

# Environmental Stewardship and Permitting Information for Waterfront Property Owners

Prepared by the Planning Division of the Fairfax County  
Department of Planning & Zoning, February 2013

As an owner of waterfront property in Fairfax County, you can be a steward of the environment as well as an important member of a partnership to protect our natural resources. This partnership includes the Fairfax County government and other state and federal agencies. Our mutual goal is to preserve the quality of our waterways by preventing erosion and protecting wildlife and vegetation.



Shoreline Erosion, Mason Neck, Fairfax County

Photo by Beth Rado

## When are permits required?

- You will need permits to conduct any construction on the shoreline or at the water's edge before you begin work. ***For help determining if you need a permit, call 703-324-1380.***
- Make certain that the contractor you choose to help you with your project is licensed to work in the County.

The following activities may result in land disturbance. Land disturbances and related construction activities often require a permit if done in an area that is a ***tidal wetland*** or is in an area adjacent to a ***tidal wetland***. The following types of land disturbing activities and construction projects will require permits:

- Any construction project on, over or adjacent to a tidal body of water.
- Any project in which fill material is placed in or near wetlands such as riprap.
- Construction of bridges, tunnels or roads which may have an impact on wetlands, either tidal or non-tidal.
- Projects designed to protect shorelines in order to minimize erosion such as bulkheads.

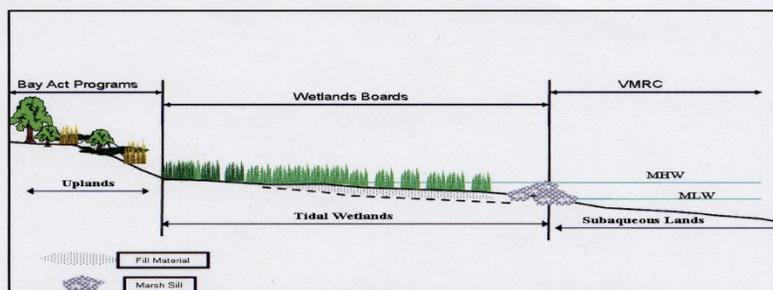
## What type of permits might be needed?

The type of activity you plan will determine the type of permit you need.

- The **Fairfax County Wetlands Board** must issue a permit for shoreline disturbances along the water's edge which may impact *vegetated* or *non-vegetated wetlands*, such as the construction of bulkheads, the placement of riprap or dredging.
  - The Policy Plan of the County's Comprehensive Plan provides an analysis of the County's tidal shoreline. That document is available at <http://www.fairfaxcounty.gov/dpz/comprehensiveplan/policyplan/chesapeakebay/>
  - Wetlands permit applications require that you submit very detailed drawings which demonstrate important information about your plan. A professional engineer can assist in the preparation of your plan.

In addition to the wetlands permit, your project may also require permits from other Fairfax County agencies.

- Activities in the **floodplain** are regulated by the County's **Zoning Ordinance**, Article 2-900, and may require written approval from the Department of Public Works and Environmental Services (DPWES) or a Special Exception approval by the Board of Supervisors. If you have questions about **floodplain** regulations, call the Engineer of Day at 703-324-1575.
  - Information regarding applications for Special Exception approval for uses in the floodplain is available from the Zoning Evaluation Division, Department of Planning and Zoning, 12055 Government Center Parkway, Suite 801, Fairfax, VA 22035-5504, or by calling 703-324-1290.
  - If you want to read regulations regarding activities in the **floodplain**, go to the County's **Zoning Ordinance**, Article 2-900 <http://www.fairfaxcounty.gov/dpz/zoningordinance>.
- Your shoreline project may also require permitting related to the **Chesapeake Bay Preservation Ordinance**. The **Chesapeake Bay Preservation Ordinance**, Chapter 118 of the County Code, is administered by the Department of Public Works and Environmental Services (DPWES). If you have questions about the ordinance, call the Engineer of the Day at 703-324-1575. If you want the **Chesapeake Bay Preservation Ordinance**, go to: [www.fairfaxcounty.gov/government](http://www.fairfaxcounty.gov/government); choose the **County Code**, Chapter 118, to view the ordinance.



*Regulatory programs involved in living shoreline design.*

Source: *Rivers and Coast*, Newsletter for the Center for Coastal Resources Management, Winter 2006

## How do I apply for a wetlands permit?

To find out if you need a permit for your planned project, you must first file a Joint Permit Application with the Virginia Marine Resources Commission, Habitat Management Division. This will begin the review process notifying the *Corps of Engineers*, the *Fairfax County Wetlands Board*, the *Virginia Marine Resources Commission* and the *Virginia Department of Environmental Quality* of the planned activity on your property.

If you have questions about your proposed project in relationship to the Wetlands Board's jurisdiction – that area within *mean low water* and an elevation above mean low water equal to *1½ times the mean tide range* – or if you have any questions about filing a wetlands permit application, contact:

Fairfax County Wetland Board Staff  
Department of Planning and Zoning, Planning Division  
12055 Government Center Parkway, Suite 730  
Fairfax, VA 22035-5504 – 703-324-1380

The *Wetlands Zoning Ordinance* is Chapter 116 of the County Code. If you want to read the ordinance, go to [www.fairfaxcounty.gov/government](http://www.fairfaxcounty.gov/government) ; choose County Code, Chapter 116, to view the ordinance.

Tidal wetlands are valuable natural resources which help to prevent flooding, improve water quality and to provide habitat. Consequently, the Wetlands Board requires mitigation or compensation for wetlands impacts.

[http://www.fairfaxcounty.gov/dpz/environment/wetlands/mitigation\\_compensation\\_policy\\_adopted.pdf](http://www.fairfaxcounty.gov/dpz/environment/wetlands/mitigation_compensation_policy_adopted.pdf)

In addition, the Wetlands Board has adopted a policy which encourages vegetative shoreline stabilizations. The Wetlands Board's "Living Shoreline" Stabilization Policy can be found at <http://www.fairfaxcounty.gov/dpz/environment/finallivingshoreline.pdf> .

The Wetlands Board requires that you provide a completed Supplementary Information Form with a wetlands permit request.

[http://www.fairfaxcounty.gov/dpz/environment/wetlands/supplementary\\_information\\_form.pdf](http://www.fairfaxcounty.gov/dpz/environment/wetlands/supplementary_information_form.pdf)

## Sources for additional information about permitting

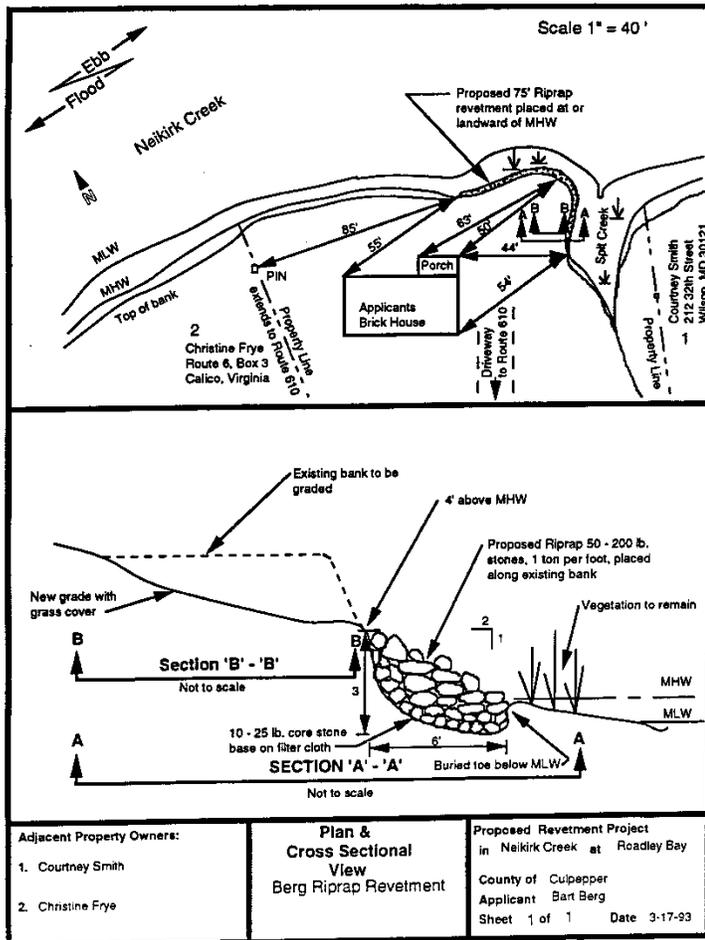
For more information about activities conducted in waters and wetlands of the U.S.:

United States Army Corps of Engineers  
Northern Virginia Field Office  
18139 Triangle Shopping Plaza, Suite #213  
Dumfries, VA 22026  
703-221-6967  
<http://www.nao.usace.army.mil/>

For questions about activities conducted below mean low water:

Virginia Marine Resources Commission  
Habitat Management  
P.O. Box 756  
2600 Washington Avenue  
Newport News, VA 23607-0756  
757-247-2200  
[www.mrc.state.va.us/](http://www.mrc.state.va.us/)

Sample drawings (not to scale) for a shoreline permit –  
 Upper drawing: plan view; lower drawing: cross-section view



Below is a checklist of necessary information which must be included in your drawings for the application to be considered complete:

**Plan View Drawing (to a measurable scale)**

- North arrow
- Name of waterway
- Existing structures
- Benchmarks showing distance to fixed reference points
- Mean low water and mean high water lines (tidal)
- Ordinary high water line (nontidal)
- Location of vegetated wetlands at the project site
- Shoreline, property lines, and location of adjacent property owners
- Ebb and flood (tidal) or direction of the flow (nontidal)
- Channelward encroachment relative to mean high/mean low water lines
- Connection with existing bulkhead or riprap structure (if applicable)
- Proposed backfill
- Length of revetment

**Cross-section Drawing (to a measurable scale)**

- Proposed backfill
- Mean low water and mean high water levels (tidal)
- Ordinary high water (nontidal)
- Existing contours of the shoreline and/or bank
- Dimensions of proposed revetment
- Filter cloth
- Buried toe or riprap apron
- Proposed grading of existing bank relative to mean high water
- Vicinity map – The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map or county map is preferred).

**Answer the following questions regarding the application.**

1. What will be the average amount of fill material (placed below the plane of mean high water) per linear foot of shoreline?

\_\_\_\_\_ cubic yards per foot                      OR                      \_\_\_\_\_ tons per foot

2. What type of material will be used for construction of the riprap revetment (example: quarry stone, cinder block, etc.)

3. Estimate what the average weight of the core material (bottom layers) will be: \_\_\_\_\_ pounds per stone.

Estimate what the average weight of the armour material (2 top layers) will be: \_\_\_\_\_ pounds per stone.

4. If backfill will be placed landward of the revetment, then describe the composition of the material to be used (Example: 80% sand, 15% clay, 5% silt).

\_\_\_\_\_

5. What is the source of the backfill material?

\_\_\_\_\_

6. Will any portion of the project be placed on wetlands or subaqueous lands? \_\_\_\_ Yes \_\_\_\_ No

If yes, indicate the square footage and the type of area to be affected.

	<b>Tidal</b>	<b>Non-tidal</b>
Vegetated wetlands	Sq. ft.	Sq. ft.
Non-vegetated wetlands	Sq. ft.	-----
Subaqueous land	Sq. ft.	Sq. ft.

## GLOSSARY

**Beach** – Shoreline zone comprised of unconsolidated sandy material upon which there is a mutual interaction of the forces of erosion, sediment transport and deposition that extends from the low water line landward to where there is a marked change in either material composition or physiographic form or to the line of woody vegetation (usually the effective limit of stormwaves), or the nearest impermeable man-made structure, such as a bulkhead, revetment, or paved road.

**Chesapeake Bay Preservation Ordinance** – Chapter 118 of the Code of Fairfax County; the Ordinance adopted by the Fairfax County Board of Supervisors on March 22, 1993, to meet the requirements established by the Code of Virginia, Section 10.1-2100, Chapter 21, known as the Chesapeake Bay Preservation Act. The ordinance was adopted for the purposes of encouraging and promoting the protection of state waters and to preserve the habitat, which those waters provide, as well as to reduce existing pollution in the state waters and to prevent further pollution.

**Corps of Engineers** – This federal agency, which traces its origins back to the Continental Congress in 1775, has played a major role in civil and public works projects over the years. The Corps oversees the federal regulatory role in the implementation and administration of The Clean Water Act.

<http://nao.usace.army.mil/>

**Erosion control** – Measures used to prevent movement of sediment onto neighboring properties or into state waters; such movement of sediment is usually caused by excavation, clearing, grading and is exacerbated by the natural forces of wind and rain.

**Fairfax County Wetlands Board** – Seven members and one alternate member appointed by the Fairfax County Board of Supervisors and created on October 17, 1983, to meet the provisions of title 28.2, Chapter 13, Section 28.2-1300 of the Code of Virginia, Chapter 116 of the Code of Fairfax County, known as the Wetlands Zoning Ordinance. The Wetlands Board also administers Chapter 14, Section 28.2 – 1400 of the Code of Virginia and Chapter 123 of the Code of Fairfax County, the Coastal Primary Sand Dune (Beach) Zoning Ordinance.

**Floodplain** – Those land areas in and adjacent to streams and watercourses subject to continuous or periodic inundation from flood events with a one (1) percent chance of occurrence in any given year (i.e. the 100-year flood frequency event) and having a drainage area greater than 70 acres.

**Mean low water line** – A contour line on a drawing that shows the channelward limits of an average low tide.

**Mean tide range** – Mean high water and mean low water are defined as the average vertical elevation of all high water tides and low water tides, respectively that have occurred during the 19 year lunar cycle.

**Non-vegetated wetlands** – Unvegetated lands lying contiguous to mean low water and between mean low water and mean high water.

**Resource Protection Area (RPA)** – That component of the Chesapeake Bay Preservation Area comprised of lands at or near the shoreline or water's edge that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation of the quality of state waters. In their natural condition, these lands provide for the removal, reduction or assimilation of sediments and nutrients and potentially harmful or toxic substances from runoff entering the Bay and its tributaries.

**Riprap Revetment** – Rock strategically placed on the shoreline or at the water's edge to slow erosion caused by wave action.

**Tidal wetlands** – Lands lying between and contiguous to mean low water and between mean low water and mean high water subject to flooding by normal tides and wind tides.

**Tide** – The periodic rise and fall of water (in oceans, bays, gulfs, inlets and tidal regions of rivers) resulting from the gravitational interactions between the sun, moon, and earth.

**Vegetated wetlands** – Lands lying between and contiguous to mean low water and an elevation above mean low water equal to the factor on and one-half times the mean tide range. Vegetated wetlands are lands, which are inundated, and saturated by surface and groundwater at a frequency and duration sufficient to support vegetation adapted to life in saturated soil.

**Virginia Department of Environmental Quality** – Department of the Commonwealth of Virginia formed in 1993 under the authority of the executive branch involved in regulating and permitting related to water, air and waste <http://www.deq.state.va.us/>

**Virginia Marine Resources Commission (VMRC)** – Agency of the Commonwealth that is responsible for marine management, which seeks to protect the living resources and the habitat of those resources. In addition, the VMRC maintains responsibility for permitting encroachments in or over State-owned submerged lands and oversees the administration of the following laws:

- The Virginia Wetlands Act was passed in 1972 and placed under the management of VMRC;
- The 1980 Coastal Primary Sand Dune Protection Act;
- In 1982, the General Assembly broadened the 1972 Wetlands Act to include non-vegetated wetlands;
- In 1984, a distinct Fisheries Management Division was created and its authority over fisheries issues was strengthened. <http://www.mrc.state.va.us/>
- Originally established in 1877 as the Virginia Fish Commission, the Virginia Marine Resources Commission (VMRC) was re-named by an act of the Virginia General Assembly in 1968.