#### **TOWN OF HERNDON, VIRGINIA**

#### ORDINANCE

#### **FEBRUARY 10, 2004**

## Ordinance- An ordinance amending ARTICLE X, <u>CHESAPEAKE BAY</u> <u>PRESERVATION AREA OVERLAY DISTRICT</u>, Zoning Ordinance, Herndon, Town Code (2000), as amended.

#### Recital

In adopting this ordinance, the Town Council has considered the factors set out in §15.2-2284, Code of Virginia (1950), as amended.

**THEREFORE, BE IT ORDAINED** by the Council of the Town of Herndon that:

1. Section 70-49, **Requirements**, Subdivision Ordinance, Herndon Town Code, (2000), as amended, is amended and reordained as follows:

#### Section 70-49. Requirements.

The requirements for a preliminary plan are as follows:

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(37) <u>Delineation of Resource Protection Areas, as may be</u> required in Chapter 78, Article X Chesapeake Bay Preservation Area Overlay District.

2. Section 70-160, Resource Protection Areas, Subdivision Ordinance, Herndon Town Code, (2000), as amended, is hereby added and ordained as follows:

#### Section 70-160. Resource Protection Areas.

All Resource Protection Areas (RPA) boundaries shall be delineated on final record plats with a note that states, "The Resource Protection Area is to remain undisturbed and comply with Chapter 78, Article X, Chesapeake Bay Preservation Area Overlay District."

3. Section 78-363, Required Information, Zoning Ordinance, Herndon Town Code, (2000), as amended, is amended and reordained as follows:

#### Section 78-363. Required Information.

Every site plan, except where an administrative approval in §78-364 is given and where only a temporary site plan as provided in §78-365 is required, shall contain the following information:

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(36) <u>Delineation of Resource Protection Areas, as may be</u> required in Chapter 78, Article X Chesapeake Bay <u>Preservation Area Overlay District.</u>

4. Article X, <u>Chesapeake Bay Preservation Area Overlay District</u>, Zoning Ordinance, Herndon Town Code (2000), as amended, is amended and reordained as follows:

## Sec. 78-1121. Findings.

- (a) The Chesapeake Bay and its tributaries is one of the most important and productive estuarine systems in the country, providing economic and social benefits to the citizens of the town.
- (b) The Chesapeake Bay waters have been degraded significantly by many sources of pollution including nonpoint source pollution from land uses and development. The lands within the town are valuable in assisting the preservation of the bay. Some display intrinsic water quality value due to the ecological processes they perform and also display ecological benefits by providing water quality maintenance and flood and erosion control. Only with proper management can development and use occur without damage to Chesapeake Bay waters.
- (c) The lands designated by the town council as Chesapeake Bay preservation areas are those lands which, due to the degradation of bay waters and the passage of the Chesapeake Bay Preservation Act, need to be protected from destruction and damage through improper development and use practices to protect the quality of bay waters.
  (Z.O. 1971, art. 50)

(2.0.1971, att. 50)

## Sec. 78-1122. Statement of Intent.

- (a) This Chesapeake Bay Preservation Area (CBPA) overlay district is established under the authority provided in Code of Virginia, §15.2-2280, and following, and to implement the requirements of Code of Virginia, §10.1-2100 et seq., and to:
  - (1) Implement the clean streams overlay policies described in the comprehensive plan;
  - (2) Protect existing high quality state waters and protect surface groundwater;
  - (3) Restore all other state waters to a condition or quality that will permit all reasonable public uses and will support the propagation and growth of all aquatic life within a balanced ecosystem;
  - (4) Safeguard the clean waters of the commonwealth from pollution;
  - (5) Prevent increase of nonpoint pollution;
  - (6) Reduce existing nonpoint source pollution; and
  - (7) Promote water resource conservation to provide for the health, safety and welfare of the present and future residents of the town.

(b) These CBPA district regulations shall be in addition to all other zoning districts where they are applied so that any parcel of land lying in the Chesapeake Bay Preservation Area Overlay District (CPBAOD) shall also lie in one or more of the other zoning districts provided by this chapter. Unless otherwise provided, approval procedures provided for in this chapter and the Town Code shall be utilized in reviewing all applications governed by this article.
(Z.O. 1971, art. 50)

## Sec. 78-1123. 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. Words and terms not defined in this section shall be given the meanings set forth in §78-2.

*Best management practices (BMPs)* mean practices or a combination of practices, that is determined by the town, a state or designated area-wide planning agency to be the most effective, practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with 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 pursuant to part III of the Chesapeake Bay Preservation Area Designation and Management Regulations, §9 VAC 10-20-10 et seq., and Code of Virginia, §10.1-2107. A CBPA shall consist of the resource protection area (RPA) and the resource management area (RMA). The abbreviated "CBPA" and "CBPAOD" (Chesapeake Bay preservation area overlay district) shall be used interchangeably where the context does not indicate otherwise.

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

*Diameter at breast height (DBH)* means the diameter of a tree measured outside the bark at a point  $4\frac{1}{2}$  feet above the ground.

#### Floodplain. See 100-year floodplain.

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

*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, streets, parking areas, and any concrete, asphalt or compacted gravel area and similar ground coverings.

*Intensely developed area (IDA)* means an area designated by the CBPA map for existing development and infill sites at the original adoption date of this article on October 23, 1990 in which development is concentrated and little of the natural environment remains. IDAs are generally characterized by at least one of the following:

- (1) Development has severely altered the natural state of the area such that it has more than 50 percent impervious surface;
- (2) Public sewer and water systems, or a constructed stormwater drainage system, or both, have been constructed and served the area by the original adoption date of this article;
- (3) The condition in item 2 does not include areas planned for public sewer and water or constructed stormwater drainage systems. For the purposes of this definition, any property within 500 feet of public sewer and water is considered served by public sewer and water; or
- (4) Housing density is equal to or greater than four dwelling units per acre.

*Intermittent stream* means a watercourse that flows in a well-defined channel during some seasons of the year but not the entire year.

*Land disturbing activity* means any activity that causes, contributes to or results in the removal or covering of vegetation on land that may result in soil erosion from water or wind and the movement of sediments into Virginia waters or onto lands in the town. Such activities include clearing, grading, excavating, transporting and filling of land (including construction of all single-family houses, septic tanks, drainfields, but otherwise as defined in Code of Virginia, §10.1-560). This term shall not include minor activities such as home gardening, planting of trees and shrubs and home maintenance.

*Nonpoint source pollution* means pollution consisting of constituents such as sediment, nutrients, and organic and toxic substances from diffuse sources, such as runoff from agriculture and urban land development and use.

*Nontidal wetlands* mean those wetlands 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.

*Noxious Weeds* mean Johnson grass, kudzu, poison ivy, ragweed, poison oak, poison sumac, purple loosestrife, multiflora rose, Japanese honeysuckle, mile-a-minute vine and any other species hereinafter identified on the list of "Invasive Alien Plant Species of Virginia," compiled by the Virginia Department of Conservation and Recreation.

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

*Public road* includes public streets or public rights-of-way in the town and publicly owned roads designed and constructed in accordance with water quality protection criteria at least as stringent

as requirements applicable to the Virginia Department of Transportation, including regulations promulgated pursuant to (i) the Erosion and Sediment Control Law (Code of Virginia, §10.1-560 et seq.) and (ii) the Virginia Stormwater Management Act (Code of Virginia, §10.2-603.1 et seq).

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

*Resource management area (RMA)* means lands that if improperly used or developed, have the potential for causing significant water quality degradation or for diminishing the functional value of the resource protection area. RMA is further described in §78-1124(c).

*Resource protection area (RPA)* means that component of the CBPA comprised of lands adjacent to water bodies with perennial flow that have an intrinsic water quality value due to the ecological and biological process they perform or are sensitive to impacts which may result in significant degradation to the quality of state waters. The elements of an RPA are set out in §78-1124(b)(1).

Steep slopes mean slopes with a gradient equal to or greater than 15 percent.

*Substantial alteration* means any expansion or modification of a structure or development that would result in a disturbance of land exceeding an area of 2,500 square feet only in the resource management area.

*Water body with perennial flow* means a body of water flowing in a natural or open man-made channel year-round, except during periods of drought. The term "water body with perennial flow" includes perennial streams, estuaries and tidal embayments. A perennial stream means any stream that is both perennial and so depicted on the map of Chesapeake Bay Preservation Areas, adopted by the Town Council. Lakes and ponds that form the source of a perennial stream, or through which the perennial stream flows, are a part of the perennial stream. The width of the perennial stream may be measured from either (i) top-of-bank to top-of-bank on the opposite side of the stream or (ii) from Ordinary High Water Mark (OHWM) to the OHWM on the opposite side of the stream, as defined by 33 CFR Part 328.3(e), as determined by the zoning administrator. Ponds or lakes are to be measured from the limits of the normal water level. Generally, the water table is located above the streambed for most of the year and groundwater is the primary source for stream flow.

*Water-dependent development* means a facility or development that cannot exist outside of the RPA and must be located in the stream proximity by reasons of the intrinsic nature of its operation. These facilities include intakes and outfalls of storm sewers, and public water-oriented recreation areas.

*Wetlands* mean any tidal and nontidal wetlands that meet the unified federal definition as delineated by hydrology, soils and vegetative characteristics. See Code of Federal Regulations, Title 33, Navigation and Navigable Waters, Chapter II, Part 328, Section 3. (Z.O. 1971, §28-50-1) Cross reference-Definitions generally, §1-2.

## Sec. 78-1124. Designation of Chesapeake Bay Preservation Areas.

- (a) This article shall apply to all land in CBPAs, which shall include land that meets the designation criteria in this section. CBPAs are divided into resource protection areas (RPAs), resource management areas (RMAs), as well as Intensely Developed Areas (IDAs) and they are subject to the use restrictions and regulations in this chapter.
- (b) Resource protection areas (RPAs) shall consist of sensitive lands adjacent to water bodies with perennial flow that have either an intrinsic water quality value due to the ecological or biological process they perform or that are sensitive to land uses or activities such that the use may result in significant degradation to state waters. In their natural condition, these lands provide for the removal, reduction or assimilation of nonpoint source pollution entering the bay and its tributaries.
  - (1) The RPA shall consist of:
    - a. Nontidal wetlands connected by surface flow and contiguous to water bodies with perennial flow; and
    - b. A buffer area not less than 100 feet in width that is (i) along each side of any water body with perennial flow and (ii) located adjacent to and landward of nontidal wetlands as described in a. above;
    - c. The full buffer area shall be designated as the landward component of the RPA notwithstanding the presence of permitted uses, encroachments, and permitted vegetation clearing in compliance with §78-1127, 78-1128 and 78-1129; and
    - d. The buffer is to be measured from the top of bank or ordinary high water mark landward 100 feet.
- (c) The resource management area (RMA) shall consist of all land located in the Town of Herndon that is not included in the RPA or in the IDA. Resource management areas protect the quality of state waters, are deemed to be lands of significance for the protection of the environment, and incorporate, but are not limited to, floodplains, highly erodible soils, steep slopes of 15 degrees or greater and nontidal wetlands not connected by surface flow to water bodies with perennial flow.
- (d) The Intensely Developed Area (IDA) delineates development and infill sites at the time of the original adoption date, October 23, 1990, of this article where development was concentrated and little of the natural environment remains. The IDA is defined as redevelopment and shall comply with the performance criteria for redevelopment under §78-1128(j)(4).
- (e) These designations identified in (b), (c) and (d) are delineated on the "Chesapeake Bay Preservation Areas" map, adopted by the Town Council on February 10, 2004, as amended, incorporated by reference. Data from the perennial stream mapping project conducted by the Fairfax County Department of Public Works and Environmental Services and completed November 2003 was used to determine Herndon's perennial streams and the associated 100foot RPA buffer.

Adopted: 02/10/04

(f) The Chesapeake Bay Preservation Areas map shows only the general location of CBPAs. Persons contemplating land development within the Town of Herndon should consult this map prior to these activities. The specific location of RPAs on a lot or parcel shall be delineated on each site or parcel as required under §78-1125, Site-Specific Delineation for RPAs or through the review and approval of a Water Quality Impact Assessment, as provided for in §78-1130.

(Z.O. 1971, §28-50-2)

## Sec. 78-1125. Site-Specific Delineation for Resource Protection Areas.

- (a) As part of any land disturbance, development or redevelopment in the RPA, a site-specific RPA delineation shall be required. The "Chesapeake Bay Preservation Areas" map, adopted by the Town Council on February 10, 2004, as amended, may be used as a guide to identify the general location of Resource Protection Areas.
- (b) For land disturbance in the RPA that is no more than 5,000 square feet, the site-specific RPA delineation shall include a scaled drawing of the property that:
  - (1) Delineates nontidal wetlands connected by surface flow and contiguous to water bodies with perennial flow;
  - (2) Delineates an 100-foot buffer area that is shown (i) along each side of any water body with perennial flow and (ii) adjacent to and landward of nontidal wetlands as described in (1) above; and
  - (3) Identifies other sensitive environmental features, as determined by the zoning administrator.
- (c) For land disturbance in the RPA that exceeds 5,000 square feet, the following requirements shall be met:
  - (1) RPA boundary delineation studies shall be sealed by a professional engineer, land surveyor, landscape architect, soil scientist or wetland delineator certified or licensed to practice in the Commonwealth of Virginia. Any work performed by other firms or individuals not under the responsible charge of the licensed professional sealing the study shall be identified and sealed by that individual, as appropriate;
  - (2) Wetland determinations used in the RPA delineation shall be performed using methods specified by the U.S. Army Corps of Engineers (USACE), and a copy of the USACE's Jurisdictional Determination approving the wetlands delineation shall be provided;
  - (3) RPA boundary delineation studies shall be submitted on standard-size sheets of 24"x36" at a scale of 1"=50' or larger; and
  - (4) Site-specific RPA delineation shall include the following:
    - a. Cover sheet with project name, Town plan identification number, vicinity map, tax map reference number and fee computation;
- Adopted: 02/10/04

- b. A narrative describing how the proposed RPA boundary was established, including a discussion of which components determine this RPA boundary, and any wetland shown on the plan(s) that were determined not to be a component of the RPA;
- c. Plan sheet(s) with two-foot contour interval topography showing each individual component of the RPA overlain to create the final RPA boundary, the RPA boundary from the adopted Chesapeake Bay Preservation Area map, locations of the horizontal and vertical control points, and locations of points and transects used in the wetland determination. Topography shall be correlated to a USGS or Town benchmark(s), based on NGVD29, which shall be referenced in the plan. Plan sheets shall include a north arrow
- d. Standard USACE data forms used in the wetland determination and the issued jurisdictional determination for the subject site.
- e. A description of the methodology used and data collected, including standard data sheets, used to identify water bodies with perennial flow.
- (d) In determining the site-specific RPA boundary, the zoning administrator may adjust the applicant's submitted boundary survey. In addition, the zoning administrator shall utilize the "Federal Manual for Identifying and Delineation Jurisdictional Wetlands," 1987, for determining wetlands location. In the event the applicant contests the adjusted boundary, the applicant may appeal the zoning administrator's decision, under Article III of this Chapter, the Board of Zoning Appeals.

## Sec. 78-1126. Subdivision.

Where land, all or part of which is within the CBPAOD, is subdivided, the subdivision plat thereof shall note the existence of any RMA or RPA areas on the land shown on such plat. The existence of RMA or RPA on a lot created prior to the adoption of this article shall not be the basis for the granting of a CBPA exception.

(Z.O. 1971, §28-50-3)

# Sec. 78-1127. Permitted Uses in Chesapeake Bay Preservation Areas.

- (a) A use shall be permitted within the RMA provided it is permitted in the underlying zoning district regulations and it complies with the performance criteria set forth in §78-1128.
- (b) A use shall be permitted within an RPA, provided it is permitted in the underlying zoning district, complies with §78-1128, §78-1129, and is one or more of the following:
  - (1) Water-dependent;
  - (2) Constitutes any redevelopment;
  - (3) Constitutes development or redevelopment within a designated IDA;
  - (4) A new use established pursuant to \$78-1129(g);

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- (5) A road or driveway crossing satisfying the conditions set forth in §78-1129(e); or
- (6) A flood control or stormwater management facility satisfying the conditions set forth in §78-1129(f).
- (c) The development of a new or expanded water-dependent facility in an RPA is permitted, provided it meets the criteria set forth in §78-1129(d).
- (d) Redevelopment outside the IDA shall be permitted in the RPA only if there is no increase in the amount of impervious cover and no further encroachment within the RPA. Additionally, this redevelopment shall conform to applicable erosion and sediment control and stormwater management criteria set forth in §78-1128(f) and §78-1128(j) as well as all applicable stormwater management requirements of other Virginia and federal agencies.
- (e) Uses exempt from this article are (i) water wells, (ii) passive recreation facilities such as boardwalks, trails and pathways; and (iii) historic preservation and archaeological activities provided:
  - (1) All required local, state and federal permits, except those to which these uses specifically apply, have been issued;
  - (2) Sufficient and reasonable proof is submitted that the intended use will not deteriorate water quality;
  - (3) The intended use does not conflict with nearby planned or approved uses; and
  - (4) There is compliance will Article III, Chapter 26 (Erosion and Sediment Control) of the Town of Herndon Code if the land disturbance exceeds an area of 2,500 square feet.

# Sec. 78-1128. General Performance Criteria for Land Disturbance in Chesapeake Bay Protection Areas.

- (a) To attain the water quality objectives set forth in the statement of intent, uses, development, and redevelopment of land in CBPAs, (RMAs and RPAs) shall meet and maintain the performance criteria set forth in this section.
- (b) All development and redevelopment within RMAs and RPAs that exceed 2,500 square feet of land disturbance shall be subject to approval by the zoning administrator through the submission of a site plan, a single lot development plan, or a subdivision plan. The zoning administrator may approve these submissions only if the regulated activity is in accordance with this article and the applicant has demonstrated that the proposed development meets or exceeds the criteria in this section.
- (c) Land disturbance shall be in accordance with an approved plan or water quality impact assessment and shall be clearly shown on the plan and physically marked on the development site. No more land shall be disturbed than is necessary to provide for the proposed use or development.

- (d) Indigenous vegetation shall be preserved to the maximum extent practicable consistent with the proposed use(s) or development. To preserve indigenous vegetation to the maximum extent practicable consistent with the proposed use(s) or development, all trees located outside the area of land disturbance with a DBH of four inches or more shall be preserved. Clearing within the area of land disturbance shall be limited to that necessary to provide for the intended use of the property and all appurtenances, a single access during construction, positive site drainage, water quality BMPs, and the installation of utilities. Such clearing limits shall be subject to review and approval by the zoning administrator.
- (e) Development shall minimize impervious cover consistent with the proposed use or development. To minimize impervious cover and promote infiltration of stormwater in the ground consistent with proposed uses and development, grid and modular pavements shall be considered for any required parking area, alley or other low traffic driveway, unless otherwise approved by the zoning administrator.
- (f) Land disturbance of 2,500 square feet or more (including construction of all single family houses) shall comply with Article III, Chapter 26 (Erosion and Sediment Control) of this Code.
- (g) Where the BMPs utilized require regular or periodic maintenance to continue their functions, such maintenance shall be ensured by the town through a maintenance agreement with the owner or developer or some other mechanism that achieves an equivalent objective.
- (h) A water quality impact assessment, pursuant to §78-1130, shall be required for the following:
  - (1) Any proposed land disturbance, development or redevelopment activity within a RPA, including the expansion of non-conforming structures and uses, as identified in §78-1131; or
  - (2) Any development within the RMA, as deemed necessary by the zoning administrator, based upon the unique characteristics of the site or intensity of the proposed use(s) or development.
- (i) The developer shall provide evidence to the Town, prior to commencing grading or other onsite land disturbing activities, that any wetlands or similar permit required by federal, Virginia or local laws or regulations have been properly obtained.
- (j) The following stormwater management requirements consistent with water quality protection provisions of the Virginia Stormwater Management Regulations (4VAC 3-20-10 et seq.) shall apply in CBPAs (RMAs and RPAs):
  - (1) Post development nonpoint source pollution load shall not exceed the predevelopment nonpoint source pollution load of runoff based upon calculated values of average land cover conditions of watersheds within the town.
  - (2) The following options may be employed to achieve the stormwater management requirements of this article, as required by (j)(1) above:

- a. Incorporation on the site of BMPs that achieve the required control as determined by calculation procedures and BMP efficiencies in the Town of Herndon Public Facilities Manual, the Northern Virginia BMP Handbook or the Virginia Stormwater Management Regulations. For this requirement, the "site" may include multiple projects or properties that are adjacent to one another or lie within the same drainage area where a single BMP will be utilized by those projects to satisfy water quality protection requirements;
- b. Compliance with a locally adopted regional stormwater management program incorporating pro rata share payments pursuant to the authority in §70-89 of this Code that results in achievement of water quality protection equivalent to Article III, Chapter 26 (Erosion and Sediment Control) of the Town of Herndon Code and (j)(1) of this section. Compliance with the locally adopted regional stormwater management program may include a Virginia Pollution Discharge Elimination System (VPDES) permit issued by the Department of Environmental Quality to the Town of Herndon for its municipally owned separate storm sewer system discharges that is reviewed and found by the board to achieve water quality protection equivalent to that required by section (j); or
- c. Compliance with a site-specific VPDES permit issued by the Department of Environmental Quality, provided that the Town Council specifically determines that the permit requires measures that collectively achieve water quality protection equivalent to that required in this section.
- (3) If the proposal is defined as redevelopment, whether or not it is located within the IDA, it must meet one of the following stormwater management performance criteria:
  - a. If currently served by water quality BMPs, and such BMPs are in good working order, regulated activity must not increase nonpoint source pollution load in runoff; or
  - b. If not served by water quality BMPs, regulated activity must reduce nonpoint source pollution load runoff by at least ten percent.
- (4) If the development is located within the IDA, it shall be considered redevelopment and shall comply with the stormwater management provisions for redevelopment, as defined in section (j)(3) above, and Article III, Chapter 26 (Erosion and Sediment Control) of the Town of Herndon Code.
- (k) The zoning administrator may exempt any maintenance, alteration, use or improvement to an existing structure from the requirements of section (j) that does not degrade the quality of surface water discharge. Recognized engineering standards are to be used to determine if the quality of the surface discharge is to be degraded.
- (1) The landowner shall be responsible for maintaining all stormwater management and BMP facilities, except that the town shall be responsible for maintaining stormwater management and BMP facilities in single-family detached residential areas. An easement agreement shall

be required that sets forth maintenance responsibilities, inspections by the town and maintenance by the town at the owner's expense if the owner fails to maintain properly the facilities.

(Z.O. 1971, §28-50-5)

## Sec. 78-1129. Additional Development Criteria for Resource Protection Areas.

- (a) Establishment of a 100-foot buffer area is required, and it shall be the landward component of the RPA as set forth in §78-1124(b)(1). Notwithstanding permitted uses, encroachments, and vegetation clearing, as set forth in this section, the 100-foot buffer shall not be reduced in width. In addition, the following criteria apply:
  - (1) To minimize the adverse effects of human activities on the other components of the RPA, state waters and aquatic life, this 100-foot wide buffer that is effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff shall be retained if present, established where it does not exist, and adequately maintained thereafter. This 100-foot wide buffer is the same one referred to in (a) above; and
  - (2) The 100-foot buffer area, as described in (a) above, shall be deemed to achieve a 75 percent reduction in sediments and 40 percent reduction in nutrients.
- (b) A water quality impact assessment, pursuant to §78-1130, shall be required and submitted for any proposed land disturbance, development or redevelopment activity within a RPA.
- (c) To maintain the functional value of the buffer area, indigenous vegetation may be removed, if approved by the zoning administrator, to provide for reasonable sight lines, access paths, general woodlot management, and BMPs, including BMPs that prevent upland erosion and concentrated flows of stormwater, as follows:
  - (1) Trees may be pruned or removed only 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;
  - (2) Any path shall be constructed and surfaced to control erosion effectively;
  - (3) Dead, diseased or dying trees or shrubbery and noxious weeds may be removed and thinning of trees may be allowed pursuant to sound horticulture practice as prescribed by the Town's Community Forester; and
  - (4) Use of fertilizers, herbicides or pesticides shall be minimized in the buffer area.
- (d) For new or expanded water-dependent development, the applicant shall demonstrate that the regulated activity meets or exceeds the following standards:
  - (1) All performance criteria set forth in this article;
  - (2) Any nonwater dependent component is located outside of the RPA;

- (3) Access is provided with the minimum disturbance necessary and where possible, with a single point of access; and
- (4) The development does not conflict with the comprehensive plan.
- (e) Roads and driveways not exempt under §78-1132(a)(1) and which, therefore, must comply with the provisions of this article, may be constructed in or across RPAs if each of the following conditions is met:
  - (1) The zoning administrator makes a finding that there are no reasonable alternatives to aligning the road or driveway in or across the RPA;
  - (2) The alignment and design of the road or driveway are optimized, consistent with other applicable requirements, to minimize (i) encroachment in the RPA and (ii) adverse effects on water quality;
  - (3) The design and construction of the road or driveway satisfy all applicable criteria of this article including the submission and approval of a water quality impact assessment, as provided for in §78-1130; and
  - (4) The zoning administrator reviews the plan for the road or driveway proposed in or across the RPA in coordination with the review process for a site plan or subdivision.
- (f) 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 RPAs, provided that:
  - (1) The Town of Herndon has established that the location of the facility within the RPA is the optimal 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 the Town of Herndon's Public Facilities Manual, the Northern Virginia BMP Handbook or the Virginia Stormwater Management Regulations;
  - (4) All applicable permits for construction in Virginia or federal waters must be obtained from the appropriate Virginia and federal agencies, such as the U.S. Army Corps of Engineers, the Virginia Department of Environmental Quality, and the Virginia Marine Resources Commission;
  - (5) Approval prior to construction must be received from the Town of Herndon;
  - (6) Routine maintenance is allowed to be performed on such facilities to assure that they continue to function as designed; and
  - (7) It is not the intent of this subsection to allow a BMP that collects and treats runoff from only an individual lot or some portion of the lot to be located within a RPA.

- (g) The 100-foot RPA buffer may be encroached upon under the following circumstances:
  - (1) If the requirements result in the loss of a buildable area for new homes or new principal structures on lots recorded before October 1, 1989, the zoning administrator may grant encroachments into the buffer area provided that:
    - a. The applicant submits an administrative waiver application, in accord with §78-1134(b), and the required Water Quality Impact Assessment (WQIA), receives zoning administrator approval;
    - b. The encroachment into the buffer area shall be the minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utilities;
    - c. Where practical, a vegetated area that maximizes water quality protection, mitigates the effects of the buffer encroachment, and equals the area of the buffer encroachment shall be established elsewhere on the lot; and
    - d. The encroachment may not extend into the buffer area that is 50 feet closest to the water body with perennial flow and/or its associated wetlands.
  - (2) If the requirements result in the loss of a buildable area for new homes or new principal structures on lots recorded between October 1, 1989, and February 10, 2004, the zoning administrator may grant an encroachment into the buffer area provided that:
    - a. The lot or parcel was created as a result of a process conducted in conformity with Chapter 70, Subdivision of Land, of the Town of Herndon Code;
    - b. Conditions or mitigation measures imposed through a previously approved exception shall be met;
    - c. If the use of a best management practice 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
    - d. The criteria in §78-1129(g)(1) shall be met.

## Sec. 78-1130. Water Quality Impact Assessment.

- (a) A Water Quality Impact Assessment shall be required for the following:
  - (1) Any proposed land disturbance, development or redevelopment activity within a RPA, as permitted and consistent with §78-1127, 78-1128, 78-1129 and 78-1131;
  - (2) Any proposed development in the RMA that, in the judgement of the zoning administrator, warrants such an assessment because of the unique characteristics of the site or intensity of the proposed use, or development; and
  - (3) As a part of a request for a rezoning, a conditional use permit as well as the submission of a site plan or preliminary plan or single lot development plan that meets the criteria in

items (1) and (2) above. The zoning administrator has the authority to approve or deny a water quality impact assessment.

- (b) The purpose of the water quality impact assessment is to:
  - (1) Identify the impacts of the proposed land disturbance, development or redevelopment on water quality and lands within the RPAs and other environmentally sensitive lands;
  - (2) Ensure that, where land disturbance, development or redevelopment takes place within RPAs and other sensitive lands, it will be located on those portions of a site and in a manner that will be least disruptive to the natural functions of RPAs and other sensitive lands;
  - (3) Protect individuals from investing funds for improvements proposed for location on lands unsuited for such development because of high groundwater, erosion, vulnerability to flood and storm damage; and
  - (4) Specify mitigation that addresses water quality protection.
- (c) There are two levels of water quality impact assessments: a minor and a major.
  - (1) A minor water quality impact assessment pertains only to any land disturbance, development or redevelopment in the RPA which (i) causes up to 5,000 square feet of land disturbance, or (ii) is located in the RMA and is determined by the zoning administrator to warrant such assessment under §78-1128(h)(2).
  - (2) A minor assessment must demonstrate that the undisturbed buffer area, together with the enhanced vegetative plantings and any required BMP, retards runoff, prevents erosion, and filters non-point source pollution to the equivalent of the full undisturbed 100-foot buffer area, which shall be deemed to achieve a 75 percent reduction in sediments and a 40 percent reduction in nutrients. A minor assessment shall include a drawing to scale that shows the following:
    - a. Location of the components of the CBPA including the 100-foot buffer area component of the RPA;
    - b. Location and nature of the proposed encroachment into the buffer area including type of paving material; areas of clearing or grading; location of any structures, drives, or other impervious cover; and existing private water supply system or sewage disposal systems to include reserve drainfield sites;
    - c. Type and location of proposed BMPs, if necessary, to mitigate the proposed encroachment;
    - d. Location of existing, on-site vegetation, including the number and type of trees and other vegetation, to be removed in the buffer to accommodate the encroachment or modification; and

- e. Re-vegetation plan that supplements the existing buffer vegetation in a manner that provides for pollutant removal as well as erosion and runoff control.
- (3) A major water quality impact assessment shall be required for any land disturbance, development or redevelopment in the RPA which (i) exceeds 5,000 square feet of land disturbance or (ii) is located in an RMA and is determined by the zoning administrator to warrant a water quality impact assessment under §78-1128(h)(2). The information for this assessment shall be considered a minimum, unless the zoning administrator determines that some of the elements are unnecessary due to the scope and nature of the proposed use(s) and land development. The following elements shall be included in the preparation and submission of a major water quality assessment:
  - a. All of the information required in a minor water quality impact assessment, as specified (c)(2) of this section.
  - b. A hydrogeological component that:
    - 1. Describes the existing topography, soils, hydrology and geology of the site and adjacent lands;
    - 2. Describes the impacts of the proposed development on topography, soils, hydrology and geology on the site and adjacent lands; and
    - 3. Indicates the following:
      - i. Disturbance or destruction of wetlands and justification for such action;
      - ii. Disruptions to existing hydrology including wetland and stream circulation patterns;
      - iii. Description and source location of proposed fill material;
      - iv. Estimation of predevelopment and postdevelopment pollutant loads in runoff;
      - vi. Estimation of percent increase in the on-site impervious surface and types of surfacing materials used;
      - vii. Percent of site to be cleared for the project;
      - viii. Anticipated duration and phasing schedule or construction project; and
      - ix. Acquisition of all requisite permits from all applicable agencies necessary to develop the project.
  - c. Describes the proposed mitigation measures for the potential hydrogeological impacts. Potential mitigation measures include:

- 1. Proposed erosion and sediment control concepts; concepts may include minimizing the extent of the cleared area, perimeter controls, reduction of runoff velocities, measures to stabilize disturbed areas, schedule and personnel for site inspection;
- 2. Proposed stormwater management system;
- 3. Creation of wetlands to replace those lost; and
- 4. Minimizing cut and fill.
- d. Identification of the existing characteristics and conditions of sensitive lands included as components of Chesapeake Bay preservation areas, as defined in this article.
- e. Identification of the natural processes and ecological relationships inherent in the portion of the CBPA located on the site and an assessment on the impact of the proposed use and development on these processes and relationships.
- (d) The submission and review requirements shall meet the following standards:
  - Seven copies of all site drawings and other applicable information as required by items
     (c)(2) and (c)(3) of this section shall be submitted to the zoning administrator for review;
  - (2) For a major water quality impact assessment, all information required in this section shall be certified by a professional engineer or land surveyor as complete and accurate. Such certification is not required for a minor water quality impact assessment; and
  - (3) As part of any major water quality impact assessment submittal, the zoning administrator may require the Chesapeake Bay Local Assistance Department (CBLAD) to review the assessment and respond with written comments. Upon receipt of a major water quality impact assessment, the zoning administrator will determine if a CBLAD review is warranted to assure compliance with this article. The zoning administrator may incorporate any comments from CBLAD received within 90 days of the request into the final review.
- (e) The evaluation procedure shall be as follows:
  - (1) Upon the completed review of a minor water quality impact assessment, the zoning administrator shall determine if any proposed modification or reduction to the buffer area is consistent with the provisions of this article and make a finding based upon the following criteria:
    - a. The necessity of the proposed encroachment and the ability to place improvements elsewhere on the site to avoid disturbance of the buffer area;
    - b. Impervious surface is minimized;
    - c. Proposed best management practices, where required, to achieve the requisite reductions in pollutant loadings;

- d. The development, as proposed, meets the purpose and intent of this article; and
- e. The cumulative impact of the proposed development, when considered in relation to other development in the vicinity, both existing and proposed, shall not result in a significant degradation of water quality.
- (2) Upon the completed review of a major water impact assessment, the zoning administrator shall determine if the proposed development is consistent with the purpose and intent of this article and shall make findings based upon the following criteria:
  - a. Within any RPA the proposed development is water-dependent or is redevelopment;
  - b. The disturbance of wetlands is minimized;
  - c. The development does not result in significant disruption of the hydrology of the portion of CBPA on the site;
  - d. The development does not result in significant degradation to aquatic vegetation of life in the portion of CBPA on the site;
  - e. The development does not result in unnecessary destruction of plant materials in the portion of CBPA on the site;
  - f. Proposed erosion and sediment control concepts are adequate to achieve the required reductions in runoff and prevent off-site sedimentation;
  - g. Proposed stormwater management concepts are adequate to control the stormwater runoff to achieve the required standard for pollutant control;
  - h. Proposed revegetation of disturbed areas provides required erosion and sediment control benefits;
  - i. The development, as proposed, is consistent with the purpose and intent of the CBPA overlay district; and
  - j. The cumulative impact of the proposed development, when considered in relation to other development in the vicinity, both existing and proposed, shall not result in a significant degradation of water quality.
- (3) The zoning administrator shall require additional mitigation when potential impacts have not been adequately addressed. Evaluation of mitigation measures will be made by the zoning administrator based on the criteria listed in (e)(1) and (e)(2) of this section.
- (4) The zoning administrator must find the proposal to be inconsistent with the purpose and intent of this article when the impacts created by the proposal cannot be mitigated. Evaluation of the impacts shall be made by the zoning administrator based on the criteria listed in subsection (e)(1) and (e)(2) of this section.

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(Z.O. 1971, §28-50-7)
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#### Sec. 78-1131. Nonconforming Structures and Uses

- (a) The lawful use of a building or structure, or a lawful building or structure, which existed on October 23, 1990 or which exists at the time of any amendment to the article, and which is not in conformity with this article may be continued, in accordance with Article V, Nonconformities, of this chapter.
- (b) Subject to zoning administrator approval, existing legal buildings or structures (or the legal uses therein) that are not in conformity with this article may be remodeled provided that:
  - (1) The applicant submits an administrative waiver application, as identified in §78-1134(b);
  - (2) There is no increase in the nonpoint source pollution load; and
  - (3) Any development or land disturbance exceeding an area of 2,500 square feet shall comply with the requirements of article III, chapter 26 of this Code (Erosion and Sediment Control).
- (c) Subject to zoning administrator approval, existing legal principal buildings or structures that are not in conformity with this article may be expanded, provided that:
  - (1) The applicant submits an administrative waiver application, in accord with §78-1134(b), and the required Water Quality Impact Assessment (WQIA), receives zoning administrator approval;
  - (2) The request is the minimum necessary to afford relief;
  - (3) Granting the request will not confer upon the applicant any specific privileges that are denied by the article to other property owners in similar situations;
  - (4) The request is in harmony with the purpose and intent of this article and does not result in water quality degradation;
  - (5) The request is not based on conditions or circumstances that are self-created or self-imposed;
  - (6) Reasonable and appropriate conditions are imposed, as warranted, that will prevent degradation of water quality;
  - (7) Other findings, as appropriate and required by the Town of Herndon are met; and
  - (8) In no case shall this provision apply to accessory structures.
- (d) Possible expansion or modification of accessory structures and possible expansion or modification of nonconforming uses, where land disturbing activities are to take place, must be reviewed under §78-1133, Request for a CBPA Exception.

- (e) If a nonconformity is approved, the zoning administrator shall declare the nonconformity null and void 12 months from the construction date if work has not commenced.
- (f) In any event, any such expansion or alteration must comply with Article V of this chapter (Nonconformities) and with the underlying zoning district regulations.
- (g) Notwithstanding the regulations in (f) of this section, nothing in this article shall prevent the reconstruction of preexisting buildings or structures destroyed or damaged by any casualty, provided the building or structure is reconstructed in the same location and creates no more impervious area than the preexisting building or structure.

## Sec. 78-1132. Exemptions for Public Utilities, Railroads, Public Roads and Facilities.

- (a) The following activities shall be exempt from the provisions of this article to the extent that they are permitted by the Town of Herndon's Zoning Ordinance and are not prohibited by any other ordinance or law:
  - (1) Construction, installation, operation and maintenance of electric, natural gas, fiber optic and telephone transmission lines, railroads and public roads and their appurtenant structures shall be conducted in accordance with (i) the Erosion and Sediment Control Law (Code of Virginia, §10.1-560 et seq.), Article III, Chapter 26 of this Code (Erosion and Sediment Control) and the Stormwater Management Act (Code of Virginia, §10.1-603.1 et seq.) (ii) an erosion and sediment control plan and a stormwater management plan approved by the town, or (iii) local water quality protection criteria at least as stringent as the above state requirements are deemed to comply with this article. Exemptions for public roads are further conditioned as follows: The road alignment and design has been optimized, consistent with all applicable requirements, to prevent or otherwise minimize the encroachment in the RPA and to minimize the adverse effects on water quality.
  - (2) Construction, installation and maintenance of water, sewer natural gas lines and underground telecommunications and cable television lines owned, permitted or both by the Town of Herndon shall be exempt from the criteria in this article, provided that:
    - a. To the extent possible, the location of such utilities and facilities should be outside the RPA;
    - b. No more land shall be disturbed than is necessary to provide for the proposed utility installation;
    - c. All such construction, installation and maintenance of such utilities and facilities shall comply with all applicable town, Virginia and federal permits and be designed and conducted in a manner that protects water quality; and
    - d. Any land disturbance exceeding an area of 2,500 square feet must comply with erosion and sediment control requirements of the town.

(Z.O. 1971, §28-50-9)

### Sec. 78-1133. Request for an Exception to the Chesapeake Bay Preservation Areas.

- (a) To be relieved from the requirements of §78-1127, Permitted uses in the Chesapeake Bay Preservation Areas, and §78-1129, Additional Criteria for Development Activities within a Resource Protection Area, the applicant must be granted an exception to the Chesapeake Bay Preservation Areas (CBPA) by the Town Council. An application for a CBPA exception must be submitted to the Town Council through the Department of Community Development. The application shall include a written statement that identifies the impacts of the proposed exception on water quality and on lands within the Resource Protection Area, through the submission of a WQIA, as required under §78-1130.
- (b) No such CBPA exception shall be authorized except after notice and hearing, as required by Code of Virginia §15.2-2204, (2000), as amended, except only one hearing shall be required and the applicant may notify affected property owners by first-class mail.
- (c) The Town Council shall review the request for a CBPA exception as well as the WQIA and may grant it with such conditions ands safeguards as deemed necessary to further the purpose and intent of this article if the Council finds:
  - (1) The requested CBPA exception is the minimum necessary to afford relief;
  - (2) Granting the CBPA exception does not confer upon the applicant any special privileges that are denied by §78-1127, 78-1128 and 78-1129 to other property owners who are similarly situated;
  - (3) The request is in harmony with the purpose and intent of §78-1127, 78-1128 and 78-1129 and is not of substantial detriment to water quality;
  - (4) The request is not based upon conditions or circumstances that are self-created or self-imposed;
  - (5) Reasonable and appropriate conditions are imposed, as warranted, that will prevent the allowed activity from causing a degradation of water quality; and
  - (6) Other findings, as appropriate and required by the Town of Herndon, are met.

## Sec. 78-1134. Administrative Waivers.

- (a) An administrative waiver process is established to address the zoning administrator review for nonconforming principal structures (§78-1131)(c), buffer encroachments (§78-1129)(g), and relief from §78-1128 and all other article sections, exclusive of §78-1127, and §78-1129. Such requests must be made in writing to the zoning administrator, who has the authority to grant or deny the waiver.
- (b) To commence the administrative waiver process, an application shall be submitted to the zoning administrator and include the following information:
  - (1) Name and address of applicant and property owner;

- (2) Legal description of the property;
- (3) Location map; and
- (4) A WQIA, as required under §78-1130, which needs to be approved by the zoning administrator.
- (c) The zoning administrator may grant waiver requests for §78-1128, provided:
  - (1) The request is the minimum necessary to afford relief;
  - (2) Granting the request does not confer upon the applicant any special privileges denied by this article to other property owners in the Chesapeake Bay Preservation Overlay District;
  - (3) The request is in harmony with the purpose and intent of this article and is not injurious to the neighborhood or otherwise detrimental to the public welfare, and is not of substantial detriment to water quality;
  - (4) The request is not based upon conditions or circumstances that are self-created or self-imposed; and
  - (5) Reasonable and appropriate conditions are imposed, as warranted, that will prevent the allowed activity from causing a degradation of water quality.
- (d) The zoning administrator may grant a waiver requests for sections other than 78-1127, 78-1128 and 78-1129, provided:
  - (1) The request is the minimum necessary to afford relief; and
  - (2) The zoning administrator has the authority to place reasonable and appropriate conditions upon any waiver, as necessary, so that the purpose and intent of this article is preserved.
- e) The administrative waiver process for nonconforming principal structures are identified in §78-1131(c). Buffer encroachments may be administratively waived under §78-1129(g).
- (f) Nothing in this section shall affect the ability to seek a CBPA exception. Use of the administrative procedure is not a prerequisite to use of the appeal or exception process.
   (Z.O. 1971, §28-50-8)

## Sec. 78-1135. Conflict of Article with Other Regulations.

In cases where the requirements of this article conflict with any other provisions of this Code, or state code regulations, the more stringent restrictions shall apply. (Z.O. 1971, §28-50-11)

#### Sec. 78-1136. Severability.

The sections, paragraphs, sentences, clauses and phrases of this article are severable, and if any phrase, clause, sentence, paragraph or section of this article shall be declared unconstitutional or

#### Adopted: 02/10/04

invalid by the valid judgement or decree of a court of competent jurisdiction, such unconstitutionality or invalidity shall not affect any of the remaining phrases, clauses, sentences, paragraphs or sections of this article. (Z.O. 1971, §28-50-12)

Secs. 78-1137--78-1150. Reserved.

5. The official zoning map of the Town of Herndon is amended to show the updated Chesapeake Bay Preservation Areas and shall be annotated to indicate the Resource Management Areas, Resource Protection Areas, and the Intensely Developed Area described in paragraph 3, §78-1124 above, and incorporates the *Chesapeake Bay Preservation Areas Map* prepared by Town staff and presented at the Town Council's meeting on February 10, 2004, less the tributary that runs to the east of Queens Row Street.

6. This ordinance shall be effective on and after the date of its adoption and shall not apply to any completed and accepted land use application received by the Town on or prior to that date.