

The Chesapeake Bay Clean-Up Plan in Developing and Developed Areas
Virginia's environmental policy for the Chesapeake Bay and its watershed

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Pollution in the Chesapeake Bay is a problem that effects many more people than just those that live in it's watershed. Lots of our country's seafood comes from the Bay and people all over the world vacation on the shores of the Bay. As this is such a far-reaching problem, it is crucial that the Chesapeake Bay be restored to its beautiful and natural state. All the States (and the District of Columbia) in the Bay's watershed have made some type of effort to improve pollution from their area – some with more success.

These efforts called “tributary strategies,”¹ currently focus on the headwater areas in West Virginia, Delaware, and New York. Soon they will include ground efforts in the entire watershed, most importantly in our state of Virginia. Not only is Southern Virginia an agriculturally prominent state with all the pollutants that implies, but Northern Virginia is also one of the busiest and fastest growing suburban/urban areas. This means that we face unique environmental challenges.

Virginia has already made several valiant attempts to curb pollution. In 2006, the General Assembly passed House Bill 1150 “...requiring the Secretary of Natural Resources to develop a plan for the clean up of the Chesapeake Bay and Virginia's waters.”² The bill addresses wastewater, agriculture and forestry pollution, developed and developing land, and air pollution.

Virginia has many options available to correct its environmental issues. Among these are taxes/fees – or charging point source polluters an amount to continue their waste disposal. Subsidies, in which the government offers monetary support to clean up

“Tributary Strategies – Chesapeake Bay Program.” <http://www.chesapeakebay.net/wqtributarytech.htm>. March 18, 2008.

² “Secretary of Natural Resources – Initiatives.” <http://www.naturalresources.virginia.gov/Initiatives/WaterCleanupPlan/>. March 18, 2008.

the Bay, are another option. Command-and-control regulations would mandate environmental changes, and tradable permits would allow point source pollutants to buy and sell rights to pollute. According to HB 1150, Virginia seems to be mainly using command-and-control regulations and taxes.³

The Northern part of the state falls under the category of developed and developing land. This section of the policy focuses mainly on urban and suburban pollution problems. Specifically, issues like rain water runoff, sediment runoff, septic issues, nutrients used in fertilizing, and water quality issues. Nearly all these issues are non-point source pollutants, and are therefore very difficult to regulate.

Sediment runoff is one issue that is especially important in Virginia. Caused by construction, logging and other ground disturbances, sediment runoff is seriously affecting the Chesapeake Bay. Mud, silt, and debris in Virginia waterways cause many problems. Not only are the Bay's tributaries getting clogged and flooding, but the amount of sediment that is actually entering the Bay is causing the aquatic life there to struggle.

Sediment runoff, or soil erosion, occurs when wind, water, ice, snow, or gravity detaches and transports somewhere else. There are several signs that can point to an erosion problem. Bare spots on lawns, gullies becoming visible, silt build-up, fallen trees near streams and rivers, muddy water or leftover mud in ditches and gutters, and visible tree roots are all symptoms of sediment runoff. Sediment runoff can be caused

³ "Chesapeake Bay and Virginia Waters Clean-Up Plan." Bryant, Preston Jr. January 2007.

by several different things, including poorly graded slopes, over use of cement or asphalt, removal of vegetation on slopes and improper grading.⁴

There are two different types of erosion - watershed erosion and tidal erosion. The problems with erosion inland effect both the Bay itself and the regions it flows through. Watershed erosion is effected by construction, poor grading, vegetation loss, and over use of ground sealing materials like cement and asphalt. Tidal erosion is something that has been happening for thousands of years. The shores of the Bay are eroding due to wave action and natural sea levels rising. Unlike watershed erosion, tidal erosion is a good thing. It provides habitats for blue crabs, herons, terrapins and other Bay creatures. However, when humans interfere with natural shorelines by hardening them with cement or rocks, this can interfere with wetland formation, and cause the area beneath the hardened shore to erode – preventing sunlight from reaching underwater grasses.⁵

Sediment runoff from construction sites will be dealt with by requiring all build sites to be “consistent with the requirements of Virginia Erosion and Sediment Control Law.”⁶ By collaborating with private firms, enabling local programs, and implementing better reviews, the Clean-Up Plan wants to improve sediment runoff by 2010. It could cost anywhere from \$650,000 to \$900,000 to implement, and all participants may not have the resources to enforce stricter laws.

The Virginia Erosion and Sediment Control Law exempts certain activities – including mostly activities privately undertaken in the home. Gardening, lawn

⁴ “Chesapeake Bay Foundation – Save the Bay: Simple Ways to Save the Chesapeake Bay.” 2007. http://www.cbf.org/site/PageServer?pagename=action_simple_ways_soil.

⁵ “Erosion – Bay Pressures – Chesapeake Bay Program.” 20, February 2008. <http://www.chesapeakebay.net/erosion.aspx?menuitem=19524>.

maintenance, putting up fences and poles, and maintenance of facilities underground are all included in these exemptions. Many qualifications must be met before the land can be disturbed. These include permit requirements, and the name of a “responsible land disturbance.”⁷

Clearly, the Chesapeake Bay is seriously effected by erosion. Of late, lawmakers are taking steps to protect the Bay from erosion and sediment runoff. Erosion is caused by many things – including logging, paving, construction, and other human activities, as well as natural events like wave movements and hurricanes. Construction firms are starting to be held responsible for practicing soil friendly activities, but limits are not so strict they impede growth. With the cooperation of everyday citizens, Virginia can exemplify how to continue to grow and expand, but still protect the Bay.

⁶ “Chesapeake Bay and Virginia Waters Clean-Up Plan.” Bryant, Preston Jr. Page 32. January 2007.

⁷ “Virginia Erosion and Sediment Control.” 2006. http://www.dcr.virginia.gov/soil_&_water/e&s.shtml.

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