mature tree amendment
- Attachment 2 – Excerpt from DEQ presentation on Proposed coastal resilience and adaptation to sea-level rise and climate change amendment

Excerpt from Department of Environmental Quality presentation to the State Water Control Board on:

Chesapeake Bay Preservation Area Designation and Management Regulation - 9VAC25-830 - Proposed Amendment - Preservation of Mature Trees and Replanting of Trees

At the December 9, 2020, meeting of the State Water Control Board (Board), staff will ask the Board for approval to proceed to public notice with proposed amendments to the Chesapeake Bay Preservation Area Designation and Management Regulations (9 VAC 25-830). The proposed amendments were developed pursuant to Chapter 1207 of the 2020 Acts of Assembly, which required that a provision for “preservation of mature trees or planting of trees as a water quality protection tool and as a means of providing other natural resource benefits” be added to the criteria requirements in 9 VAC 25-830 as established by the Board. This memorandum provides a brief background on the Chesapeake Bay Preservation Act, the implementing regulations and the proposed amendments, as well as the General Assembly action authorizing this regulatory action.

BACKGROUND

The Chesapeake Bay Preservation Act (§ 62.1-44.15:72 of the Code of Virginia) provides that the State Water Control Board shall promulgate regulations that establish criteria for use by local governments in granting, denying, or modifying requests to rezone, subdivide, or use and develop land in Chesapeake Bay Preservation Areas. Chesapeake Bay Preservation Areas include Resource Protection Areas, Resource Management Areas and Intensely Developed Areas.

Chapter 1207 of the 2020 Acts of Assembly amended § 62.1-44.15:72 of the Code of Virginia and added a provision of “preservation of mature trees or planting of trees as a water quality protection tool and as a means of providing other natural resource benefits” to the criteria requirements for regulations to be established by the State Water Control Board for use by local governments under the Chesapeake Bay Preservation Act. Chapter 1207 also included a clause requiring the State Water Control Board to adopt regulations to implement the change and a clause that initial adoption of applicable regulations shall be exempt from the requirements of Article 2 (§ 2.2-4006 et seq.) of Chapter 40 of Title 2.2 of the Code of Virginia, but shall be subject to a public comment period of at least 60 days prior to final adoption by the Board. Consistent with this provision, a Notice of Intended Regulatory Action and a Regulatory Advisory Panel were not utilized.

The Office of the Attorney General will be sent the regulation for certification of authority to adopt the amendments.

PROPOSED AMENDMENT TO THE CHESAPEAKE BAY PRESERVATION AREA DESIGNATION AND MANAGEMENT REGULATIONS (9VAC25-830)

Overall, this proposed regulatory amendment includes requirements to preserve and protect mature trees and where existing vegetation is removed that includes a tree, a tree is utilized in

reestablishing vegetation. It also provides that where vegetation or buffers must be established, the planting of trees should be utilized where practicable.

The proposed regulatory amendment includes additional language to existing performance criteria related to vegetation and trees. Specifically, the general performance criteria under 9 VAC 25-830-130 already include a requirement for the preservation of indigenous vegetation. The proposed language underscores that mature trees should be preserved to the maximum extent practicable and protected during development. This is consistent with the benefits identified in the statutory language.

Additionally, most existing performance criteria provisions related to vegetation and trees are found in the criteria for Resource Protection Areas (9 VAC 25-830-140). For existing provisions related to tree removal such as for sight lines, vistas, driveways, roads, and erosion projects, the amendment clarifies that mature trees should be preserved and not removed as practicable. Where replanting or vegetation is to be established or reestablished, it should include the planting of trees. This includes previous agricultural lands converted to other uses, Intensely Developed Areas, and where a buffer does not currently exist.

Regulatory Text

9VAC25-830-130. General performance criteria.

Through their applicable land use ordinances, regulations and enforcement mechanisms, local governments shall require that any use, development or redevelopment of land in Chesapeake Bay Preservation Areas meets the following performance criteria:

1. No more land shall be disturbed than is necessary to provide for the proposed use or development.
2. Indigenous vegetation shall be preserved to the maximum extent practicable, consistent with the use or development proposed. Mature trees shall only be removed where determined to be necessary to provide for the proposed use or development and protected during development to the maximum extent practicable.
3. All development exceeding 2,500 square feet of land disturbance shall be accomplished through a plan of development review process consistent with § 15.2-2286 A 8 of the Code of Virginia and subdivision 1 e of 9VAC25-830-240.
4. Land development shall minimize impervious cover consistent with the proposed use or development.
5. Any land disturbing activity that exceeds an area of 2,500 square feet (including construction of all single family houses, septic tanks and drainfields, but otherwise as defined in § 62.1-44.15:51 of the Code of Virginia) shall comply with the requirements of the local erosion and sediment control ordinance. Enforcement for noncompliance with the erosion and sediment control requirements referenced in this criterion shall be conducted under the provisions of the Erosion and Sediment Control Law and attendant regulations.
6. Any Chesapeake Bay Preservation Act land-disturbing activity as defined in § 62.1-44.15:24 of the Code of Virginia shall comply with the requirements of 9VAC25-870-51 and 9VAC25-870-103.

7. Onsite sewage treatment systems not requiring a Virginia Pollutant Discharge Elimination System (VPDES) permit shall:

- a. Have pump-out accomplished for all such systems at least once every five years.
 - (1) If deemed appropriate by the local health department and subject to conditions the local health department may set, local governments may offer to the owners of such systems, as an alternative to the mandatory pump-out, the option of having a plastic filter installed and maintained in the outflow pipe from the septic tank to filter solid material from the effluent while sustaining adequate flow to the drainfield to permit normal use of the septic system. Such a filter should satisfy standards established in the Sewage Handling and Disposal Regulations (12VAC5-610) administered by the Virginia Department of Health.
 - (2) Furthermore, in lieu of requiring proof of septic tank pump-out every five years, local governments may allow owners of onsite sewage treatment systems to submit documentation every five years, certified by an operator or onsite soil evaluator licensed or certified under Chapter 23 (§ 54.1-2300 et seq.) of Title 54.1 of the Code of Virginia as being qualified to operate, maintain, or design onsite sewage systems, that the septic system has been inspected, is functioning properly, and the tank does not need to have the effluent pumped out of it.
- b. For new construction, provide a reserve sewage disposal site with a capacity at least equal to that of the primary sewage disposal site. This reserve sewage disposal site requirement shall not apply to any lot or parcel recorded prior to October 1, 1989, if the lot or parcel is not sufficient in capacity to accommodate a reserve sewage disposal site, as determined by the local health department. Building shall be prohibited on the area of all sewage disposal sites until the structure is served by public sewer or an onsite sewage treatment system that operates under a permit issued by the board. All sewage disposal site records shall be administered to provide adequate notice and enforcement. As an alternative to the 100% reserve sewage disposal site, local governments may offer the owners of such systems the option of installing an alternating drainfield system meeting the following conditions:
 - (1) Each of the two alternating drainfields in the system shall have, at a minimum, an area not less than 50% of the area that would otherwise be required if a single primary drainfield were constructed.
 - (2) An area equaling 50% of the area that would otherwise be required for the primary drainfield site must be reserved for subsurface absorption systems that utilize a flow diversion device, in order to provide for future replacement or repair to meet the requirements for a sewage disposal system. Expansion of the primary system will require an expansion of this reserve area.
 - (3) The two alternating drainfields shall be connected by a diversion valve, approved by the local health department, located in the pipe between the septic (aerobic) tank and the distribution boxes. The diversion valve shall be used to alternate the direction of effluent flow to one drainfield or the other at a time. However, diversion valves shall not be used for the following types of treatment systems:
 - (a) Sand mounds;
 - (b) Low-pressure distribution systems;
 - (c) Repair situations when installation of a valve is not feasible; and

- (d) Any other approved system for which the use of a valve would adversely affect the design of the system, as determined by the local health department.
- (4) The diversion valve shall be a three-port, two-way valve of approved materials (i.e., resistant to sewage and leakproof and designed so that the effluent from the tank can be directed to flow into either one of the two distribution boxes).
- (5) There shall be a conduit from the top of the valve to the ground surface with an appropriate cover to be level with or above the ground surface.
- (6) The valve shall not be located in driveways, recreational courts, parking lots, or beneath sheds or other structures.
- (7) In lieu of the aforementioned diversion valve, any device that can be designed and constructed to conveniently direct the flow of effluent from the tank into either one of the two distribution boxes may be approved if plans are submitted to the local health department and found to be satisfactory.
- (8) The local government shall require that the owner(s) alternate the drainfields every 12 months to permit the yearly resting of half of the absorption system.
- (9) The local government shall ensure that the owner(s) are notified annually of the requirement to switch the valve to the opposite drainfield.
8. Land upon which agricultural activities are being conducted, including but not limited to crop production, pasture, and dairy and feedlot operations, or lands otherwise defined as agricultural land by the local government, shall have a soil and water quality conservation assessment conducted that evaluates the effectiveness of existing practices pertaining to soil erosion and sediment control, nutrient management, and management of pesticides, and, where necessary, results in a plan that outlines additional practices needed to ensure that water quality protection is being accomplished consistent with the Act and this chapter.
- a. Recommendations for additional conservation practices need address only those conservation issues applicable to the tract or field being assessed. Any soil and water quality conservation practices that are recommended as a result of such an assessment and are subsequently implemented with financial assistance from federal or state cost-share programs must be designed, consistent with cost-share practice standards effective in January 1999 in the "Field Office Technical Guide" of the U.S. Department of Agriculture Natural Resource Conservation Service or the June 2000 edition of the "Virginia Agricultural BMP Manual" of the Virginia Department of Conservation and Recreation, respectively. Unless otherwise specified in this section, general standards pertaining to the various agricultural conservation practices being assessed shall be as follows:
- (1) For erosion and sediment control recommendations, the goal shall be, where feasible, to prevent erosion from exceeding the soil loss tolerance level, referred to as "T," as defined in the "National Soil Survey Handbook" of November 1996 in the "Field Office Technical Guide" of the U.S. Department of Agriculture Natural Resource Conservation Service. However, in no case shall erosion exceed the soil loss consistent with an Alternative Conservation System, referred to as an "ACS", as defined in the "Field Office Technical Guide" of the U.S. Department of Agriculture Natural Resource Conservation Service.

- (2) For nutrient management, whenever nutrient management plans are developed, the operator or landowner must provide soil test information, consistent with the Virginia Nutrient Management Training and Certification Regulations (4VAC50-85).
- (3) For pest chemical control, referrals shall be made to the local cooperative extension agent or an Integrated Pest Management Specialist of the Virginia Cooperative Extension Service. Recommendations shall include copies of applicable information from the "Virginia Pest Management Guide" or other Extension materials related to pest control.
 - b. A higher priority shall be placed on conducting assessments of agricultural fields and tracts adjacent to Resource Protection Areas. However, if the landowner or operator of such a tract also has Resource Management Area fields or tracts in his operation, the assessment for that landowner or operator may be conducted for all fields or tracts in the operation. When such an expanded assessment is completed, priority must return to Resource Protection Area fields and tracts.
 - c. The findings and recommendations of such assessments and any resulting soil and water quality conservation plans will be submitted to the local Soil and Water Conservation District Board, which will be the plan-approving authority.
9. Silvicultural activities in Chesapeake Bay Preservation Areas are exempt from this chapter provided that silvicultural operations adhere to water quality protection procedures prescribed by the Virginia Department of Forestry in the Fifth Edition (March 2011) of "Virginia's Forestry Best Management Practices for Water Quality Technical Manual." The Virginia Department of Forestry will oversee and document installation of best management practices and will monitor in-stream impacts of forestry operations in Chesapeake Bay Preservation Areas.
10. Local governments shall require evidence of all wetlands permits required by law prior to authorizing grading or other onsite activities to begin.

9VAC25-830-140. Development criteria for Resource Protection Areas.

In addition to the general performance criteria set forth in 9VAC25-830-130, the criteria in this section are applicable in Resource Protection Areas.

1. Land development may be allowed in the Resource Protection Area, subject to approval by the local government, only if it (i) is water dependent; (ii) constitutes redevelopment; (iii) constitutes development or redevelopment within a designated Intensely Developed Area; (iv) is a new use established pursuant to subdivision 4 a of this section; (v) is a road or driveway crossing satisfying the conditions set forth in subdivision 1 d of this section; or (vi) is a flood control or stormwater management facility satisfying the conditions set forth in subdivision 1 e of this section.
 - a. A water quality impact assessment in accordance with subdivision 6 of this section shall be required for any proposed land disturbance.
 - b. A new or expanded water-dependent facility may be allowed provided that the following criteria are met:
 - (1) It does not conflict with the comprehensive plan;
 - (2) It complies with the performance criteria set forth in 9VAC25-830-130;
 - (3) Any nonwater-dependent component is located outside of Resource Protection Areas;
- and

(4) Access to the water-dependent facility will be provided with the minimum disturbance necessary. Where practicable, a single point of access will be provided.

c. Redevelopment outside locally designated Intensely Developed Areas shall be permitted in the Resource Protection Area only if there is no increase in the amount of impervious cover and no further encroachment within the Resource Protection Area, and it shall conform to applicable erosion and sediment control and stormwater management criteria set forth in the Erosion and Sediment Control Law and the Virginia Stormwater Management Act and their attendant regulations, as well as all applicable stormwater management requirements of other state and federal agencies.

d. Roads and driveways not exempt under subdivision B 1 of 9VAC25-830-150 and which, therefore, must comply with the provisions of this chapter, may be constructed in or across Resource Protection Areas if each of the following conditions is met:

(1) The local government makes a finding that there are no reasonable alternatives to aligning the road or driveway in or across the Resource Protection Area;

(2) The alignment and design of the road or driveway are optimized, consistent with other applicable requirements, to minimize (i) encroachment in the Resource Protection Area ~~and~~ (ii) adverse effects on water quality, and (iii) removal of mature trees;

(3) The design and construction of the road or driveway satisfy all applicable criteria of this chapter, including submission of a water quality impact assessment; and

(4) The local government reviews the plan for the road or driveway proposed in or across the Resource Protection Area in coordination with local government site plan, subdivision and plan of development approvals.

e. Flood control and stormwater management facilities that drain or treat water from multiple development projects or from a significant portion of a watershed may be allowed in Resource Protection Areas provided such facilities are allowed and constructed in accordance with the Virginia Stormwater Management Act and its attendant regulations, and provided that (i) the local government has conclusively established that location of the facility within the Resource Protection Area is the optimum location; (ii) the size of the facility is the minimum necessary to provide necessary flood control or stormwater treatment, or both; (iii) the facility must be consistent with a comprehensive stormwater management plan developed and approved in accordance with 9VAC25-870-92 of the Virginia Stormwater Management Program (VSMP) regulations; (iv) all applicable permits for construction in state or federal waters must be obtained from the appropriate state and federal agencies, such as the U.S. Army Corps of Engineers, the department, and the Virginia Marine Resources Commission; (v) approval must be received from the local government prior to construction; and (vi) routine maintenance is allowed to be performed on such facilities to assure that they continue to function as designed. It is not the intent of this subdivision to allow a best management practice that collects and treats runoff from only an individual lot or some portion of the lot to be located within a Resource Protection Area.

2. Exemptions in Resource Protection Areas. The following land disturbances in Resource Protection Areas may be exempt from the criteria of this part provided that they comply with subdivisions a and b of this subdivision 2: (i) water wells; (ii) passive recreation facilities such as boardwalks, trails and pathways; and (iii) historic preservation and archaeological activities:

- a. Local governments shall establish administrative procedures to review such exemptions.
 - b. Any land disturbance exceeding an area of 2,500 square feet shall comply with the erosion and sediment control criteria in subdivision 5 of 9VAC25-830-130.
3. Buffer area requirements. The 100-foot wide buffer area shall be the landward component of the Resource Protection Area as set forth in subdivision B 5 of 9VAC25-830-80. Notwithstanding permitted uses, encroachments, and vegetation clearing, as set forth in this section, the 100-foot wide buffer area is not reduced in width. To minimize the adverse effects of human activities on the other components of the Resource Protection Area, state waters, and aquatic life, a 100-foot wide buffer area of vegetation that is effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff shall be retained if present and established where it does not exist. Where such buffer must be established, the planting of trees should be utilized to the maximum extent practicable and appropriate to site conditions.
- a. The 100-foot wide buffer area shall be deemed to achieve a 75% reduction of sediments and a 40% reduction of nutrients.
 - b. 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 100-foot wide buffer shall be reestablished. In reestablishing the buffer, management measures shall be undertaken to provide woody vegetation that assures the buffer functions set forth in this chapter. Such measures should include to the maximum extent practicable and appropriate to site conditions the planting of trees in reestablishing the buffer.
4. Permitted encroachments into the buffer area.
- a. When the application of the buffer area would result in the loss of a buildable area on a lot or parcel recorded prior to October 1, 1989, encroachments into the buffer area may be allowed through an administrative process in accordance with the following criteria:
 - (1) Encroachments into the buffer area shall be the minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utilities.
 - (2) Where practicable, a vegetated area that will maximize water quality protection, mitigate the effects of the buffer encroachment, and is equal to the area of encroachment into the buffer area shall be established elsewhere on the lot or parcel. Such vegetated area where established should include the planting of trees to the maximum extent practicable.
 - (3) The encroachment may not extend into the seaward 50 feet of the buffer area.
 - b. When the application of the buffer area would result in the loss of a buildable area on a lot or parcel recorded between October 1, 1989, and March 1, 2002, encroachments into the buffer area may be allowed through an administrative process in accordance with the following criteria:
 - (1) The lot or parcel was created as a result of a legal process conducted in conformity with the local government's subdivision regulations;
 - (2) Conditions or mitigation measures imposed through a previously approved exception shall be met;
 - (3) If the use of a best management practice (BMP) was previously required, the BMP shall be evaluated to determine if it continues to function effectively and, if necessary, the BMP shall be reestablished or repaired and maintained as required; and
 - (4) The criteria in subdivision 4 a of this section shall be met.

5. Permitted modifications of the buffer area.

a. In order to maintain the functional value of the buffer area, existing vegetation may be removed, subject to approval by the local government, only to provide for reasonable sight lines, access paths, general woodlot management, and best management practices, including those that prevent upland erosion and concentrated flows of stormwater, as follows:

(1) Trees may be pruned or removed as necessary to provide for sight lines and vistas, provided that where removed, they shall be replaced with other vegetation that is equally effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff. Mature trees should be preserved and not removed to the maximum extent practicable under this provision. When trees are removed, the other vegetation to replace the trees should be a trees as well to maximum extent practicable.

(2) Any path shall be constructed and surfaced so as to effectively control erosion.

(3) Dead, diseased, or dying trees or shrubbery and noxious weeds (such as Johnson grass, kudzu, and multiflora rose) may be removed and thinning of trees may be allowed pursuant to sound horticultural practice incorporated into locally-adopted standards.

(4) 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 should be preserved to the maximum extent practicable consistent with the best available technical advice and permit conditions or requirements and trees should be utilized in the projects to the maximum extent practicable.

b. On agricultural lands the agricultural buffer area shall be managed to prevent concentrated flows of surface water from breaching the buffer area and appropriate measures may be taken to prevent 182 noxious weeds (such as Johnson grass, kudzu, and multiflora rose) from invading the buffer area. Agricultural activities may encroach into the buffer area as follows:

(1) Agricultural activities may encroach into the landward 50 feet of the 100-foot wide buffer area when at least one agricultural best management practice which, in the opinion of the local soil and water conservation district board, addresses the more predominant water quality issue on the adjacent land—erosion control or nutrient management—is being implemented on the adjacent land, provided that the combination of the undisturbed buffer area and the best management practice achieves water quality protection, pollutant removal, and water resource conservation at least the equivalent of the 100-foot wide buffer area. If nutrient management is identified as the predominant water quality issue, a nutrient management plan, including soil tests, must be developed consistent with the Virginia Nutrient Management Training and Certification Regulations (4VAC5-15) administered by the Virginia Department of Conservation and Recreation.

(2) Agricultural activities may encroach within the landward 75 feet of the 100-foot wide buffer area when agricultural best management practices which address erosion control, nutrient management, and pest chemical control, are being implemented on the adjacent land. The erosion control practices must prevent erosion from exceeding the soil loss tolerance level, referred to as "T," as defined in the "National Soil Survey Handbook" of November 1996 in the "Field Office Technical Guide" of the U.S. Department of Agriculture Natural Resource Conservation Service. A nutrient management plan,

including soil tests, must be developed, consistent with the Virginia Nutrient Management Training and Certification Regulations (4VAC5-15) administered by the Virginia Department of Conservation and Recreation. In conjunction with the remaining buffer area, this collection of best management practices shall be presumed to achieve water quality protection at least the equivalent of that provided by the 100-foot wide buffer area.

(3) The buffer area is not required to be designated adjacent to agricultural drainage ditches if at least one best management practice which, in the opinion of the local soil and water conservation district board, addresses the more predominant water quality issue on the adjacent land—either erosion control or nutrient management—is being implemented on the adjacent land.

(4) If specific problems are identified pertaining to agricultural activities that are causing pollution of the nearby water body with perennial flow or violate performance standards pertaining to the vegetated buffer area, the local government, in cooperation with soil and water conservation district, shall recommend a compliance schedule to the landowner and require the problems to be corrected consistent with that schedule. This schedule shall expedite environmental protection while taking into account the seasons and other temporal considerations so that the probability for successfully implementing the corrective measures is greatest.

(5) In cases where the landowner or his agent or operator has refused assistance from the local soil and water conservation district in complying with or documenting compliance with the agricultural requirements of this chapter, the district shall report the noncompliance to the local government. The local government shall require the landowner to correct the problems within a specified period of time not to exceed 18 months from their initial notification of the deficiencies to the landowner. The local government, in cooperation with the district, shall recommend a compliance schedule to the landowner. This schedule shall expedite environmental protection while taking into account the seasons and other temporal considerations so that the probability for successfully implementing the corrective measures is greatest.

6. Water quality impact assessment. A water quality impact assessment shall be required for any proposed development within the Resource Protection Area consistent with this part and for any other development in Chesapeake Bay Preservation Areas that may warrant such assessment because of the unique characteristics of the site or intensity of the proposed use or development.

a. The purpose of the water quality impact assessment is to identify the impacts of proposed development on water quality and lands in the Resource Protection Areas consistent with the goals and objectives of the Act, this chapter, and local programs, and to determine specific measures for mitigation of those impacts. The specific content and procedures for the water quality impact 183 assessment shall be established by each local government. Local governments should notify the board of all development requiring such an assessment.

b. The water quality impact assessment shall be of sufficient specificity to demonstrate compliance with the criteria of the local program.

7. Buffer area requirements for Intensely Developed Areas. In Intensely Developed Areas the local government may exercise discretion regarding whether to require establishment of vegetation in the 100-foot wide buffer area. However, while the immediate establishment of

vegetation in the buffer area may be impractical, local governments shall give consideration to implementing measures that would establish vegetation in the buffer in these areas over time in order to maximize water quality protection, pollutant removal, and water resource conservation. In considering such measures, the local government should consider the planting of trees as a part of any such measures.

Excerpt from Department of Environmental Quality presentation to the State Water Control Board on:

Chesapeake Bay Preservation Area Designation and Management Regulation - 9VAC25-830 - Proposed Amendment - Coastal Resilience and Adaptation to Sea-level Rise and Climate Change Criteria

At the December 9, 2020, meeting of the State Water Control Board (Board), staff will ask the Board for approval to proceed to public notice with proposed amendments to the Chesapeake Bay Preservation Area Designation and Management Regulations (9 VAC 25-830). The proposed amendments were developed pursuant to Chapter 1207 of the 2020 Acts of Assembly, which required that a provision of “coastal resilience and adaptation to sea-level rise and climate change” be added to the criteria requirements in 9 VAC 25-830 as established by the Board. This memorandum provides a brief background on the Chesapeake Bay Preservation Act, the implementing regulations and the proposed amendments, as well as the General Assembly action authorizing this regulatory action.

BACKGROUND

The Chesapeake Bay Preservation Act (§ 62.1-44.15:72 of the Code of Virginia) provides that the State Water Control Board shall promulgate regulations that establish criteria for use by local governments in granting, denying, or modifying requests to rezone, subdivide, or use and develop land in Chesapeake Bay Preservation Areas. Chesapeake Bay Preservation Areas include Resource Protection Areas, Resource Management Areas and Intensely Developed Areas.

Chapter 1207 of the 2020 Acts of Assembly amended § 62.1-44.15:72 and added a provision of “coastal resilience and adaptation to sea-level rise and climate change” to the criteria requirements for regulations to be established by the State Water Control Board for use by local governments under the Chesapeake Bay Preservation Act. Chapter 1207 also included a clause requiring the State Water Control Board to adopt regulations to implement the change, and a clause that initial adoption of applicable regulations shall be exempt from the requirements of Article 2 (§ 2.2-4006 et seq.) of Chapter 40 of Title 2.2 of the Code of Virginia, but shall be subject to a public comment period of at least 60 days prior to final adoption by the Board.

Consistent with this provision, a Notice of Intended Regulatory Action and a Regulatory Advisory Panel were not utilized. However, staff did engage in individual discussions with state agencies and stakeholders and held a public input session to receive information and feedback on potential considerations.

The Office of the Attorney General will be sent the regulation for certification of authority to adopt the amendments.

PROPOSED AMENDMENT TO THE CHESAPEAKE BAY PRESERVATION AREA DESIGNATION AND MANAGEMENT REGULATIONS (9VAC25-830)

The proposed regulatory amendment provides clarity that climate change adaptation and resilience measures are a permitted activity within Chesapeake Bay Preservation Areas. This ensures these activities are specifically recognized consistent with identification of other allowable activities, particularly within the Resource Protection Area (RPA).

Consistent with the language in the statutory change, the proposed regulatory amendment provides that climate change impacts are considered for land development within the RPA. Given the primary nature of impacts, particularly sea-level rise, and that the RPA consists of water bodies and adjacent buffers, the amendment ensures consideration of these impacts when localities are reviewing projects. Moreover, it allows localities to incorporate or require conditions based upon a consideration of these impacts, including the use of best management practices. In considering these impacts, localities would utilize a model or forecast (2017 National Oceanographic and Atmospheric Administration (NOAA) Intermediate-High 173 scenario projection curve) specifically recognized by the Commonwealth, while having the option to consider other models or forecasts that are generally recognized and appropriate.

Additionally, the regulatory amendment proposes limitation on the granting of exceptions to activities in the RPA to ensure consideration of these impacts, avoid allowance of fill as a sole measure, and to provide for preservation and maximization of natural and nature-based features.

To allow for activities that are necessary to adapt or address climate change impacts, the regulatory amendment provides an allowance for these activities with certain requirements. These requirements apply in lieu of the performance criteria found in 9 VAC 25-830-130 and 9 VAC 25-830-140. For most activities, given the current site conditions and options in terms of adaptation measures, the regulatory amendment distinguishes between previously developed RPAs and vegetated or undeveloped RPAs.

The regulatory amendment maintains the requirement for a Water Quality Impact Assessment (WQIA) for these projects within the RPA. Given the nature of the projects and the recognition of certain activities by other DEQ programs including the Nonpoint Source Pollution control programs, the amendment also provides an exemption from the WQIA where the project is a best management practice recognized or approved by a state or federal agency to reduce runoff, prevent erosion, and filter nonpoint source pollution.

Additionally, in recognition of a common practice under regulatory oversight by the Virginia Marine Resources Commission (VMRC) and supported by commonwealth policy, the regulatory amendment provides an exemption for living shorelines where the locality has otherwise approved it, buffers and vegetation are addressed, and the project obtained necessary approval from VMRC.

Consistent with other performance criteria, local governments much include these provisions in their ordinances and incorporate the requirements into their programs. Additionally, given the timeframe necessary for ordinance changes and in recognition of the need for additional training and implementation tools such as guidance, localities would have three years from the effective date to adopt these changes.

Regulatory Text:

9 VAC 25-830-155 Climate Change Resilience and Adaptation Criteria

- A. This Section applies in addition to 9 VAC 25-830-130 and 9 VAC 25-830-140. Local governments shall incorporate these provisions into all relevant ordinances and ensure their enforcement through implementation of appropriate processes and documentation for oversight and enforcement. Localities shall update and amend their ordinances to adopt and incorporate these performance criteria by [insert date 3 years after effective date of the regulation amendment].

- B. Land development, adaption measures or activities including buffer modifications or encroachments necessary to install adaptation measures, mitigation measures, or other actions necessary to address the impacts of climate change, including but not limited to sea-level rise, recurrent flooding and storm surge, may be allowed in a Chesapeake Bay Preservation area provided the activity complies with all other applicable provisions of these regulations. Nothing in these provisions shall preclude a locality from adopting requirements or criteria in addition to the requirements of these provisions to address the impacts of climate change and sea-level rise in Chesapeake Bay Preservation areas in the locality including extension of the Resource Protection Areas, further restrictions on development, or further preservation of existing vegetation.
- C. Local governments shall consider the impacts of climate change or sea level rise on any proposed land development in the Resource Protection Area. Based upon this consideration, local governments may require the installation of additional measures or design features as part of the proposed land development consistent with the requirements of the Act and these regulations. In considering the future impact, local governments shall:
1. Consider a potential impact range of no less than 30 years; AND
 2. Utilize an appropriate model or forecast to aid in the consideration of impacts through use of:
 - i. The most updated 2017 National Oceanographic and Atmospheric Administration (NOAA) Intermediate-High scenario projection curve;
 - ii. A model or forecast that incorporates or utilizes the 2017 National Oceanographic and Atmospheric Administration (NOAA) Intermediate-High scenario projection curve; OR
 - iii. A peer-reviewed model or forecast that includes NOAA 2017 projections, including the Intermediate – High curve and has been developed, utilized, or recognized by a state or federal agency and is not based solely upon extrapolation of historical data.
 3. Include the consideration of future floodplain, water level, storm surge, or other impacts in altering the Resource Protection Area or diminishing the protection of water quality due to the proposed development from these impacts.
 4. Identify measures, conditions, or alterations to the proposed land development to address these impacts as necessary and appropriate based upon site conditions, type of proposed land development, and projected potential impacts. This includes measures such as state or federally recognized or approved best management practices appropriate for the site conditions and land development to address such impacts.
- D. Local governments shall not grant exceptions to the requirements of 9 VAC 25-830-130, or 9 VAC 250- 830-140, or 9 VAC 20-830-155 where:
1. The impact of climate change including sea level rise on the land development is not considered as outlined in Section C for exceptions in the Resource Protection Area;
 2. The exception consists of approval solely for the use of fill or other material to the Resource Protection Area or within 100 feet of the Resource Protection Area; OR
 3. The exception permits encroachment into seaward 50 feet of the buffer area of the Resource Protection Area notwithstanding permitted modifications and adaptive measures.
- E. Local governments may allow adaption measures or activities within the Resource Protection Area to address climate change including sea level rise subject to the following criteria. These criteria and

requirements shall apply to such adaptation measure or activity in lieu of the criteria in 9 VAC 25-830-130 and 140:

1. Where the adaptation measure or activity is within a Resource Protection Area that has been previously developed, including IDAs, and is not naturally vegetated, the adaptation measure or activity shall:
 - a. Be designed, implemented, and maintained in accordance with best management practices applicable to the adaptation measure or activity as recognized or approved by a state or federal agency;
 - b. Not consist solely of the use of fill or other materials to raise the elevation of a Resource Protection Area;
 - c. Incorporate natural features or measures such as the planting of vegetation or trees, maximize preservation of existing natural vegetation and trees particularly mature trees, and minimize land disturbance and impervious cover to the maximum extent practicable consistent with the applicable best management practices; AND
 - d. Where applicable, obtain any applicable federal, state, and local permits and comply with any applicable federal, state and local requirements.

2. Where the adaptation measure or activity is within a Resource Protection Area that is naturally vegetated or has not been previously developed, the measure or activity shall:
 - a. Be designed and implemented in accordance with best management practices applicable to the adaptation measure or activity as recognized or approved by state or federal agencies;
 - b. Preserve to the maximum extent practicable any existing vegetation in the additional 50 feet landward from the RPA;
 - c. Not consist solely of the use of fill or other materials to raise the elevation of a Resource Protection Area;
 - d. Maximize the preservation of existing vegetation and trees particularly mature trees, incorporate the planting and establishment of vegetation particularly trees, and minimize land disturbance and impervious cover to the maximum extent practicable consistent with the applicable best management practices; AND
 - e. Where applicable, obtain any applicable federal, state, and local permits and comply with any applicable federal, state and local requirements.

3. Where the adaptation measure or activity is a best management practice recognized or approved by a state or federal agency to reduce runoff, prevent erosion, and filter nonpoint source pollution, a Water Quality Impact Assessment in accordance with 9 VAC25-830-140(6) shall not be required. All other measures or activities shall require a Water Quality Impact Assessment in accordance with subdivision 6 of 9 VAC 25-830-140.

4. Where the proposed adaptation measure is a living shoreline project or related activity, the locality otherwise approves of the project, the projects maintains or establishes a vegetative buffer inland of the living shoreline to the maximum extent practicable, minimizes land disturbance to the maximum extent practicable, and the project receives approval from the Virginia Marine Resources Commission, including a permit as applicable, and any other necessary permits or approvals, the adaptation measure shall be exempt from additional requirements or criteria including a Water Quality Impact Assessment.