# Chesapeake Bay Protection Ordinance "Resource Protection Areas" (RPA) and How They May Affect Your Property

The continuing demise of the Chesapeake Bay environment led the jurisdictions surrounding the Bay to form a unique regional partnership in 1983 to work together toward the Bay's restoration and protection. This partnership realized that each local area within each state (e.g. cities, counties) should manage their own local watersheds with only general oversight by the Federal and State governments. The states would create the general structure for restoration and protection but the locals would establish specific regulations for their specific needs. To that end, the Chesapeake Bay Preservation Act came into being.

#### **Chesapeake Bay Preservation Act & Amendments**

The state of Virginia enacted the Chesapeake Bay Preservation Act in 1988 requiring Virginia communities that contain waters that drain into the Chesapeake Bay to institute protective measures to improve the health of the natural resources. The state created the Chesapeake Bay Local Assistance Board (under the Virginia Department of Conservation and Recreation), tasked with guiding local jurisdictions to enact measures to safeguard the water quality of the Chesapeake Bay.

As part of the Bay Act, Fairfax County enacted the Chesapeake Bay Preservation Ordinance in 1993 which contained regulations regarding land management practices that occur in sensitive zones along all waters that drain ultimately into the Chesapeake Bay. These sensitive areas along streams and rivers are referred to as Resource Protection Areas (RPAs) and commonly called Riparian Buffer Zones by ecologists.

The County's Chesapeake Bay Preservation Ordinance has been amended several times (last in 2008) with the 2003 amendment being the most significant toward increasing the protection of the watershed.

Most significant is the designation of **Resource Protection Areas – RPAs** - around all water bodies with perennial flow, meaning tributary streams that flow throughout the year except during periods of drought. The amendments also changes the criteria for development and redevelopment in RPAs, and changes the procedures and application process for obtaining construction permits and for granting exceptions and waivers to the requirements of the Chesapeake Bay Protection Ordinance. Greatly simplified, RPAs include all areas **within 100 feet** of the Lake, together with areas within 100 feet of perennial streams and wetlands connected with them. The **last 50 feet** before you get to the water or wetland receives **even higher** levels of protection. In addition, areas within 100 year flood plains are similarly protected. The complete definition is broader.

### What This Means for Lake Barcroft

Residents with homes located within an RPA should be aware of certain restrictions on development and maintenance activities on their property. In residential areas such as Lake Barcroft that were built before the Chesapeake Bay Protection Ordinance was enacted, the County tries to be reasonable when applying Chesapeake Bay Ordinance requirements. In general, development is not allowed in RPAs, however, the ordinance protects existing homes and other structures that were built in RPAs before the CBPO was enacted. The ordinance also allows for maintenance of existing property such as cutting of diseased and dying trees, and clearing of noxious weeds, with prior permission. It also allows for the construction of minor additions to existing homes, or addition of decks, and passive recreation structures such as paths or boardwalks if residents obtain necessary exemptions and waivers. Depending on the extent of the encroachment into the RPA, and the affect on the encroachment on the functionality of the RPA, owners of properties that fall in the RPA are required to obtain prior written approval from the Department of Public Works Environmental Services (DPWES). Many cases will need to have a water quality impact assessment, others may require a public hearing. Depending on the

findings of a water quality impact assessment study, remediation may be required to restore the functionality of the buffer zone lost because of tree clearing or development, and the owner may be required to densely plant a specified number of overstory trees, understory trees and shrubs, and groundcovers to restore a functioning buffer zone.

For more information, and links to County RPA maps, the Chesapeake Bay Protection Ordinance, and to forms to submit for approval or waivers, go to: http://www.fairfaxcounty.gov/dpwes/environmental/cbay/

## Why are RPAs so important?

Vegetated riparian buffer zones are vital in protecting the water quality of Lake Barcroft and the entire watershed. They reduce the velocity and absorb much of the stormwater runoff, recharging groundwater reservoirs. They trap sediment and reduce or remove nutrients such as nitrogen, phosphorous and other chemical pollutants, from both surface water and ground waters. Vegetated buffer zones prevent erosion and filter out sediments and pollutants that can be hazardous to aquatic life. They produce many other benefits not the least of which is creating wildlife habitat, water temperature modification, absorption of pollutants, and ultimately, healthy aquatic life. In fact, vegetated buffer zones also help protect us from disease producing pathogens such as bacteria and viruses, "whose survivability increases with high nutrient levels and suspended solids or sediments". These benefits can translate into increased quality of life and real savings for the community.

The single most important factor in determining the quality of a stream's water is the amount of forested land in its watershed. At one time vast forests stretched unbroken across the Chesapeake watershed and were responsible for the exceptional quality of the water in our region's streams and rivers and the enormous fertility of the Chesapeake Bay. Almost every drop of rain that fell penetrated into the soft, organic soil, because over a ton of leaves fell annually on each acre of ground. Rainwater moved slowly down hill irrigating the forests and replenishing groundwater reservoirs. The roots of each tree in the forest absorbed thousands of gallons of water in a single year. Forests at the streams edge prevented erosion and absorbed and removed excess nutrients. Leaves, seeds, and fruits that fell from the trees nourished a vast diversity of aquatic life that actually enabled the streams to clean their own water. Even after major floods, our forested streams once ran clear. These are services that a healthy stream provides free of charge. Homeowners can make a difference here in Lake Barcroft, by protecting existing trees and understory vegetation, and by planting new trees and shrubs, especially along the lakeshore.

For more information, and links to County RPA maps, the Chesapeake Bay Protection Ordinance, and to forms to submit for approval or waivers, go to: http://www.fairfaxcounty.gov/dpwes/environmental/cbay/

# <u>How the Chesapeake Bay Act and Amendments Affect Lake Barcroft Residents;</u> Answers to commonly asked questions

#### Q. How do I know if my property falls in a designated Chesapeake Bay Ordinance RPA?

A. In general a Resource Protection Area (RPA) - "contains any land within 100 ft of a floodplain or stream with perennial flow, meaning a stream or body of water that flows all year except during droughts". Properties within approximately 100' of the lake's edge typically fall into the protected buffer zone or RPA. This may include properties that are not lakefront. You can find out if part or all of your property is in an RPA by going to www.fairfaxcounty.gov/dta. Click on the link that reads 'View "my property" and Residential Sales within Assessment Neighborhoods'. Enter your address and click search.

## Q. What are the regulations that affect <u>landscaping and tree removal</u> in an RPA?

A. Lawns, gardens, or other structures legally built or installed prior to the enactment of the Chesapeake Bay Protection Ordinance, can remain in place, but cannot be expanded or modified without county approval. The removal of existing vegetation to establish new lawns is prohibited.

In addition, the Chesapeake Bay Ordinance, pVAC 10-20-130.5a states:

- "In order to maintain the functional value of the buffer area, existing vegetation may be removed, subject to approval by the local government, only 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 non-point source pollution from runoff".
- "In order for the buffer to function as intended, it should contain the full complement of vegetation that includes all of the trophic layers: shade trees, understory trees, shrubs, and ground cover, whether the groundcover is vegetation, leaf litter, or mulch."
- "Clear cutting of any area is not permissible to achieve sight lines or vistas."
- "Even noxious weeds, diseased or dying trees may be removed only with special permission by Fairfax County, and then must be replaced with equally functional layers of indigenous vegetation. Indigenous vegetation may not be removed from an RPA buffer zone to create lawns."

## Q. Why can't I plant lawn in an RPA?

A. Lawn grass has shallow roots and is not very effective in absorbing or filtering stormwater runoff. In fact, Fairfax County rates it as only 50% permeable. A combination of overstory trees, understory trees and shrubs, and herbaceous plants is vastly more effective in protecting water quality.

#### Q. Can I build an addition or deck in an RPA?

A. Homes that were constructed prior to July 1, 1993, may be granted a waiver to build **minor additions** of up to 1,000 sq. ft. or up to 2% of the lot area up to a maximum of 2500 sq. ft. of new impervious surface depending on how far they encroach into the RPA. These additions pertain only to attached structures. An administrative waver must be applied for, before permission is granted.

Most **decks** attached to the house are treated as minor additions and may be permitted through the written waiver process described above. Attached **patios** may also be covered under minor additions, described above, but check with the County to be sure.

### Q. What about detached structures like detached patios, sheds or fences?

Approval of detached structures such as **unattached patios** or structures that increase impervious surface, require a special exemption process and public hearing. Under pVAC 118-16-K, compacted gravel, stone dust, and brick, and stone pavers are considered impervious.

**Fences** may be constructed in an RPA if they "do not inhibit or alter surface flow and vegetation may only be removed to provide for actual placement of the fence. When removed, vegetation must be replaced with native vegetation that is equally effective in retarding runoff, preventing erosion, and filtering nonpoint sources of pollution from runoff. Fences should be located to avoid removal of trees."

Waivers for construction of detached, **accessory structures** like **sheds** are not available in RPAs. However small sheds less than 150 sq. ft. do not require a building permit and may be permitted in certain circumstances on grassy areas or lawn if they do not impact native vegetation, trees or roots, or impede surface flow of water.

**Paths** can be installed with prior written approval under site amenities for passive recreation, pVAC 118-5-3a, but may be no wider than 4'. Other requirements may apply.

## Q. What if I want to repair existing paths, patios, walls, or other structures in an RPA?

Under **Redevelopment**, paths, patios, and walls may be rebuilt on the footprint of a former "legally approved and permitted" structure built before the Chesapeake Bay Act, as long as there is no net increase in impervious surface. Again, each case will be examined on its own merits and written permission should be requested. Existing structures that were built without legal County permits and inspections, cannot receive exemptions.

**Grading, filling, construction of walls**, etc. require written permission and will be evaluated on a case by case basis depending on the encroachment into the RPA and a water quality impact assessment study.

Please be aware that there are many nuances and interpretations of the rules outlined above from the Chesapeake Bay Protection Ordinance and amendments, and that many requests will need to be evaluated on a case by case basis to assess impacts to the RPA. When in doubt, always call or write for permission.

Please refer to <a href="http://www.fairfaxcounty.gov/dpwes/watersheds/cbpo-brochure.pdf">http://www.fairfaxcounty.gov/dpwes/watersheds/cbpo-brochure.pdf</a> for more detailed information about all of these encroachments on the RPA.

Q. Yikes! Now that I know about the Chesapeake Bay Preservation Act and amendments and the RPA regulations, how do I get permission to make modifications to my property or house, or take down dying trees in RPA areas of my property?

A. For permission or for more information, call the office of the Department of Public Works and Environmental Assessment at 703 324-1720 to determine what steps are necessary to receive approval to work in an RPA. You can find and download forms to submit for permission, approval or waivers and more information at: http://www.fairfaxcounty.gov/dpwes/environmental/cbay/

According to Ms. Dickman, Fairfax County Urban Forester for Mason and Braddock Districts, "Removal of dead, dying and diseased and noxious vegetation is an issue that comes up all the time in Lake Barcroft. Trees have become too dense (or diseased) and there is vegetation that should be removed because it poses a risk to houses and people. The ordinance allows for such removal and thinning, but the ordinance states "subject to approval by the Director". The "director" is the Director of the Office of Public Works and Environmental Services (DWPES). Depending on the scope of the request a Water Quality Impact Assessment (WQIA) and fee need to be submitted to the County. Review of a WQIA takes anywhere from 30-60 days or longer depending on workload."

Occasionally requests come to the Urban Forestry Management Division (UFMD) staff to remove or trim trees. Requests should be in writing and explain what is proposed and what type of replacement

vegetation is proposed, along with a plan or map of the site. Their staff will evaluate if a WQIA is required or if the request can be handled by UFMD, and permission can be given in a shorter time frame. It depends on the scope of the work proposed. It also depends on their workload but the process is usually faster than a full review of the WQIA. You can contact Ms. Dickman at: <a href="mailto:ineke.dickman@fairfaxcounty.gov">ineke.dickman@fairfaxcounty.gov</a>

## Q. How can I find out more about the Chesapeake Bay Preservation Ordinance amendments and Riparian Buffer Zones?

A. Fairfax County has free informational brochures available online or for distribution, at: http://www.fairfaxcounty.gov/dpwes/watersheds/cbpo-brochure.pdf

Fairfax County Public Libraries also have videos on the amendments to the Chesapeake Bay Preservation Act and how they may affect you. You can also find information on RPA's and other environmental issues on Channel 16. You can also find detailed information and illustrations of what is and is not allowed in the Riparian Buffers Modification and Mitigation Guidance Manual at: http://www.dcr.virginia.gov/chesapeake\_bay\_local\_assistance/ripbuffmanual.shtml

## Q. Can I get in trouble if I cut trees or encroach on RPAs in other ways?

A. Yes you can. In fact, cutting trees or removal of vegetation or encroaching on or developing in an RPA, without proper authorization is a misdemeanor punishable by a fine of up to \$2500 and up to a year in jail. Violators will be required to submit a plan to be approved by the County to restore the RPA in accordance with county guidelines.

Contractors may also be held liable for any violations.

## Q. What are the rules in Lake Barcroft?

A. Lake Barcroft has its own Tree Preservation Guidelines which you can find at: <a href="http://www.lakebarcroft.org/docs/association/trees.pdf">http://www.lakebarcroft.org/docs/association/trees.pdf</a>

The Lake Barcroft Architectural Review Committee should be consulted for approval of any additions, fences, landscaping such as grading, retaining walls, or patios that affect drainage and surface flow, and tree removal, whether in an RPA or not. You can find an application form and more detailed information about the process on the LBA website under ARC or in the LBA Directory.