

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

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

Author

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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 performance measures 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 other relevant statistics.

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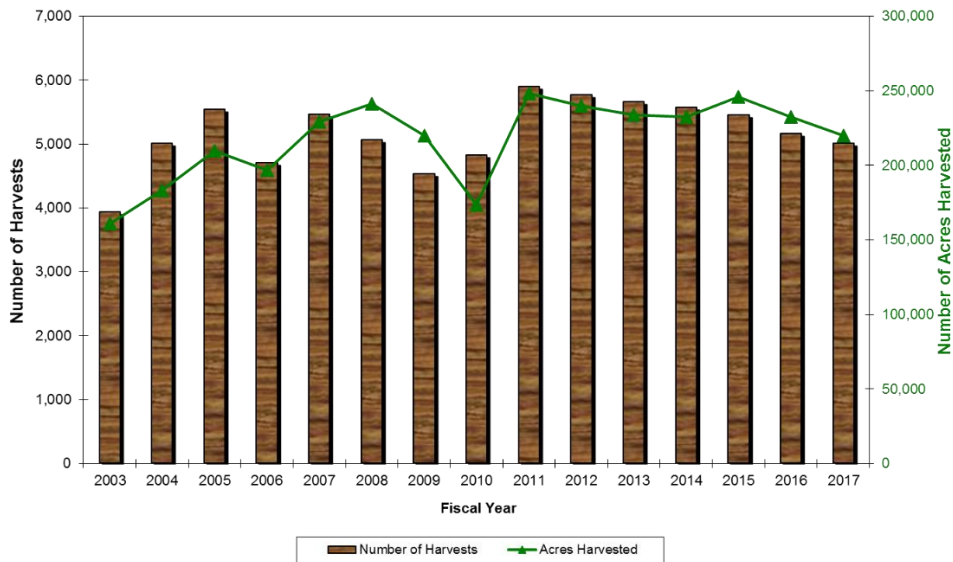
Water Quality Protection

Water quality is important to all Virginians. It affects not only public health, but also our economic stability and recreational resources. Protecting and maintaining Virginia’s water quality is essential to the state’s future as an economic and natural resource leader.

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

Timber Harvests

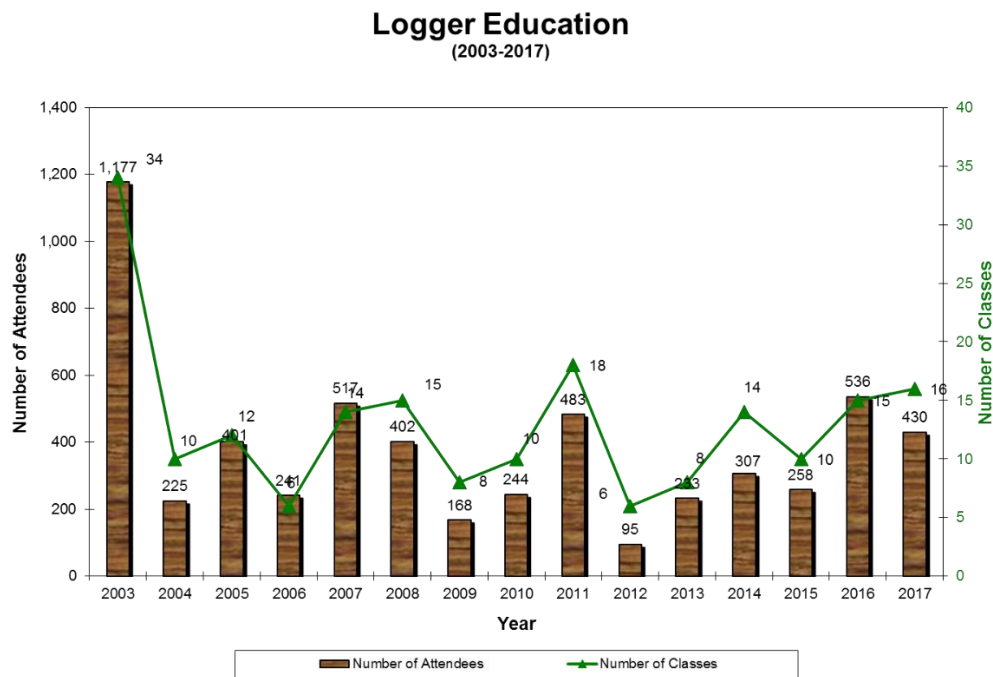
Timber Harvests in Virginia
(2003-2017)



VDOF has played an important role in the protection of our forested watersheds since the early 1970s when the first set of Forestry BMPs for Water Quality were developed. The Department utilizes the fifth edition of those guidelines which were issued in 2011. The backbone of the Department’s water quality efforts is the harvest inspection program which began in the mid-

1980s. This program provides one-on-one contact between VDOF staff and the harvest operators and offers unique opportunities to educate the operators about BMPs and the latest developments in water quality protection techniques. During FY2017, VDOF field personnel inspected 5,010 timber harvest sites across Virginia. These inspections included 22,143 site visits (an average of 4.4 visits per site) on 220,105 acres – a slight decrease in both the number of harvests and the number of acres harvested the previous year.

Logger Education



Logger education is another key focus area of the VDOF water quality program. Since the development of the first BMP Manual for Virginia, VDOF staff has helped provide harvesting contractors with water quality protection technique training ranging from harvest planning and map reading, to using GPS units to implement BMPs. This training is offered through agency-sponsored events as well as through the agency's participation in the Sustainable Forest Initiative SHARP (Sustainable Harvesting and Resource Professional) Logger Program. Since 1997, the SHARP program has allowed VDOF to help train 8,666 harvesting professionals who have participated in 284 programs related to water quality protection. During FY2017, 16 training programs were offered with a total of 430 participants. Six of these courses were in the core area (152 attendees), and the remaining 10 courses were for logger continuing education (278 attendees).

In July 1993, the General Assembly, with the support of the forest industry, enacted the Virginia Silvicultural Water Quality Law, Va. Code §10-1-1181.1 et seq. The law authorizes the State Forester to assess civil penalties to those owners and operators who fail to protect water quality on their forestry operations. Virginia is the only state in the southeastern United States that grants such enforcement authority to the state's forestry agency. During FY2017, the VDOF handled 186 water quality actions initiated under the law; a decrease of 29 percent from FY2016. Of these actions, one resulted in a Special Order being issued for violation of the law.

A statewide audit system has been in place since 1993 to track trends in BMP implementation and effectiveness. Results from calendar year 2016 data showed that the BMP harvest median implementation rate of 240 randomly selected tracts was 95 percent; the harvest median score is the best judge of central tendency of the tract score. The audit results also showed that 98percent of the sites visited had no active sedimentation present after operation close-out. The information compiled using this audit process will form the basis of reporting for the Watershed Implementation Plan in response to the TMDL for the Chesapeake Bay. Since the information is captured through GIS technology, this information can be compiled spatially for reporting those forestry operations occurring within the Bay watershed boundaries. For calendar year 2016, the BMP implementation rate harvest median score for forest harvesting within the Bay watershed was 95 percent. The entire BMP implementation monitoring effort has been automated over the past several years to be compatible with VDOF's enterprise database system known as IFRIS (Integrated Forest Resource Information System).

VDOF offers cost-share assistance to timber harvest operators through a unique program offered through 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. The program was funded for FY2017 which resulted in 30 stream protection projects that incorporate the use of portable bridges to protect stream crossings for years to come.

Watershed Protection

Because forests provide the best protection for watersheds, increasing the amount of forestland conserved, protected and established in Virginia's watersheds is one of the Department's goals. This goal focuses on practices that will benefit water quality the most; specifically, guarding water quality on land that is permanently protected by a conservation easement; establishing and maintaining riparian buffer zones; planting trees on non-forested open land; and increasing the urban forest canopy by planting trees. All of these activities are closely related to meeting water quality goals associated with Virginia's southern river watersheds and the Chesapeake Bay restoration. FY2017 proved to be one of the most active years in the history of the VDOF easement program, as the agency reviewed harvest plans and inspected for BMP compliance on

16 VDOF-held easements.

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, provides shade for water and preserves 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 2016 was 70, a slight increase in the number of applications from the previous year. This watershed protection option provided a tax credit of \$443,000 on timber retained in the streamside property areas and valued at \$2.1 million constituting an increase in both the value of buffer retained and the tax credit issued.

Forests provide superior watershed benefits compared to nearly every other land use. Because of this, the Department encourages planting open land with trees, establishing new riparian forested buffers where none previously existed and providing protection of existing riparian forests through a tax credit.