

# WQIA - Water Quality Impact Assessment

**Town of Onancock**  
15 North Street · Onancock, VA · 23417

Form submittal required for any  
Land Disturbance within the  
Resource Protection Area (RPA)  
*Permit Fee: \$290*  
*After the Fact Fee: \$390*

For more information see Town of Onancock Code of Ordinance Article X, Chesapeake Bay Preservation (CBPA) Overlay District, and WQIA Section 38-313 as well as the [Riparian Buffers Modification & Mitigation Guidance Manual](#)

Date: \_\_\_\_\_ Project Contact: \_\_\_\_\_

E-mail: \_\_\_\_\_ Phone: \_\_\_\_\_

## OWNER INFORMATION:

**Subject Parcel Tax Map#:** \_\_\_\_\_

Owner Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ E-mail: \_\_\_\_\_

\*Owners Signature: \_\_\_\_\_

1. Summary Project Description: use additional page with Site Plan to provide full detail

\_\_\_\_\_

2. Was the subject parcel subdivision recorded:

Bayside prior to October 1, 1989? or  Seaside February 19, 2009

3. Area of Land Disturbance: \_\_\_\_\_ square feet

4.  Greater than 10,000. \_\_\_\_\_ ft<sup>2</sup> →  Major WQIA Site Plan

## Permits or Code Cases Related to this project.

5. Please provide the permit number state "in process" if appropriate:

Wetlands: \_\_\_\_\_

County Building: \_\_\_\_\_

Land Disturbance: \_\_\_\_\_

Case Number: \_\_\_\_\_

Variance: \_\_\_\_\_

Re-Development: \_\_\_\_\_

Town Building and Zoning: \_\_\_\_\_

Town WQIA: \_\_\_\_\_

**EXISTING SITE CONDITIONS:** check all that apply.

- 6. Disturbance will be located...
  - More than 50' from water
  - Outside of RPA
  - Within RPA
  - Within 50' of water
  
- 7. Site is currently ...
  - Totally Wooded
  - Partially Wooded
  - Lawn
  - No trees
  - Brush
  - Drainage Ditches
  - Ditch High Bank
  - Marsh  Non-Tidal Wetland
  - Pine Needles Leaf Litter
  - Bare or Eroding Soil
  
  - Eroding Shoreline
  - Buildings
  - Paved or Impervious surface
  - Septic Tank or drain field
  - Well
  - Shoreline Protection Structure  
Type \_\_\_\_\_
  - Water Dependent Facility
  - Other \_\_\_\_\_

**PROJECT INFORMATION:** check all that apply

**8. Purpose of land disturbance:**  New Construction  Redevelopment\*\*

- Vegetation Removal
- Woodlot Management
- Vista or View

Installation of:

- Walkway, Path, Boardwalk
- Deck, Patio
- Pier
- Residential Structure\*\*
  
- Well
- Shoreline Protection Structure

9. Is impervious cover included in the scope of the project?  yes  no

10. If **yes** describe **materials** and purpose: \_\_\_\_\_

- Excavation if yes, \_\_\_\_\_ ft<sup>2</sup>
- Fill if yes, \_\_\_\_\_ yd<sup>3</sup>
- Grading, \_\_\_\_\_ ft<sup>2</sup>

11. Reason disturbance could not be located outside the RPA? \_\_\_\_\_

12. Methods to minimize impacts: *check **all** that apply*

- Track Mats
- Root Protection
- All hand work no driving in buffer
- Silt fence
- Material Storage outside of buffer
- Limits of construction roped off
- Tree protection fencing
- One controlled access point
- OTHER: \_\_\_\_\_

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## MITIGATION MEASURES

### PROPOSED VEGETATION TO BE REMOVED:

All vegetation proposed for removal must be flagged onsite for initial inspection before permit is issued. Or if using area (square footage) method rope off area.

#### 13. Individuals

- Dead Trees, how many \_\_\_\_\_
- Live Trees, how many \_\_\_\_\_
- Trees pruned, how many \_\_\_\_\_ pruning heights range \_\_\_\_\_ to \_\_\_\_\_
- Forest floor leaf litter removed or disturbed, area = \_\_\_\_\_ ft<sup>2</sup>
- Invasive/ Noxious Plants: type \_\_\_\_\_
- Shoreline grasses \_\_\_\_\_ square feet

**Or**

14. Determine the area of Land Disturbance within the RPA: \_\_\_\_\_ square feet

VEGETATION TO BE PLANTED based on formula below.

- 15. Total Trees:                      Canopy \_\_\_\_\_ Understory \_\_\_\_\_
- 16. Total Shrubs:                    Large \_\_\_\_\_ Small \_\_\_\_\_
- 17. Total Grasses \_\_\_\_\_
- 18. Other \_\_\_\_\_

### How to calculate the Mitigation units

Determine the number of individuals to be planted by using the following formula:

#### A) For one fourth ¼ acre or less of buffer (Up to 10,890 square feet or less of buffer area.)

For every 400 square-foot unit (20'x20') or fraction thereof,

#### Plant:

1. one (1) canopy tree @ 1½" - 2" caliper or large evergreen @ 6' +
  2. two (2) understory trees @ ¾" - 1 ½" caliper or evergreen @ 4'
- Or** one (1) understory tree and two (2) large shrubs @ 3'-4' +
3. three (3) small shrubs or woody groundcover @ 15" - 18"

Example:

A 100-foot wide lot x 100-foot wide buffer is 10,000 square feet. Divide by 400 square feet (20'x20' unit) to get:

25 units

Units x plant/unit Number of plants 25 units x 1 canopy tree 25 canopy trees

2 understory trees 50 understory trees

3 small shrubs 75 small shrubs

150 plants

**Continued**

**B. For Greater than ¼ acre of buffer More than 10,890 square feet**

**OPTION 1:** Plant at the same rate as for ¼ acre or less.

**OPTION 2:** For The waterside 50 of the buffer (from the waterline inland for the first 50 feet):

Plant for every 400 square-foot unit (20'x20') or fraction thereof:

1. One (1) canopy tree @ 1½" - 2" caliper or large evergreen @ 6'
2. Two (2) understory trees @ ¾" - 1 ½" caliper **or** evergreen @ 4' or one (1) understory tree and two (2) large shrubs @ 3'-4'
3. three (3) small shrubs or woody groundcover @ 15" - 18"

**AND**

For The landward 50 feet of buffer (from 50 feet inland to 100 feet inland):

1. either plant Bare root seedlings or whips at 1,210 stems per acre 1 , approximately 6'x6' on center (Minimum survival required after two growing seasons: 600 plants)
2. or Container grown seedling tubes at 700 per acre approximately 8'x 8' on center (Minimum survival required after two growing seasons: 490 plants)

**OPTION 3:**

1. If the applicant is willing to enter into a five year maintenance and performance guarantee: 100% of buffer planted with: Bare root seedlings or whips at 1,210 per acre, approximately 6'x 6' on center (Minimum survival required after two growing seasons: 600 plants) or Container grown seedling tubes at 700 per acre approximately 8'x 8' on center (Minimum survival required after two growing seasons: 490 plants) 1 acre or more of buffer With an evaluation from an arborist or forester or other professional, natural regeneration may be an acceptable method of buffer establishment, however, a forestry management plan must be in place prior to any vegetation being removed. A minimum of 35 feet next to the water must be left in forest and protected prior to any vegetation being removed.

**\*\*If over 20 percent of the vegetation must be removed for the health of the woodlot, within the 35 feet closest to the shoreline, vegetation must be reestablished by seedling plantings at the rates above.**

Information in this section taken from the:

RIPARIAN BUFFERS MODIFICATION & MITIGATION GUIDANCE MANUAL VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION CHESAPEAKE BAY LOCAL ASSISTANCE September 2003 - Reprinted 2006

**LANDSCAPE PLAN**

Provide a scaled drawing of the proposed alterations and site layout which includes: Location and ownership information,

- a. Location of the components of the resource protection area such as RPA and property boundaries, water features, creeks with perennial flow, existing vegetation, areas to preserve and proposed clearing or grading as well as location and nature of the proposed encroachment.
- b. Location of any structures such as driveways, or other impervious cover, location of sewage disposal systems or reserve drain fields or wells.
- c. Type and location of proposed best management practices to mitigate the proposed encroachment, including sediment control and stormwater runoff management.
- d. Location of proposed mitigation and re-vegetation including numbers and species.

Approval signature is required before any work shall be performed. After completion contact the Town Office for a final inspection in order to close the complete this permit.

|  |
|--|
| Fee Payment Received _____                                 |
| Approval _____ Date _____                                  |
| <input type="checkbox"/> As submitted _____                |
| <input type="checkbox"/> With revisions listed _____       |
| Final Inspection _____ One Year Mortality Inspection _____ |

## WQIA Landscape Plan

Tax Map # \_\_\_\_\_ Owner Name \_\_\_\_\_

Provide a scaled drawing of the proposed alterations and site layout on the paper provided or submit your own which includes location and ownership information,

- a. Location of the components of the resource protection area such as RPA and property boundaries, water features, creeks with perennial flow, existing vegetation, areas to preserve and proposed clearing or grading as well as location and nature of the proposed encroachment.
- b. Location of any structures such as driveways, or other impervious cover, location of sewage disposal systems or reserve drain fields or wells.
- c. Type and location of proposed best management practices to mitigate the proposed encroachment, including sediment control and stormwater runoff management.
- d. Location of proposed mitigation and re-vegetation including numbers and species.