



Application #: \_\_\_\_\_

## **WATER QUALITY IMPACT ASSESSMENT (WQIA) APPLICATION**

NON-REFUNDABLE FEE: ☐ Single Family Residential \$ 115.00 / ☐ Other: \$ 350.00

### **1. PROJECT LOCATION INFORMATION:**

Job Location Address \_\_\_\_\_

Project Name \_\_\_\_\_ Land Disturbance Area (0.00 Acre): \_\_\_\_\_

Tax Map # \_\_\_\_\_ Parcel/Lot Area (0.00 Acre): \_\_\_\_\_

### **2. APPLICANT INFORMATION:**

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

Signature (REQUIRED) \_\_\_\_\_ Date \_\_\_\_\_

### **3. PROPERTY OWNER INFORMATION: (Same as Applicant ☐ )**

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

### **4. ENGINEER or SURVEYOR: (Same as Applicant ☐ )**

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

### **5. WETLANDS EXPERT: (Same as Applicant ☐ ) (Same as Design Professional ☐ )**

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

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The Water Quality Impact Assessment is conducted to identify the impacts of proposed development on water quality and lands within resource protection and resource management areas; to ensure that where development does take place it is located on those portions of a site and in a manner that is least disruptive to the natural functions of the land and to specify mitigation measures to address water quality protection.

The applicant shall submit a WQIA in accordance with §110-4.18.8.B for:

1. Any proposed land disturbance, development, or redevelopment within a resource protection area, including any buffer area modification or reduction as provided for in §110-4.18.7; or
2. Any proposed development or redevelopment in the resource management area that may significantly impact water quality due to the unique characteristics of the site or intensity of the proposed use or development, as determined by the Zoning Administrator in accordance with §110-4.18 and §110-4.18.4.D.

## **I. DEVELOPMENT CHARACTERISTICS**

*You must submit either a minor or major WQIA for your project unless you receive a waiver (see section II). The below conditions will determine whether you submit a major or minor WQIA.*

Submit a **Minor WQIA** if you answer “Yes” to either of these development characteristics (§110- 4.18.8.C)

☐ 5,000 square feet of disturbance or less

☐ Encroachment onto the landward 50 feet of the 100-foot buffer area (**Go to section III - Minor WQIA Requirements**)

Submit a **Major WQIA** if you answer “Yes” to any of these development characteristics (§110- 4.18.8.D)

☐ Over 5,000 square feet of disturbance

☐ Encroachment onto the seaward 50 feet of the 100-foot RPA buffer area

☐ Location in the resource management area and is deemed necessary by the Zoning Administrator. (**Go to section IV - Major WQIA Requirements**)

## **II. WQIA WAIVERS**

☐ Check here if you plan to submit a WQIA waiver request.

To submit a WQIA waiver request, attach a report detailing how the proposed development or redevelopment does not significantly impact water quality.

## **III. MINOR WQIA REQUIREMENTS (§110-4.18.8.C)**

The minor WQIA calculations will demonstrate that the remaining buffer area and best management practices will result in removal of no less than 75 percent of sediments and 40 percent of nutrients from post development stormwater runoff.

Requirements for a minor WQIA scaled site drawing include:

- 1) Location of the components of any RPA, including the 100 foot buffer area;
- 2) Location and nature of proposed improvements, including:
  - a. Type of paving material;
  - b. Areas of clearing or grading;
  - c. Location of any structures, drives, or other impervious cover; and
  - d. Sewage disposal systems or reserve drain field sites;

- 3) Type and location of proposed best management practices to meet the required general performance standards specified in §110-4.18.7;
- 4) Location, size, and condition of all existing trees five inches or greater in diameter measured at standard height to be impacted to meet the requirement of §6.10 and in accordance with §4.5.9.D.1. Existing trees to be preserved shall be indicated on the plan, including any necessary tree protection measures. Mature trees shall be protected during development and may only be removed where necessary, including to provide for the proposed use or development, subject to approval by the Zoning Administrator as required by §6.10.
- 5) Location, type, and number of replacement vegetation to restore the existing buffer in a manner that provides for mitigation of removed mature trees and maximizes buffer function.
- 6) Certification of all required information as complete and accurate by a Class IIIB certified land surveyor and professional wetlands delineator.

#### **IV. Major WQIA Requirements (§110-4.18.8.D)**

Requirements for a major WQIA include:

- 1) All of the information required in a minor WQIA (Section III above);
- 2) A hydrogeological element that describes existing topography, estimates of soils characteristics and potential for erosion, hydrology of the area, impacts on wetlands and streams, proposed mitigation measures, and a listing of requisite permits with permit or application status;
- 3) A tree conservation plan that identifies existing trees to be preserved or removed to meet the requirements of §6.10 and in accordance with §4.5.9.D.1; limits of clearing and grading; and tree protection measures for existing trees to remain;
- 4) A landscape plan that includes canopy trees, understory trees, shrubs, and groundcover plant types, using native species and in accordance with §4.5.9, to restore the existing buffer in a manner that provides for mitigation of removed mature trees and maximizes buffer function;
- 5) Such other measures as deemed necessary by the Zoning Administrator to ensure the impact to water quality can be accurately predicted;
- 6) Certification of all required information as complete and accurate by a Class IIIB certified land surveyor and professional wetlands delineator.

#### **V. CLIMATE CHANGE AND SEA LEVEL RISE ASSESSMENT (§110-4.18.9)**

- 1) Requirements include an impact assessment for any proposed land development in the Resource Protection Area that shall
  - a. Be based upon a potential impact range of 30 years or the lifespan of the project if less than 30 years;
  - b. Utilize a model or forecast developed by or on behalf of the Commonwealth;
  - c. Identify potential impacts:
    - (1) From projected sea level rise using the 2017 National Oceanic and Atmospheric Administration (NOAA) Intermediate-High scenario projection curve, or any subsequently updated version thereof, on the project site;
    - (2) From storm surge based upon the most updated NOAA hydrodynamic Sea, Lake, and Overland Surges from Hurricanes model on the project site; and
    - (3) From flooding based upon the most updated Special Flood Hazard Area and the Limit of Moderate Wave Action on the project site. Such assessment of flooding should be in conjunction with the requirements and application of floodplain management requirements and programs.
  - d. Assess the potential impacts in light of the proposed land development on buffer function including loss of riparian buffer vegetation and vegetation migration; water migration; as well as the potential impacts resulting in additional future land disturbance or development in the Resource Protection Area connected to the proposed land development.
  - e. Identify conditions, alterations, or adaptation measures for the proposed land development to address these potential impacts as necessary and appropriate based upon site conditions; nature, type, and size of proposed land development, including whether such proposed land development is in an Intensely Developed Area overlay; extent of

- potential impacts, and the necessity to minimize future land disturbance.
- 2) Based on the results of the assessment, the plan shall include adaptation measures that are
    - a. Nature-based solution adaptation measure that uses environmental processes, natural systems, or natural features, is appropriate for site conditions, and is:
      - (1) Best Management Practice approved by the Chesapeake Bay Program Partnership;
      - (2) An approved Virginia Stormwater Best Management Practice listed in the Virginia Stormwater Best Management Practice Clearinghouse;
      - (3) An approved Shoreline Protection Strategy in accordance with the Tidal Wetlands Guidelines as determined by the Virginia Marine Resources Commission; or
      - (4) A project that is an eligible activity for funding by the Virginia Community Flood Preparedness Fund as determined by the Virginia Department of Conservation and Recreation.
    - b. Be designed, installed, and maintained in accordance with the applicable adaptation measure specifications in accordance with the type of adaptation measure identified.
    - c. Allow for the use of fill only under the following conditions:
      - (1) The grading and slope created by the use of fill shall be no greater than necessary based upon the project specifications and implemented in a manner that minimizes the impact of runoff;
      - (2) The fill must have the necessary biogeochemical characteristics, including sufficient organic content, to support the growth of vegetation and adequate permeability to allow infiltration consistent with the project specifications;
      - (3) The use of fill shall not enhance stormwater runoff from the Resource Protection Area, and any lateral flow onto adjacent properties shall be controlled;
      - (4) Any impacts on the management of stormwater upland of the Resource Protection Area created by the use of fill shall be mitigated as necessary;
      - (5) The use of fill shall not negatively impact septic systems and drain fields; and
      - (6) The use of fill shall be consistent with any applicable federal or state law, including floodplain management requirements in 44 CFR 60.
    - d. Maximize preservation of existing natural vegetation including mature trees and minimize land disturbance consistent with the adaptation measure specifications.
    - e. Comply with all federal, state, and local requirements, including any required permits and conditions.
    - f. Nothing in this article shall be construed to authorize approval or allowance of an adaptation measure in contravention of floodplain management requirements, including the National Flood Insurance Program and established floodplain ordinances, or construed to require an adaptation measure in contravention of participation in the National Flood Insurance Program Community Rating System.
  - 3) Any activity in the Resource Protection Area impacting wetlands shall be consistent with Chapter 13 Title 28.2, Code of Virginia, and the accompanying Tidal Wetlands Guidelines which provide for “minimum standards for the protection and conservation of wetlands,” and “ensure protection of shorelines and sensitive coastal habitat from sea level rise and coastal hazard.” Shoreline management and alteration projects should be coordinated to address the requirements of the most updated Tidal Wetlands Guidelines in conjunction with the requirements of this section.
  - 4) The Zoning Administrator may exempt a living shoreline activity from additional performance criteria requirements, including a Water Quality Impact Assessment if the project minimizes land disturbance, maintains, or establishes a vegetative buffer inland of the living shoreline, complies with the fill conditions, and receives approval from the Virginia Marine Resources Commission or the local wetlands board.
  - 5) No exception shall be granted if the assessment of climate change and sea level rise has not occurred or the proposed adaptation measure allows for the use of fill in a Resource Protection Area in contravention of the requirements of §4.18.9.B.3(c).

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**VI. EVALUATION PROCEDURE (§110-4.18.8.F)****Minor WQIA**

*The Zoning Administrator shall determine if any proposed modification or reduction to the buffer area is consistent with the provisions of this division and make a finding based upon the following criteria:*

<b>4.18.8.F.1</b>	<b>Minor WQIA Criteria</b>	<b>Satisfied (Y/N)</b>
<b>a.</b>	The proposed encroachment is necessary and there is no other location on site to place improvements without disturbing the buffer area.	
<b>b.</b>	The impervious surface is minimized.	
<b>c.</b>	The proposed best management practices, where required, achieve the requisite reductions in pollutant loadings.	
<b>d.</b>	The development, as proposed, meets the purpose and intent of §110-4.18	
<b>e.</b>	The cumulative impact of the proposed development, when considered in relation to other development in the vicinity, both existing and proposed, will not result in a significant degradation of water quality.	
<b>f.</b>	Any other information deemed necessary by the Zoning Administrator.	

**Major WQIA**

*The Zoning Administrator shall determine if the proposed development is consistent with the purpose and intent of this division and make a finding based upon the following criteria:*

<b>4.18.8.F.2</b>	<b>Major Water Quality Criteria</b>	<b>Satisfied (Y/N)</b>
<b>a.</b>	The disturbance of any wetlands is minimized.	
<b>b.</b>	The development will not result in significant disruption of the hydrology of the site.	
<b>c.</b>	The development will not result in significant degradation to aquatic life.	
<b>d.</b>	The development will not result in unnecessary destruction of plant materials on site and will prioritize the protection of mature trees in the RPA.	
<b>e.</b>	Proposed erosion and sediment control concepts are adequate to achieve the reductions in runoff and prevent off site sedimentation.	
<b>f.</b>	Proposed stormwater-management measures are adequate to control the stormwater runoff to achieve the required performance standard for pollutant control.	
<b>g.</b>	Proposed revegetation of disturbed areas will provide optimum erosion and sediment control benefits.	
<b>h.</b>	The design and location of any proposed drain field will be in accordance with the general performance standards outlined in §110-4.18.7.	
<b>i.</b>	The development, as proposed, is consistent with the purpose and intent of §110-4.16.	
<b>j.</b>	The cumulative impact of the proposed development, when considered in relation to other development in the vicinity, both existing and proposed, will not result in a significant degradation of water quality.	

**- FOR CITY USE ONLY -**

Receipt # \_\_\_\_\_ ☐ \$115.00 ☐ \$350.00

This Application is Approved By \_\_\_\_\_ Date \_\_\_\_\_

Approval type: ☐ WQIA Review ☐ WQIA Waiver