

Chapter 12

Forestry in the White Oak River Basin

12.1 Forestry Resources

Unlike most other river basins in North Carolina, the majority of forestland in the White Oak basin is publicly owned, amounting to approximately 59 percent of the forested acres in the basin. Public forestland ownership is mainly composed of the Croatan National Forest and Camp Lejeune Marine Corps Base.

State-owned forestland includes approximately one-half of the Hofmann Forest. This Forest was gifted to the Endowment Fund of N.C. State University in 1977 by the North Carolina Forestry Foundation, which retains responsibility for managing the Forest for its purposes of instruction, research, demonstration and income support for N.C. State University's College of Natural Resources.

In 2003 a multi-agency partnership between the USDA-Forest Service Forest Legacy Program, NC Division of Forest Resources, Clean Water Management Trust Fund, Natural Heritage Trust Fund, and NC Wildlife Resources Commission resulted in the permanent protection of 2.4 miles of Pettiford Creek through the acquisition of 841 acres of forestland adjacent to Croatan National Forest. This property is a model example of pine flatwoods eco-type, and provides habitat for the endangered Red-Cockaded Woodpecker.

Ownership of the remaining timberland in the White Oak River basin includes 23 percent with private individuals, and 18 percent with either forest industry or other corporate ownership. Ownership information is estimated from the most recent data report published by the USDA-Forest Service (Brown, 2002).

To provide a sustainable source of renewable materials for forest products, the management of working forests is a vital component of the basin's landscape. This is evident from NC Division of Forest Resources records that indicate at least 8,065 acres of land were established or regenerated with forest trees across the basin from September 1, 1999 through August 31, 2004. Almost 20 percent of these reforested acres were at least partially funded through the FDP.

During this same time period the DFR provided over 328 individual forest management plans for forest landowners that encompassed nearly 20,700 acres in the basin. For more information on forest management, visit the website at www.dfr.state.nc.us.

12.2 Forestry & Water Quality

It is important to recognize that not all "timber cutting" is related to working forests; much of the timber clearing that takes place along the peripherals of urbanizing areas in North Carolina is a result of land use conversions from low-impact agriculture or forestry to a high-impact developed condition. Timber and land clearing activities that are specifically related to development require all applicable state and local permits. The NCDFR does not monitor activities of this nature.

12.2.1 Forest Practices Guidelines Related to Water Quality (FPGs)

Forestry operations in North Carolina are subject to regulation under the Sedimentation Pollution Control Act (SPCA) of 1973 (reference NCGS Ch.113A Art.4). However, forestry operations may be exempted from the permit and plan requirements of the SPCA, if the operations meet the compliance standards outlined in the *Forest Practices Guidelines Related to Water Quality* (referred to as “FPGs”, reference 15A NCAC 1I .0101 - .0209) and N.C. General Statutes regarding stream obstruction (G.S.77-13 & G.S.77-14)). Detailed information on maintaining compliance with the FPGs is available on the *Water Quality Section* of the DFR website at www.dfr.state.nc.us.

The FPGs are nine standards that are, in essence, codified performance-based practices that are required on forestry-related, site-disturbing activities. While the specific use of Best Management Practices (BMPs) is voluntary, measures must be taken to comply with the standards defined in the FPGs.

The North Carolina Division of Forest Resources (NCDFR) is delegated the authority to monitor and evaluate forestry operations for compliance with these aforementioned laws and/or rules. In addition, the NCDFR works to resolve FPG compliance questions brought to its attention through citizen complaints. Violations of the FPG performance standards that cannot be resolved are referred to the appropriate State agency for enforcement action.

During the period September 1, 1999 through August 31, 2004 the Division of Forest Resources conducted 270 FPG inspections of forestry-related activities in the White Oak River basin; 95 percent of the sites inspected were in compliance.

12.2.2 Forestry Best Management Practices (BMPs)

While using BMPs for forestry operations are voluntary in North Carolina, their usage is strongly encouraged in order to efficiently and effectively protect our water resources. It is interesting to note that while the state laws do not require using BMPs, several forestry and timber companies require BMPs to be used when timber is harvested to supply their manufacturing mills. This BMP requirement is typically a component of the forest certification program(s) adopted by a forest products company and/or forest landowner.

The *North Carolina Forestry Best Management Practices Manual To Protect Water Quality - Amended September 2006* describes recommended techniques that can be used to help comply with the State’s forestry laws and protect water resources. A copy can be obtained free of charge from your local DFR District or County Ranger office. The Division wants forest operators and other customers to start using the revised manual July 1, 2007. More information on forestry BMPs and to download the manual visit the DFR’s website at www.dfr.state.nc.us.

12.2.3 BMP Surveys

From March 2000 through March 2003, the NCDFR conducted a statewide BMP Implementation Survey to evaluate Forestry BMPs on active harvest operations for forest management purposes. This survey evaluated seven sites in the basin. The BMP implementation rate was 86 percent, while the FPG compliance rate on these same sites was 100 percent.

The problems most often cited from the survey results across the state relate to stream crossings, skid trails, and site rehabilitation. This BMP survey, and additional periodic surveys to be conducted, 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.

12.2.4 Bridgemat Loan Project

To help address some of these issues, the NCDFR has been providing bridgemats on loan out to loggers for establishing temporary stream crossings during harvest activities. Temporary bridges are usually the best solution for stream or ditch crossings, instead of culverts, hard-surfaced ‘fords’, or pole-timber crossings.

In mid-2005, bridgemats were made available from the NCDFR for the first time based out of the New Bern District Office, which covers the White Oak basin. These bridgemats were provided from funds through US-EPA Section 319 Grants and the Albemarle-Pamlico National Estuary Program (APNEP). Further information on DFR's Bridgemat Loan Program can be found on the DFR website at www.dfr.state.nc.us or by contacting the New Bern District Water Quality Forester.

12.2.5 Water Quality Forester

A Water Quality Forester based out of the NCDFR's New Bern District Office handles water-quality related tasks for forestry in the White Oak basin. 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. There are Water Quality Foresters located in ten of 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. Contact information for each district and/or county can be found on DFR's website at www.dfr.state.nc.us and in Appendix III.

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. Progress reports on these projects will be made available at the DFR website at www.dfr.state.nc.us.

