

Chapter 7

Forestry in the Watauga River Basin

7.1 Forestland Ownership and Resources

In the Watauga River basin, approximately 92 percent of the forestland is privately owned with the remaining eight percent owned by the State Parks System (Brown, 2004). There are no state forests, education state forests or significant national forestlands in the Watauga River basin.

7.1.1 Forest Management

From September 1999 to August 2004, nearly 130 acres of land were established or regenerated with forest trees across the Watauga River basin. During this same time period, the Division of Forest Resources (DFR) provided 120 individual forest plans for landowners that encompassed over 4,700 acres in the basin.

7.1.2 Christmas Tree Production

It should be noted that the Division of Forest Resources does not oversee regulations relating to land clearing for Christmas tree production nor the associated best management practices (BMPs) for tree farming operations. These activities are deemed to be an agricultural/horticultural practice, and therefore come under the oversight of the NC Department of Agriculture & Consumer Services (NCA&CS) and their recommended agriculture BMPs. The NC Cooperative Extension Service through NC State University has developed extensive guidelines and recommendations for Christmas tree operations. This material is available on the website www.ces.ncsu.edu/fletcher/programs/xmas/index.html. Section 1.5.2 contains more information related to Christmas tree BMPs.

7.2 Forestry Water Quality Regulations in North Carolina

7.2.1 Forest Practice Guidelines (FPG) for Water Quality

Forestry operations in North Carolina are subject to regulation under the Sedimentation Pollution Control Act of 1973 (General Statute Chapter 113A Article 4 referred to as “SPCA”) and its amendments. Forestry operations may be exempt from the permit and plan requirements of the SPCA if the operations meet the compliance standards outlined in the *Forest Practices Guidelines (FPGs) Related to Water Quality* (Administrative Code 15A NCAC 11 .0101 - .0209) and General Statutes regarding stream obstruction (General Statutes 77-13 and 77-14).

DFR is delegated the authority to monitor and evaluate forestry operations for compliance with the aforementioned laws and/or rules. In addition, the DFR works to resolve identified FPG compliance questions brought to its attention through citizen complaints. Violations of the FPG performance standards that cannot be resolved by the DFR are referred to the appropriate State agency for enforcement action. During the five-year assessment period, DFR conducted 73 FPG

inspections of forestry-related activities in the basin; approximately 73 percent of the sites inspected were in compliance with the FPGs.

7.2.2 Water Quality Foresters

Water quality issues related to forestry in the Watauga River basin are predominantly handled by a Water Quality Forester based in the DFR's Lenoir District Office. DFR currently has a Water Quality Forester located in ten of its thirteen Districts across the State. Assistant District Foresters or Service Foresters handle water quality issues in the remaining Districts, along with other forest management and fire control responsibilities. Water Quality Foresters conduct FPG inspections, survey BMP implementation, develop pre-harvest plans, and provide training opportunities for landowners, loggers, and the public regarding water quality issues related to forestry. Contact information for each district and/or county can be found on the website www.dfr.state.nc.us and in Appendix VIII.

7.2.3 Forestry Best Management Practices (BMPs) and Water Quality

Implementing Forestry Best Management Practices (BMPs) is strongly encouraged by DFR in order to efficiently and effectively protect the water resources of North Carolina. During this assessment period, DFR recorded 79 instances across 3,000 acres in which BMPs were either noted in use or had been recommended. The Forestry BMP Manual describes recommended techniques that should be used to help comply with the State's forestry laws and help protect water quality. This manual is currently undergoing its first revision since adoption in 1989. This revision, led by the DENR appointed Technical Advisory Committee (TAC) has undertaken four years of effort.

To further assess BMPs, DFR conducted a detailed, statewide BMP Implementation Survey (March 2000 through March 2003) to evaluate forestry BMPs on active harvest operations. This survey, and future surveys, will serve as a basis for focused efforts in the forestry community to address water quality concerns through better and more effective BMP implementation and training. The survey did not capture any harvest sites within the Watauga River basin; however, of those survey sites taken statewide, the problems most often cited relate to stream crossings, skid trails and site rehabilitation.

Among the BMP's promoted for timber harvesting is the use of bridgemats for establishing temporary stream crossings. DFR's Bridgemat Loan and Education Program is an education and protection project which promotes the benefits of using portable bridges for stream crossings, in lieu of using other techniques such as culverts or hard-surface crossings, both of which have a greater potential to result in stream sedimentation. Bridgemats have been available for use in the basin for nearly nine years, and are available upon request from the Lenoir District Water Quality Forester. In 2003, three new steel bridgemats were assigned to the Lenoir District to replace older worn out wooden timber mats. In 2005, due to the high demand for this program, a second set of new wooden timber bridgemats was also assigned to the Lenoir District. In both cases, Environmental Protection Agency (EPA) Section 319 grant funds allowed DFR to implement and support this successful program. More information about using bridgemats and the BMP survey is available on the "Water Quality" section of the DFR website www.dfr.state.nc.us.

7.2.4 Forestry Accomplishments

Since the previous basinwide plan was produced, DFR accomplished the following tasks in an ongoing effort to improve compliance with forest regulations and, in turn, minimize nonpoint source (NPS) pollution from forestry activities:

- Replaced worn-out wood timber bridgemats in the Lenoir District with new steel and wood mats available for use throughout the basin.
- Established a Forestry NPS Unit that develops and oversees projects throughout the state that involves protection, restoration and education on forestry NPS issues.
- Revised and produced 10,000 copies of a pocket field guide outlining the requirements of the FPGs and suggested BMPs.
- Created and published 15,000 copies of a new brochure “Call Before You Cut” for landowners promoting pre-harvest planning to ensure water quality issues are addressed prior to undertaking timber harvesting.
- Continued to assist with workshops in cooperation with the NC Forestry Association’s “ProLogger” logger training program.

DFR continues its efforts to protect water quality through various protection, restoration, and education projects. This includes research projects, on-site demonstrations, and integration of NPS topics through DFRs network of Educational State Forests and State Forests. Progress reports and summaries are posted in the ‘Water Quality’ section of DFRs website www.dfr.state.nc.us as they are completed.