

# Chapter 9

## Forestry in the New River Basin



### 9.1 Forestland Ownership and Resources

In the New River basin, nonindustrial landowners own approximately 98% of the forestland. The remaining 2% is state-owned lands that are part of the State Parks system (USDA-Forest Service, 2004). There are no State Forests, Educational State Forests or significant National Forestlands in the New River basin.

#### 9.1.1 Forest Management

From 1998 to 2003, nearly 5,900 acres of privately owned forestland in the basin were established or regenerated with forest trees with over three-quarters of these acres partially funded by the NC Forest Development Program (FDP). In addition, over 670 forest management plans were developed to support sustainable forests on 27,195 acres of forestland owned by nonindustrial, private landowners.

Within the basin, nearly 700 acres across 7 tracts of land are certified under the Forest Stewardship Program. This voluntary, cooperative program helps individual forest owners manage their total forest resource. Landowners receive technical assistance in developing a stewardship management plan based on their ownership objectives. Activities are scheduled to enhance the forest for wildlife, soil and water quality, timber production, recreational opportunities, and natural beauty. Recertification is required periodically to benchmark the progress of the owner's stewardship plan. For more information on forest management, visit the DENR Division of Forestry (DFR) website [www.dfr.state.nc.us](http://www.dfr.state.nc.us).

#### 9.1.2 Urban Forestry

No Urban & Community Forestry Grants were awarded in the New River basin during this assessment period. Projects funded by this grant include urban forestry education, teacher training, forest inventories, tree planting, and urban forest management. Urban forestry and an associated field known as "agroforestry" are becoming an increasingly vital component in reducing runoff by integrating "working green space" into urban development projects. In 1993, the Urban & Community Forestry Program recognized the Town of Boone as a Tree City USA. DENR encourages the Town's efforts in maintaining working green space.

#### 9.1.3 Forest Utilization

Ten businesses in the basin are considered "Primary Processors" of raw material forest products. These ten represent less than five percent of the total number of primary processors located in North Carolina. Some examples of a primary processor include a sawmill, veneer mill, chip mill, paper mill or pallet mill. These primary processors pay an assessment to the state, which is then combined with annual legislative appropriations to fund

the Forest Development Program (FDP). This program provides cost shared reforestation assistance for forest landowners (Section 9.1.1).

#### **9.1.4 Christmas Tree Production**

The Division of Forest Resources does not oversee regulations related to land clearing activities for Christmas tree production or the associated BMPs for tree farming operations. These activities are deemed to be an agricultural/horticultural activity and are under the oversight of the NC Department of Agriculture & Consumer Services (NCA&CS) and their recommended agricultural best management practices (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-line at [www.ces.ncsu.edu/fletcher/programs/xmas/](http://www.ces.ncsu.edu/fletcher/programs/xmas/). Refer to Section 1.5.1 for more information.

## **9.2 Forestry Water Quality Regulations in North Carolina**

### **9.2.1 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 Ch.113A Article 4 referred to as "SPCA") and its amendments. However, forestry operations are exempt from the permit requirements of the SPCA, if the operations comply with performance standards outlined in the *Forest Practices Guidelines (FPG) Related to Water Quality* (Administrative Code 15A NCAC 11 .0101 - .0209) and the North Carolina General Statutes that addresses stream obstruction (General Statutes 77-13 and 77-14) (NCDEHNR-DFR, January 1990). Detailed information on maintaining compliance with the FPGs is available on the Water Quality Section of the DFR website [www.dfr.state.nc.us](http://www.dfr.state.nc.us).

DFR is delegated the authority, by the Division of Land Resources (DLR), to monitor and evaluate forestry operations for compliance with the aforementioned laws. In addition, DFR works to resolve FPG compliance questions brought to its attention through citizen complaints. Violations of the FPG performance standards that cannot be resolved by DFR are referred to DLR for enforcement action. During a five-year period beginning September 1998, DFR conducted 321 FPG inspections of forestry and/or timber harvesting activities in the basin; approximately 91 percent of the sites inspected were in compliance with the FPGs. None of the sites were referred to DLR for noncompliance enforcement.

### **9.2.2 Other Forestry Related Water Quality Regulations**

In addition to the FPGs, DFR monitors the implementation of the following Federal rules related to water quality and forestry operations. These include:

- US Army Corps of Engineers' (USACE) Section 404 Dredge and Fill exemption for forestry activities under the Clean Water Act;
- USACE 15 mandatory BMPs to satisfy the exemption related to forest road construction in wetlands; and

- USACE BMPs for mechanical site preparation for the establishment of pine plantation silviculture in southeastern wetlands.

### **9.2.3 Water Quality Foresters**

Water quality issues related to forestry in the New River basin are predominantly handled by a Water Quality Forester based in the DFR's Lenoir District Office. Created in 1999, Water Quality Foresters were assigned to seven of the DFR's 13 districts across the state. The Water Quality Foresters conduct FPG inspections, survey BMP implementation, develop pre-harvest plans, and provide training opportunities for landowners, loggers and the public regarding soil conservation and water quality protection practices related to forestry. Assistant District Foresters and Service Foresters handle water quality issues in the remaining districts, along with other forest management and fire control responsibilities. Contact information for each district and/or county can be found on DFR's website at [www.dfr.state.nc.us](http://www.dfr.state.nc.us) and in Appendix VIII.

### **9.2.4 Forestry Best Management Practices (BMPs) and Water Quality**

Implementing forestry BMPs is strongly encouraged by DFR in order to efficiently and effectively protect the water resources of North Carolina. The *Forestry Best Management Practices Manual* (NRCD-DFR, September 1989) describes recommended techniques that should be used to comply with the State's forestry laws and help protect water quality. Also known as the "Blue Book", this manual is currently undergoing its first revision since adoption in 1989. Revisions to the manual are led by a DENR appointed Technical Advisory Committee (TAC). The second edition of the manual will be printed in a condensed pocket-sized version, as well as a comprehensive desktop text. The pocket-sized, condensed version will allow for greater distribution and on-site use by loggers and equipment operators. More information on forestry BMPs can be found at DFR's website at [www.dfr.state.nc.us](http://www.dfr.state.nc.us).

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. Grant awards from the EPA Nonpoint Source Pollution Management Program have funded all bridgemat purchases for this loan program. For the last eight years, DFR has provided bridgemats for short-term loan to loggers to use throughout the New River basin. It is recommended that additional bridgemats be made available for forestry activities in the New River basin. Further information on DFR's Bridgemat Loan Program can be found on the DFR website at [www.dfr.state.nc.us](http://www.dfr.state.nc.us) or by contacting the Lenoir District Water Quality Forester.

DFR conducted a statewide BMP Implementation Survey (March 2000 to March 2003) to evaluate Forestry BMPs on active harvest operations for forest management purposes. This survey evaluated 18 sites in the New River basin, with a resulting BMP implementation rate of 68%. This was among the lowest of any river basin in the state. Statewide, the problems most often cited in this survey relate to stream crossings, skid trails and site rehabilitation. This and future surveys will serve as a basis to focus efforts in the forestry community to

address water quality concerns through better and more effective BMP implementation and training.

Since the last basin plan was issued, DFR has implemented the following in an ongoing effort to improve compliance with forest regulations and, in turn, minimize nonpoint source pollution from forestry operations.

- (1) Replaced worn-out wood timber bridgemats with new steel mats available for use throughout the basin. Contact the Lenoir District Water Quality Forester for loan information.
- (2) Established a Forestry NPS Unit that develops and oversees projects throughout the state that involves protection, restoration and education on forestry NPS issues.
- (3) Revised and produced 10,000 copies of a pocket field guide outlining the requirements of the FPGs and suggested BMPs to implement.
- (4) 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.
- (5) Continued to assist with workshops in cooperation with the NC Forestry Association’s “ProLogger” logger training program. As of 2004, this program requires at least 6 credit hours of continuing education every 3 years focused exclusively on water quality topics.

DFR continues its efforts to protect water quality through education and training programs, demonstrations and research projects. Projects that address forestry NPS pollution prevention can be found on the website at [http://h2o.enr.state.nc.us/nps/What\\_is\\_NPS/forestry.htm](http://h2o.enr.state.nc.us/nps/What_is_NPS/forestry.htm). Progress reports on these projects will be made available on the DFR website [www.dfr.state.nc.us](http://www.dfr.state.nc.us).