

## PART II - CODE OF ORDINANCES

### Chapter 18 - ZONING

#### ARTICLE 21.1. - CHESAPEAKE BAY PRESERVATION AREAS

#### ARTICLE 21.1. - CHESAPEAKE BAY PRESERVATION AREAS

##### **Sec. 18-216.1.1. - Purpose and authority.**

It is the intent of the Town and this article to protect, improve and enhance the water quality of the Chesapeake Bay, its tributaries and other state waters. These regulations are issued under authority of Code of Virginia, §§ 62.1-44.15:74 and 15.2-2283 and regulations of 9VAC25-830-10 et seq.

(Code 1969, § 18-216.1.1; Ord. of 1-6-1992; Ord. of 4-1993; Ord. of 2-2003; Ord. of 12-2003)

##### **Sec. 18-216.1.2. - Definitions.**

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

*Best management practice (BMP)* means a practice, or combination of practices, that is determined by the commonwealth to be the most effective, practicable means of preventing or reducing the amount of pollution generated by non-point sources to a level compatible with state water quality goals.

*Buffer area* means an area of natural or established vegetation managed to protect other components of a resource protection area and state waters from significant degradation due to land disturbances.

*Chesapeake Bay Preservation Area (CBPA)* means any land designated by the Town Council pursuant to Code of Virginia, § 62.1-44.15:74. Chesapeake Bay Preservation Areas shall consist of resource protection areas and/or resource management areas.

*Development* or land development means the construction or substantial alteration of residential, commercial, industrial, institutional, recreational, transportation, or utility facilities, structures or land.

*Floodplain* means all lands that would be inundated by floodwater as a result of a storm event of a 100-year return interval.

*Highly erodible soils* means soils with an erodibility index (EI) from sheet and rill erosion equal to or greater than eight. The EI for any soil shall be defined by the formula  $RKLS/T$ , where K is the soil susceptibility of water erosion in the surface layer; R is the rainfall and runoff; LS is the combined effects of slope, length and steepness; and T is the soil loss tolerance.

*Highly permeable soils* means any soil having a permeability equal to or greater than six inches of water movement per hour in any part of the soil profile to a depth of 72 inches as found in the "National Soils Survey Handbook," November 1996, in the "Field Office Technical Guide" of the U.S. Department of Agriculture Soil Conservation Service.

*Impervious cover* means a surface composed of any material that significantly impedes or prevents natural infiltration of water into the soil. Impervious surfaces include, but are not limited to: roofs, buildings, structures, streets, parking areas, and any concrete, asphalt, or compacted gravel surface.

*Land disturbing activity* means any land change which may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the commonwealth or Town. Such land change or activity may include, but is not limited to: the removal or destruction of a portion of the natural topsoil; the removal or destruction of trees or other vegetative cover; clearing, grading, excavating, transporting and filling of land; and construction activities.

*Non-point source pollution* means diffuse source pollutants such as runoff from cultivated agricultural land, from silvicultural activities, and from urban storm runoff. These pollutants are conveyed to

## PART II - CODE OF ORDINANCES

### Chapter 18 - ZONING

#### ARTICLE 21.1. - CHESAPEAKE BAY PRESERVATION AREAS

waterways through natural processes, such as rainfall, stormwater runoff, or groundwater seepage rather than by deliberate discharge.

*Non-tidal wetlands* means areas other than tidal wetlands that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, as defined by the U.S. Environmental Protection Agency pursuant to section 404 of the Federal Clean Water Act, in 33 CFR 328.3b.

*Point source pollution* means discharge of pollutants into waters at a specific location through a pipe, outfall, or ditch.

*Redevelopment* means the process of developing land that is or has been previously developed.

*Resource management area (RMA)* means a component of the Chesapeake Bay Preservation Area (not classified as a resource protection area (RPA)), as designated on the official CBPA map for the Town as incorporated in the current comprehensive plan that includes lands, which if improperly used or developed, have a potential for causing significant water quality degradation. Lands with the following characteristics may be classified as RMAs:

- A. 100-year floodplains;
- B. Highly erodible soils and/or slopes in excess of 15 percent;
- C. Highly permeable soils;
- D. Non-tidal wetlands not classified as an RPA; or
- E. Other lands as identified by the Town to be necessary to protect the quality of state waters.

*Resource protection area (RPA)* means a component of the Chesapeake Bay Preservation Area as designated on the official CBPA map for the Town as incorporated in the comprehensive plan that is comprised of lands adjacent to a water body with perennial flow that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to the impacts which may result in significant degradation to the quality of state waters. The following lands shall be classified as RPAs:

- A. Non-tidal wetlands connected by surface flow to or contiguous to a water body with perennial flow;
- B. Other lands as identified by the Town to be necessary to protect the quality of state waters; and
- C. Buffer areas having widths of not less than 100 feet, landward of the components listed in subsections A and B of this definition, and adjacent to and landward from each side of any water body with perennial flow.

*Substantial alteration* means expansion or modification of a structure in a resource management area, which results in a disturbance of land exceeding an area of 2,500 square feet.

*Water body with perennial flow* means a well-defined channel that contains water yearround during a year of normal rainfall with the aquatic bed located below the water table for most of the year. Groundwater is the primary source of water for the perennial stream, but it also carries stormwater runoff. A water body with perennial flow exhibits the typical biological, hydrological, and physical characteristics associated with the continuous conveyance of water. Generally, the Town will consider a water body to have perennial flow if it is depicted as a perennial stream on the most recent U.S. Geological Survey 7½ minute topographic quadrangle map (scale 1:24,000).

*Water dependent facility* means development of any land that cannot exist outside of a Resource Protection Area and must be located on the shoreline by reason of the intrinsic nature of its operation. These facilities include, but are not limited to:

## PART II - CODE OF ORDINANCES

### Chapter 18 - ZONING

#### ARTICLE 21.1. - CHESAPEAKE BAY PRESERVATION AREAS

- A. Ports;
- B. The intake and outfall structures of power plants, water treatment plants, sewage treatment plants and storm sewers;
- C. Marinas and other boat docking structures;
- D. Beaches and other public water-oriented recreation areas; and
- E. Fisheries or other marine resources facilities.

(Code 1969, § 18-216.1.2; Ord. of 1-6-1992; Ord. of 4-1993; Ord. of 2-2003; Ord. of 12-2003)

#### **Sec. 18-216.1.3. - General provisions.**

- A. *Application.* The regulations in this section shall apply to all lands located within Chesapeake Bay Preservation Areas (CBPA), both resource management areas and resource protection areas as defined above and as depicted on the official CBPA maps for the Town of Vienna.
- B. *Delineation of RPA (resource protection area) boundaries.* An applicant for a building, clearing or grading permit, or subdivision or site plan review shall conduct an evaluation to locate the boundary of the RPA (100-foot buffer area) on the applicant's property as well as the boundary of the 50-foot portion of the buffer area that is directly adjacent to the water body with perennial flow. All plans shall clearly delineate the buildable areas on each lot and based on the performance criteria, identify the front and side yard setbacks and any other relevant easements or limitation regarding lot coverage. The applicant shall submit the results of the evaluation to the Town for review. The Town may provide such assistance to an applicant, as the Town deems necessary, to conduct such evaluation.
- C. *Dispute of resource protection area boundaries.* An applicant for a building, clearing or grading permit, or subdivision or site plan review for land within an RPA who disputes the boundaries on the CBPA Map, a delineation of boundaries pursuant to subsection [18-216.1.3\(B\)](#), or the inclusion of the applicant's property within an RPA shall submit to the zoning administrator a site specific evaluation with supporting evidence to determine where such boundaries are or whether a water body on or adjacent to the applicant's property is a water body with perennial flow. The existence and location of a water body with perennial flow that is on or adjacent to the development site must be identified in the evaluation, including any non-tidal wetlands connected by surface flow or contiguous to such a water body. The applicant shall submit to the zoning administrator surveys or drawings, which indicates a precise delineation of the RPA boundary, including buffer area. The zoning administrator will review and confirm that the boundaries of the RPA (resource protection area) are adjusted, as necessary, based on the evaluation of the site.

(Code 1969, § 18-216.1.3; Ord. of 1-6-1992; Ord. of 4-1993; Ord. of 2-2003; Ord. of 12-2003; Ord. of 6-20-2011(2), § 1)

#### **Sec. 18-216.1.4. - Allowed uses and developments.**

Permitted uses, accessory uses, and conditional uses shall be allowed as established by the underlying zoning district except as specifically modified by this article. Lot size shall meet the requirements of the underlying zoning district; provided further that any subdivision plat submitted after the effective date of the ordinance from which this article is derived shall provide sufficient area outside an RPA to accommodate an intended use.

- A. *Allowed uses in resource protection areas.*

## PART II - CODE OF ORDINANCES

### Chapter 18 - ZONING

#### ARTICLE 21.1. - CHESAPEAKE BAY PRESERVATION AREAS

1. Land development must be permitted by the underlying zoning district and must be in compliance with all applicable performance requirements of [section 18-216.1.5](#). Land development shall be allowed only if it meets one or more of the following criteria:
  - a. Is water dependent;
    - (1) New or expanded water dependent facility may be allowed provided that:
      - (a) Any non-water dependent component is located outside of resource protection areas;
      - (b) Access will be provided with the minimum disturbance necessary. Where possible, a single point of access will be provided;
      - (c) It does not conflict with the comprehensive plan;
      - (d) It complies with the performance criteria for RPAs.
  - b. Constitutes redevelopment;
    - (1) Redevelopment in RPAs shall be permitted only if there is no increase in the amount of impervious cover and no further encroachment within the resource protection area. All redevelopment activities shall conform to the regulations contained in sections [17-55](#) and [17-56](#), [chapter 18.1](#), and [chapter 23](#); as well as the criteria for redevelopment in section 18-216.1.5.A.7.
  - c. Is a use established prior to October 1, 1989;
  - d. Is a road or driveway not exempted under section 18-216.1.4.A.2.b and satisfies the following conditions:
    - (1) No reasonable alternatives to aligning the road or driveway in or across the RPA exist;
    - (2) The alignment and design of the road or driveway are optimized, consistent with other applicable requirements, to minimize encroachment in the RPA and adverse effects on water quality;
    - (3) The design and construction of the road and driveway satisfy all applicable criteria of this chapter, including submission of a water quality impact assessment; and
    - (4) The proposed road or driveway meets all requirements to obtain a building permit or site plan approval.
  - e. Is a flood control or stormwater management facility satisfying the following conditions:
    - (1) The facility within the RPA is in its optimum location;
    - (2) The size of the facility is the minimum necessary to provide necessary flood control, stormwater management, or both;
    - (3) The facility must be consistent with a storm management program that has been approved by the state department of **environmental quality** as a Phase I modification to the Town's program;
    - (4) All applicable permits for construction in state or federal waters have been obtained from the appropriate state and federal agency, such as the U.S. Army Corps of Engineers and the state department of environmental quality;
    - (5) A building permit or site plan approval has been obtained;

## PART II - CODE OF ORDINANCES

### Chapter 18 - ZONING

#### ARTICLE 21.1. - CHESAPEAKE BAY PRESERVATION AREAS

- (6) Routine maintenance is performed on such facility to ensure that it continues to function as designed.
2. The following uses and improvements are exempt from the performance criteria of [section 18-216.1.5](#)
- a. Passive recreation facilities, such as hike and bicycle trails, picnic areas and pathways, and historic preservation and archaeological activities, provided that:
    - (1) All land disturbing activity exceeding an area of 2,500 square feet shall be performed in accordance with performance criteria in [section 18-216.1.5 A.5](#).
    - (2) Such uses are reviewed and approved by the zoning administrator.
  - b. Utilities, public facilities, improvements such as streets, channel improvements, bridges, utility pipes and utility transmission lines with the performance criteria exemptions found in [section 18-216.1.5 D](#).
  - c. Reconstruction or structural alteration of those buildings, structures, and improvements existing prior to the effective date of the ordinance from which this article is derived, provided that the performance criteria of [section 18-216.1.5 A](#) are met.
- B. *Nonconforming uses and waivers.* The lawful use of a building or structure which existed on the effective date of the ordinance from which this article is derived, January 6, 1992, and which is not in conformity with the provisions of this article may be continued in accordance with [article 20](#) of this chapter. No alteration or expansion of a nonconforming principal building or structure shall be permitted with the exception that the zoning administrator may grant a waiver when:
- 1. There will be no net increase in non-point source pollutant load;
  - 2. Any development or land disturbance exceeding an area of 2,500 square feet shall comply with all requirements of [chapter 23](#)
  - 3. Granting the waiver will not confer upon the applicant any special privileges denied by this article to other property owners in the RPA;
  - 4. The waiver is not based on conditions or circumstances that are self-created or self-imposed, nor does the request arise from conditions or circumstances either permitted or nonconforming that are related to adjacent parcels;
  - 5. The waiver is the minimum necessary to afford relief;
  - 6. The waiver will be in harmony with the purpose and intent of the RPA, not injurious to the neighborhood or otherwise detrimental to the public welfare, and is not of substantial detriment to water quality; and
  - 7. Reasonable and appropriate conditions are imposed which will prevent the waiver request from causing a degradation of water quality.

This waiver may be granted only for relief from the Chesapeake Bay Preservation Area requirements and shall not apply to any other restrictions imposed or required by this Code including, but not limited to, the floodplain, zoning, subdivision, erosion and sedimentation, and stormwater management ordinances. Any development not meeting the performance criteria under [section 18-216.1.5 B.1](#) and 2 shall require an exception under [section 18-216.1.5 E](#).

Appeals to any waiver decision of the zoning administrator shall be made to the board of zoning appeals in accordance with [article 23](#) of this chapter.

(Code 1969, § 18-216.1.4; Ord. of 1-6-1992; Ord. of 4-1993; Ord. of 2-2003; Ord. of 12-2003)

## PART II - CODE OF ORDINANCES

### Chapter 18 - ZONING

#### ARTICLE 21.1. - CHESAPEAKE BAY PRESERVATION AREAS

##### **Sec. 18-216.1.5. - Performance criteria.**

It is the intent of these criteria to achieve a ten percent reduction in non-point source pollution for redevelopment under one acre, achieve a twenty percent reduction in non-point source pollution for redevelopment one acre or greater, and to prevent an increase in non-point source pollution from new development.

- A. *General performance criteria.* Unless provided elsewhere in this article, each use, development or redevelopment of lands located in a Chesapeake Bay Preservation Area as designated on the official CBPA map for the Town and/or verified by the site-specific evaluation required under [section 18-216.1.3](#) B shall meet or exceed 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 and development proposed.
  3. All development, including single-family residential, which exceeds 2,500 square feet of land disturbance, shall be subject to site plan review as required in [section 18-252](#)
  4. All land development shall minimize impervious area consistent with the proposed use or development.
  5. Any land disturbing activity that exceeds an area of 2,500 square feet, including single-family homes and septic lines and drain fields, shall comply with the requirements of [chapter 23](#).
  6. On-site land disturbing activities shall not begin until appropriate permits such as those for land disturbing or building have been issued and evidence provided that all required federal and state wetland permits have been obtained.
- B. *Additional performance criteria for resource protection areas.* The following criteria shall apply within RPAs in addition to the general performance criteria in subsection 18-216.1.5.A:
1. Except as otherwise provided herein, no land disturbing activity and no acts prohibited by [chapter 18.1](#) of the Town Code (Flood Plain Ordinance) shall be permitted in RPAs.
  2. Buffer area requirements:
    - a. For the purpose of retarding runoff, preventing erosion and filtering non-point source pollution from runoff, a buffer area extending at least 100 feet adjacent to the edge of a water body with perennial flow shall be retained, if present, or established wherever such buffer does not exist. The 100-foot buffer shall be deemed to achieve a 75 percent reduction in sediment and a 40 percent reduction of nutrients. The following performance criteria shall apply:
    - b. In order to maintain the functional value of such buffer area, indigenous vegetation may be removed as permitted by the Town of Vienna only to provide reasonable sight lines, access paths, general woodlot management and BMP, including those that prevent upland erosion and concentrated flows of stormwater, as follows:
      - (1) Trees may be pruned or removed, subject to the provisions of subsection [18-252\(E\)](#) of the Town Code (Tree Preservation) to provide for sight lines and vistas; provided, however, that each tree removed shall be replaced with other vegetation, which is at least equally effective in retarding runoff, preventing erosion and filtering non-point source pollution from runoff.
      - (2) Dead, diseased or dying trees or shrubbery may be removed.

## PART II - CODE OF ORDINANCES

### Chapter 18 - ZONING

#### ARTICLE 21.1. - CHESAPEAKE BAY PRESERVATION AREAS

- (3) Trees and woody vegetation may be removed in connection with approved stream bank erosion control projects. However, control techniques must be employed and appropriate vegetation established to protect or stabilize the stream bank.
    - (4) Any trail or pathway shall be constructed and surfaced so as to effectively control erosion.
  - c. When the establishment of a buffer area results in the loss of buildable area on a lot or parcel recorded prior to October 1, 1989, the zoning administrator may permit encroachment into the buffer area after submission of sufficient evidence as follows:
    - (1) Encroachments into the buffer area shall be permitted to the minimum extent necessary to achieve reasonable buildable area for a principal building or structure and necessary utilities to serve the building or structure.
    - (2) Where practicable, a vegetated area that will maximize water quality protection, mitigate the effects of buffer encroachment, and is equal to the encroachment area shall be established elsewhere on the lot or parcel to maximize water quality protection.
    - (3) The encroachment may not extend into the 50-foot portion of the buffer area that is directly adjacent to the water body with perennial flow.
  - d. All plans and/or plats submitted for approval and review shall include a notation that specifies the requirement to retain an undisturbed and vegetated 100-foot buffer area in the resource protection areas ("RPA").
- C. *Water quality impact assessment.* A water quality impact assessment (WQIA) is required to be submitted with all development and redevelopment site plans for property partially or totally located within an RPA and where there is land disturbing activity in excess of 2,500 square feet in the RMA. The WQIA study will include but not be limited to the following:
  - 1. *Narrative description.*
    - a. Impact of proposed development on water quality.
    - b. Description of specific measures to be employed to mitigate the impacts.
    - c. Geology of the site.
    - d. Estimates of pre-development and post-development runoff.
    - e. Additional information as deemed necessary by the director of public works or zoning administrator to assist in the review of the project.
  - 2. *Site drawing.*
    - a. Existing topography, soils and hydrology of the site.
    - b. Boundaries of the RMA, and if adjacent to a water body with perennial flow as defined in this article, the location of the 100-foot RPA buffer area.
    - c. Location and nature of any proposed encroachments into the RPA buffer area including roadways and areas of grading; location of structures, driveways, or other impervious cover; utilities; and wetland mitigation sites.
    - d. Type and location of proposed stormwater management facilities and best management facilities and BMPs to mitigate the proposed encroachments.
    - e. Size and location of anticipated drainfield or wastewater irrigation areas.



## PART II - CODE OF ORDINANCES

### Chapter 18 - ZONING

#### ARTICLE 21.1. - CHESAPEAKE BAY PRESERVATION AREAS

- f. Location of existing vegetation on site, including the number and type of trees and the vegetation to be removed in the buffer to accommodate the encroachment or modification;
    - g. Re-vegetation plan that supplements the existing buffer vegetation in a manner that provides for pollutant removal and erosion and runoff control.
- D. *Exemptions for public purposes.* Exemptions for public utilities, public roads, railroads and similar facilities from performance criteria for RPAs are as follows:
  - 1. Construction, installation, operation and maintenance of electric, natural gas, telephone, fiber optic, and cable television transmission lines, railroads and public roads and their appurtenant structures shall be exempt from the performance criteria in this section, provided that said construction, installation, operation and maintenance is in accordance with [chapter 23](#) or the Erosion and Sediment Control Law (Code of Virginia, § [62.1-44.15:51](#) et seq.), as appropriate.
  - 2. Construction, installation and maintenance of water, sewer, natural gas, and underground telecommunications and cable television lines owned, permitted, or both by the Town or a regional service authority shall be exempt from the performance criteria in this section, provided that:
    - a. Such utilities and facilities shall be located outside RPAs to the highest degree possible.
    - b. No more land shall be disturbed than is necessary to provide for the desired utility installation.
    - c. All construction, installation and maintenance of such utilities and facilities shall be in compliance with all applicable state and federal permits and designed and conducted in a manner that protects water quality.
    - d. Any land disturbing activity exceeding an area of 2,500 square feet shall comply with the requirements of subsection A.5 of this section.
- E. *Exceptions.*
  - 1. An application for an exception to the requirements of section 18-216.1.4.A and subsection B of this section shall be made in writing to the board of zoning appeals. It shall identify the impacts of the proposed exception on water quality and on lands within the RPA through the performance of a water quality impact assessment, which complies with the provisions of subsection C of this section.
  - 2. The board of zoning appeals shall notify the affected public of any such exception requests and shall consider these requests in a public hearing in accordance with Code of Virginia, § 15.2-2204, except that only one hearing shall be required.
  - 3. The board of zoning appeals shall review the request for an exception and the water quality impact assessment and may grant the exception with such conditions and safeguards as deemed necessary to further the purpose and intent of this article if the board of zoning appeals finds that:
    - a. Granting the exception will not confer upon the applicant any special privileges denied by this article to other property owners in the RPA;
    - b. The exception is not based on conditions or circumstances that are self-created or self-imposed;
    - c. The exception is the minimum necessary to afford relief;



## PART II - CODE OF ORDINANCES

### Chapter 18 - ZONING

#### ARTICLE 21.1. - CHESAPEAKE BAY PRESERVATION AREAS

- d. The exception will be in harmony with the purpose and intent of the RPA, not injurious to the neighborhood or otherwise detrimental to the public welfare, and will not result in substantial detriment to water quality; and
  - e. Reasonable and appropriate conditions can be imposed which will prevent the exception request from causing a degradation of water quality.
- 4. If the board of zoning appeals cannot make the required findings or refuses to grant the exception, the board of zoning appeals shall return the request for an exception together with the water quality impact assessment and the written findings and rationale for the decision to the applicant.
- 5. A request for an exception to the requirements of provisions of this article other than [section 18-216.1.4](#) A and subsection B.2 of this section shall be made in writing to the zoning administrator. The zoning administrator may grant these exceptions provided that:
  - a. Exceptions to the requirements are the minimum necessary to afford relief; and
  - b. Reasonable and appropriate conditions are placed upon any exception that is granted, as necessary, so that the purpose and intent of this article is preserved.
  - c. Exceptions to subsection A of this section may be made, provided that the findings noted in subsection E.3 of this section are made.

(Code 1969, § 18-216.1.5; Ord. of 1-6-1992; Ord. of 4-1993; Ord. of 2-2003; Ord. of 12-2003; Ord. of 6-20-2011(3), § 1)

---

#### FOOTNOTE(S):

---

--- (5) ---

**Note—** This formula originally derived from the "Food Security Act Manual" of August 1988 in the "Field Office Guide" of the U.S. Department of Agriculture Soil Conservation Service. ([Back](#))