# **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 <u>Riparian Buffers Modification & Mitigation Guidance Manual</u>

Date:	Project Con	ntact:
E-mail:		Phone:
OWNER INFOR	RMATION:	
Subject Parcel T	ax Map#:	
Owner Name:		
Address:		
Telephone:		E-mail:
*Owners Signatur	·e:	
1. Summary Pr	oject Description:	: use additional page with Site Plan to provide full detail
	ct parcel subdivis	ion recorded: 1989? or ⊡ Seaside February 19, 2009
3. Area of Land I	Disturbance:	square feet
4.	n 10,000	ft² → ⊡ Major WQIA Site Plan
Permits or Code	Cases Related to	this project.
<b>5.</b> Please provi	de the permit nur	mber state "in process" if appropriate:
	rbance:	
⊡ Re-Develop	ment:	
⊡ Town Build	ling and Zoning:_	
	A:	

EXISTING SITE CONDITIONS:	check <u>all</u> that apply.			
<ul> <li>6. Disturbance will be located</li> <li>☑ More than 50' from water</li> <li>☑ Outside of RPA</li> <li>☑ Within RPA</li> <li>☑ Within 50' of water</li> </ul>				
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	<ul> <li>⊡ Eroding Shoreline</li> <li>⊡ Buildings</li> <li>⊡ Paved or Impervious surface</li> <li>⊡ Septic Tank or drain field</li> <li>⊡ Well</li> <li>⊡ Shoreline Protection Structure</li></ul>			
PROJECT INFORMATION: check <u>all</u> that apply  8. Purpose of land disturbance:   ☐ New Construction ☐ Redevelopment**				
<ul><li> Vegetation Removal</li><li> Woodlot Management</li><li> Vista or View</li></ul>				
Installation of:  ☐ Walkway, Path, Boardwalk ☐ Deck, Patio ☐ Pier ☐ Regidential Structure**				
<ul><li> Residential Structure**</li><li>9. Is impervious cover included in th</li></ul>	☐ Shoreline Protection Structure			
<u>-</u>	pose:			
<ul><li></li></ul>	yd <sup>3</sup>			
11. Reason disturbance could not be located outside the RPA?				

12. Methods to minimize impacts: <i>check</i> <u>all</u> that apply
<ul> <li>□ Track Mats □ Root Protection</li> <li>□ All hand work no driving in buffer</li> <li>□ Silt fence</li> <li>□ Material Storage outside of buffer</li> <li>□ Limits of construction roped off</li> <li>□ Tree protection fencing</li> <li>□ One controlled access point</li> <li>□ OTHER:</li> </ul>
This space intentionally left blank.

# **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					
<ul><li>Dead Trees, how many</li></ul>					
☐ Live Trees, how many					
<ul> <li></li></ul>					
☐ Invasive/ Noxious Plants: type 1					
☐ Shoreline grassessquare feet					
<u>Or</u>					
14. Determine the area of Land Disturbance within the RPA:	square feet				
VEGETATION TO BE PLANTED based on formula below.					
15. Total Trees: CanopyUnderstory					
16. Total Shrubs: LargeSmall					
17. Total Grasses					
18. Other					
Il and to calculate the Mittingtion coults					
How to calculate the Mitigation units					
Determine the number of individuals to be planted by using the following fo	rmula:				
A) For one fourth ¼ acre or less of buffer (Up to 10,890 square feet or les	s of buffer area.)				
For every 400 square-foot unit (20'x20') or fraction thereof,					
Plant:					
1. one (1) canopy tree @ $1\frac{1}{2}$ " - 2" caliper or large evergreen @ 6' + 2. two (2) understory trees @ $3\frac{1}{4}$ " - 1 $\frac{1}{2}$ " caliper or evergreen @ 4'					
$\underline{\mathbf{Or}}$ 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 f	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 $\frac{1}{4}$ 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 @  $1\frac{1}{2}$ " 2" caliper or large evergreen @ 6'
- 2. Two (2) understory trees @  $\frac{3}{4}$ " 1  $\frac{1}{2}$ " caliper <u>or</u> evergreen @ 4' or one (1) understory tree and two (2) large shrubs @  $\frac{3}{4}$ " 1  $\frac{1}{2}$ " caliper <u>or</u> evergreen @ 4' or one (1) understory
- 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.

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

<sup>\*\*</sup>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.

## 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.

Date
One Year Mortality Inspection

### **WQIA** Water Quality Impact Assessment

# 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.
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