

Bettina K. Ring
State Forester



COMMONWEALTH of VIRGINIA

DEPARTMENT OF FORESTRY

900 Natural Resources Drive, Suite 800 • Charlottesville, VA 22903
(434) 977 -6555 • www.dof.virginia.gov

December 8, 2015

The Honorable Walter Stosch
Co-Chairman, Senate Finance Committee
Innsbrook Centre
4551 Cox Road, Suite 110
Glen Allen, Virginia 23060
District12@senate.virginia.gov

The Honorable Charles S. Colgan
Co-Chairman, Senate Finance Committee
10660 Aviation Lane
Manassas, Virginia 20110
District29@senate.virginia.gov

The Honorable S. Chris Jones
Chairman, House Appropriations Committee
P.O. Box 5059
Suffolk, VA 23435
DelCJones@house.virginia.gov

Dear Chairmen:

In accordance with Item 98(E) in Chapter 665 of the 2015 Virginia Acts of Assembly, the Department of Forestry submits the following report to the Chairmen of the House Appropriations and Senate Finance Committees on the progress of implementing the silvicultural water quality laws in Virginia.

Sincerely,

A handwritten signature in black ink, appearing to read "Bettina K. Ring".

Bettina K. Ring
State Forester

Annual Report on the Progress of Implementing the Silvicultural Water Quality Laws in Virginia

PUBLICATION YEAR 2015

Document Title

Annual Report on the Progress of Implementing the Silvicultural Water Quality Laws in Virginia

Author

Department of Forestry

Mandate

Item 98(E) of Chapter 665 of the 2015 Acts of Assembly

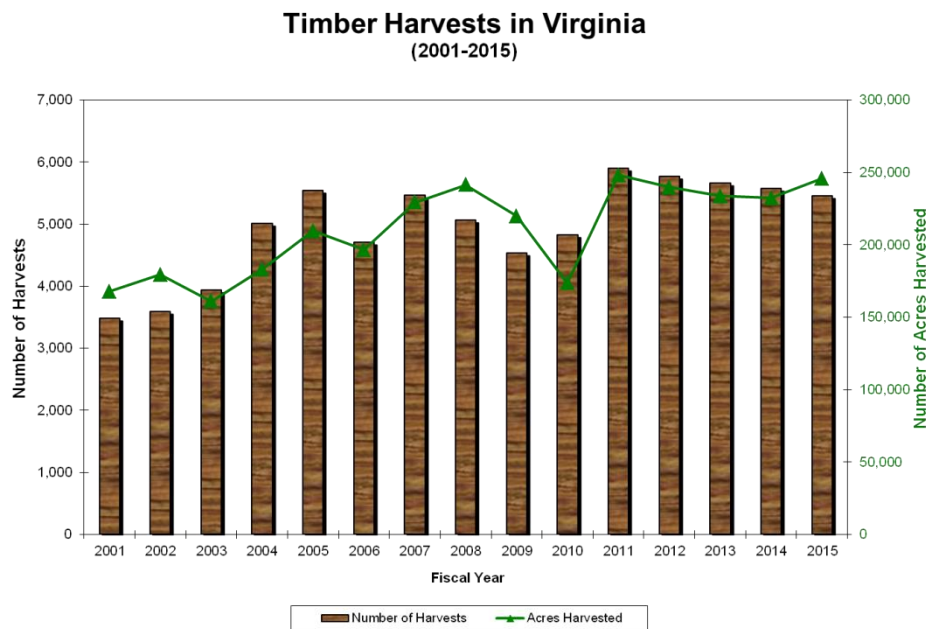
EXECUTIVE SUMMARY

This report describes the activities of the Virginia Department of Forestry related to the implementation of the 1993 Silvicultural Water Quality Law, §§ 10-1-1181.1 through §10.1-1181.7 of the Code of Virginia. Two key functions of the Department involve water quality. One focuses on Best Management Practices on forest harvesting operations and protecting streams from sediment. The other focuses on improving and protecting watersheds through management and land conservation. The report includes relevant statistics.

I. Water Quality Protection

Water quality is important to all Virginians. Studies have shown that the cleanest water comes from forested watersheds. These watersheds are critical sources of pure drinking water, habitat for important fisheries, and areas that are treasured for their recreational value and purity of life. This is especially important when considering the Total Maximum Daily Load (TMDL) and Watershed Improvement Plan (WIP) that have been developed for the Chesapeake Bay. Two key performance measures for the Virginia Department of Forestry (VDOF) involve water quality. One focuses on Best Management Practices on forest harvesting operations and protecting streams from sediment. The other focuses on improving and protecting watersheds through management and land conservation.

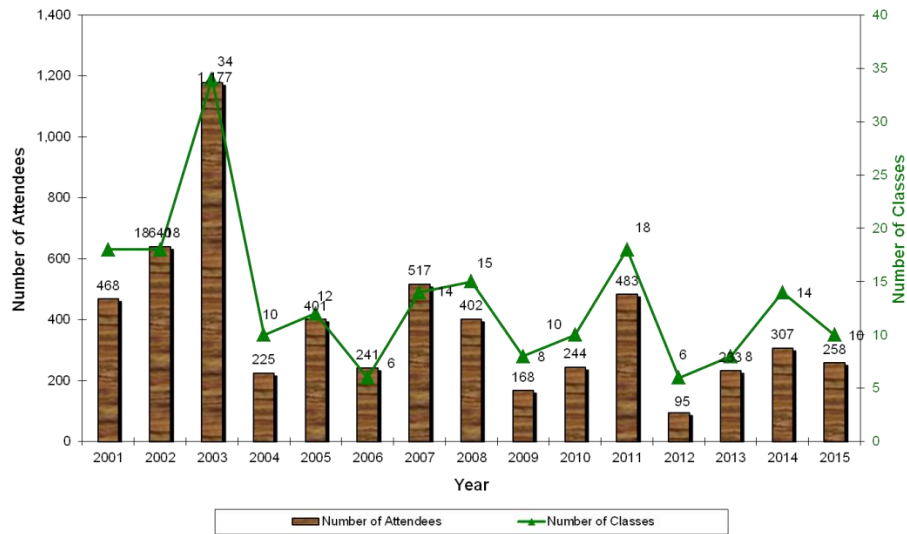
The Department has been involved in the protection of our forested watersheds since the early 1970s with the development of our first set of Forestry Best Management Practices (BMPs) for Water Quality. The Department uses the fifth edition of those guidelines which were published in 2011. The backbone for the Department's water quality effort is the harvest inspection program which began in the mid-1980s. This program provides for one-on-one contact between VDOF and the harvest operators, and it serves as a unique opportunity to educate the operators on BMPs and the latest developments in water quality protection techniques. In fiscal year 2015, VDOF field personnel inspected 5,458 timber harvest sites across Virginia involving 245,749 acres—a slight increase in the number of acres harvested over FY2014.



Another focus of the VDOF water quality program is logger education. Since the development of the first BMP Manual for Virginia, VDOF has been involved in the training of harvesting contractors in water quality protection techniques including harvest planning, map reading, use of GPS units, and BMP implementation to name a few. This training has been sponsored by agency sponsored and, more recently,

through VDOF participation in the SHARP (Sustainable Harvesting and Resource Professional) Logger Training Program, an effort of the Sustainable Forestry Initiative. Since 1997, this program has enabled VDOF to assist in training approximately 7,700 harvesting professionals in 253 programs relating to water quality protection. For fiscal year 2015, there were 10 training programs offered with a total of 258 attendees present. Seven of these courses were in the core area (184 attendees), and the remaining 3 courses were for logger continuing education (74 attendees).

Logger Education
(2001-2015)



In July 1993, the General Assembly, with the support of the forest industry, enacted the Virginia Silvicultural Water Quality Law, §§ 10-1-1181.1 through §10.1-1181.7 of the Code of Virginia. The law grants the State Forester the authority to assess civil penalties against those owners and operators who fail to protect water quality during their forestry operations. Virginia continues to be the only state in the southeastern United States that grants enforcement authority under such a law to the state’s forestry agency. In fiscal year 2015, VDOF was involved with 195 water quality actions initiated under the Silvicultural Law. This is a decrease of 41 percent from FY2014. Of these actions, three resulted in Special Orders being issued for violations of the law, and three involved the issuance of an Emergency Special Order (Stop Work Order). None of these proceeded to the issuance of a civil penalty.

A statewide audit system has been in place since 1993 to track trends in BMP implementation and effectiveness. Results from the calendar year 2014 data show that the BMP harvest median implementation rate on 240 randomly selected tracts is 93 percent. The audit results also showed that 98.3 percent of the sites visited had no active sedimentation present after the close-out of the operation. This information is eventually factored into the TMDL for the Chesapeake Bay. Since the information is captured through GIS technology, it can be compiled spatially for reporting on those forestry operations that occur within the boundaries of the Bay watershed. For calendar year 2014, the BMP implementation rate harvest median score for forest harvesting within the Bay Watershed was 93.6 percent. This whole

BMP Implementation Monitoring effort has been automated over the past several years to be compatible with IFRIS (Integrated Forest Resource Information System), VDOF's automated information system.

VDOF offers cost-share assistance to timber harvest operators through a unique program offered through the utilization of funding from the Commonwealth's Water Quality Improvement Fund. This program shares the cost of the installation of forestry BMPs on timber harvest sites by harvest contractors. This program was funded for FY15 and 29 stream protection projects have been funded which incorporate the use of portable bridges that will provide stream crossing protection not only during the harvest but also for years to come.

II. Watershed Protection

Because forests provide the best protection for watersheds, one of the Department's goals is to increase the amount of forestland conserved, protected, and established in Virginia's watersheds. The focus is on practices that will have a high benefit to water quality, specifically conserving land permanently; establishing and maintaining riparian buffer zones; planting trees on non-forested open land; and increasing urban forest canopy by planting trees. All of these activities are closely related to meeting water quality goals associated with the Chesapeake Bay restoration and watersheds for Virginia's southern rivers.

Virginia's Forestry BMPs that address harvesting have been highly successful. One of the most valuable BMPs for water quality is the uncut or partially cut streamside management zone. This voluntary measure assures an unbroken forest groundcover near the stream, shade for water, and wildlife corridors. Landowners can elect to receive a state tax credit for a portion of the value of the uncut trees in the buffer. By doing so, they agree to leave the buffer undisturbed for 15 years. The number of landowners electing this option in Tax Year 2014 was 61, a slight decrease in number of applications over the previous year. This watershed protection option provided a tax credit of \$334,614.55 on timber valued at \$1,363,490.41 that was retained in the streamside areas of their property. This was an increase in both value of buffer retained and tax credit issued.

Forests provide superior watershed benefits over nearly every other land use. Because of this, the Department is encouraging planting of open land with trees, establishing new riparian forested buffers where none previously existed, and providing protection of existing riparian forests through a tax credit. The Virginia Department of Forestry is leading a project with the Virginia Department of Environmental Quality, the Chesapeake Bay Commission, the Rappahannock River Basin Commission, the George Washington Regional Commission, The Nature Conservancy, and the Water Resource Research Center at Virginia Tech to demonstrate the value of retaining forestland in the Chesapeake Bay watershed. The goal is to determine if forest retention actions by localities, private landowners, and others will decrease actual loads over 2025 Chesapeake Bay TMDL projected loads and, if the answer is "yes," determine approaches to credit forestland retention through the Chesapeake Bay TMDL Model.