

Department of Forestry Implementation of the 1993 Silvicultural Water Quality Act for FY2012

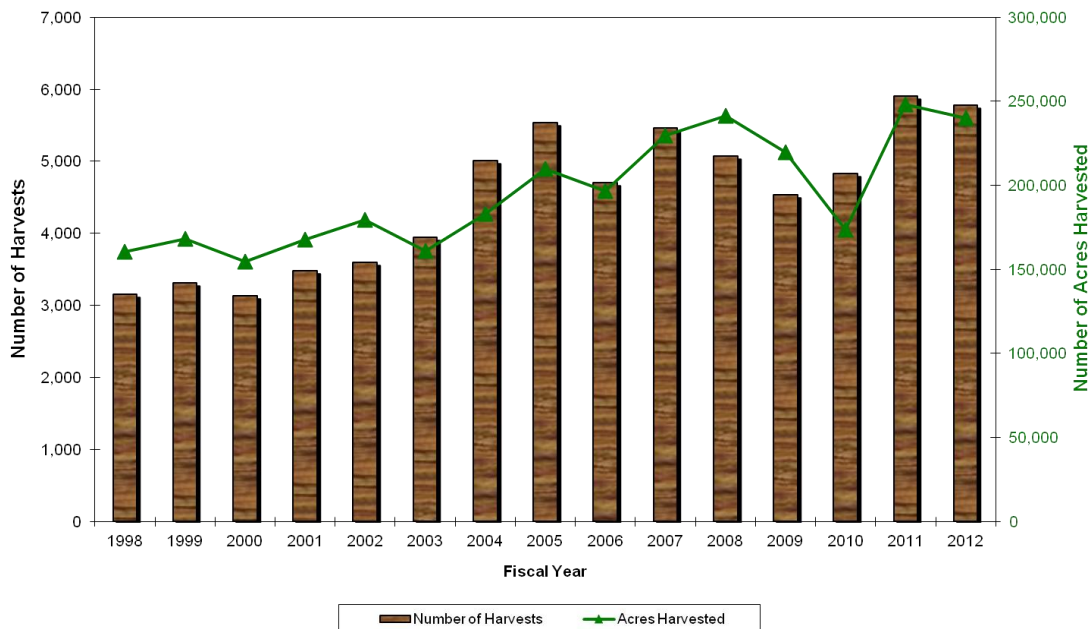
Submitted December 2012

Protecting Virginia's Water Quality

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 has been developed for the Chesapeake Bay. Two of the Department's important measures 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.

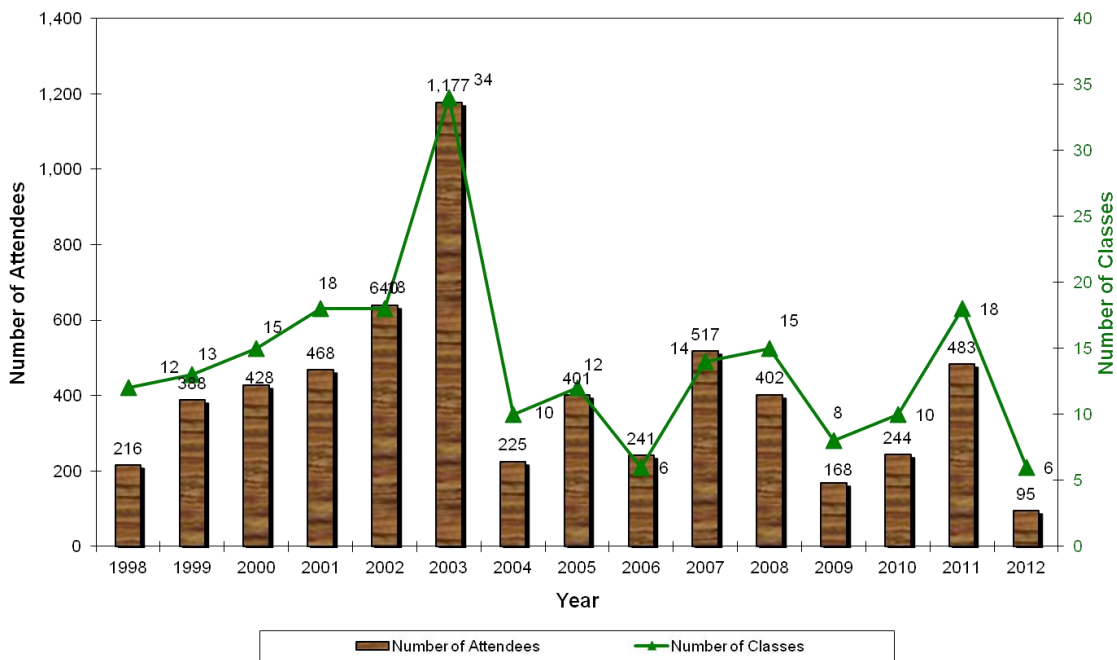
The VDOF has been involved with the protection of our forested watersheds since the early 1970s with the development of our first set of Forestry Best Management Practices (BMPs) for Water Quality. The Department utilizes the fifth edition of those guidelines, which came out in 2011. The backbone for the Department's water quality effort is the harvest inspection program, which began in the mid-'80s. This program has provided for one-on-one contact between VDOF and the harvest operators and a welcomed opportunity to educate the operators on BMPs and the latest in water quality protection techniques. In FY2012, VDOF field personnel inspected 5,777 timber harvest sites across Virginia on 239,827 acres - a slight decrease in the number of acres harvested over FY2011.

Timber Harvests in Virginia
(1997-2011)



Another main focus of the VDOF water quality program is logger education. Since the development of the first BMP Manual for Virginia, the VDOF has been involved in the training of harvesting contractors in water quality protection techniques ranging from harvest planning, map reading and the use of GPS units to BMP implementation. This occurred through training that the agency sponsored and, more recently, through VDOF participation in the SFI® SHARP (Sustainable Harvesting and Resource Professional) Logger Training Program. Since 1997, this program has enabled VDOF to assist in training 6,902 harvesting professionals in 221 programs relating to water quality protection. For FY2012, there were six training programs offered with a total of 95 people present. Three of these courses were in the core area (67 attendees), and the remaining three courses were for logger continuing education (28 attendees).

Logger Education (1998-2011)



In addition, the VDOF conducted two Gravel Road Workshops to educate 90 professionals from across the state on proper construction and maintenance techniques for gravel logging roads to reduce the impact of these roads on water quality. In addition, the VDOF promoted water quality protection and BMPs at the East Coast Sawmill and Logging Equipment Exposition in Richmond, Virginia. This biennial Exposition caters to sawmill operators and loggers, and it is estimated that 10,000+ people attended. The VDOF also “rolled out” a new program promoting Virginia’s Forest Products under the “Virginia Grown” program of the Department of Agriculture and Consumer Services at the Expo.

In July 1993, the General Assembly of Virginia – with the support of the forest industry – enacted the Virginia Silvicultural Water Quality Law, §10-1-1181.1 through §10.1-1181.7. The law grants the authority to the State Forester to assess civil penalties to those owners and operators who fail to protect water quality on their 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 FY2012, the VDOF was involved with 201 water quality actions initiated under the Silvicultural Law –

a reduction of 19 percent from FY2011. Of these actions, four resulted in Special Orders being issued for violations of the law, and one involved the issuance of an Emergency Special Order (Stop Work Order). None of these proceeded to the issuance of civil penalties, however any penalties collected under this law are placed in the Water Quality Penalty Fund, which is a non-reverting fund to be used for education, demonstration and research.

A statewide audit system has been in place since 1993 to track trends in BMP implementation and effectiveness. Calendar year 2011 data show that overall BMP implementation on 240 randomly selected tracts is 85.5 percent – an increase of one percent over the previous audit cycle. The audit results also show that 98.3 percent of the sites visited had no active sedimentation present after the close-out of the operation. The information compiled using this audit process will be the basis of reporting for the Watershed Implementation Plan (WIP) that is 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 on those forestry operations that occur within the boundaries of the Bay watershed. For calendar year 2011, the BMP implementation rate tract average for forest harvesting within the Bay Watershed was 90.7 percent, and the average of all BMPs across all tracts within the Bay Watershed was 89.8 percent. This BMP Implementation Monitoring effort has been automated over the past year 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 utilization of funding from the Commonwealth's Water Quality Improvement Fund. This unique program shares the cost of the installation of forestry BMPs on timber harvest sites by harvest contractors. Unfortunately, the program was unfunded for FY2012.

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 protecting Virginia watersheds.

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 the water and wildlife corridors. Landowners may 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 FY2012 was 28. This watershed protection option provided a tax credit of \$168,677.36 on timber valued at \$745,804.19 that was retained in the streamside areas.

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. In the 2012 season, trees were established or protected on 3,743 acres of land.