# FORESTRY FORESTRY IN THE HIWASSEE RIVER BASIN: 2012 UPDATE

#### FORESTLAND OWNERSHIP\*

Approximately 55% of the forestland in the basin is privately-owned, with the remainder being publicallyowned land, primarily the Nantahala National Forest.

\* The ownership estimates come from the most recent data published by the USDA-Forest Service ("Forest Statistics for North Carolina, 2002." Brown, Mark J. Southern Research Station Resource Bulletin SRS-88. January 2004).

## FOREST WATER QUALITY REGULATIONS

Forestry operations in North Carolina are subject to regulation under the Sedimentation Pollution Control Act of 1973 (Article 4-GS113A, referred to as "SPCA"). However, forestry operations may be exempted from specific requirements of the SPCA if the operations meet the compliance performance standards outlined in the Forest Practices Guidelines Related to Water Quality (15A NCAC 11 .0100 - .0209, referred to as "FPGs") and General Statutes regarding stream and ditch obstructions (GS 77-13 and GS 77-14).

The FPG performance standard rule-codes and topics include:

- .0201 Streamside Management Zone (SMZ)
- .0202 Prohibition of Debris Entering Streams and Waterbodies
- .0203 Access Road and Skid Trail Stream Crossings
- .0204 Access Road Entrances
- .0205 Prohibition of Waste Entering Streams, Waterbodies, and Groundwater
- .0206 Pesticide Application
- .0207 Fertilizer Application
- .0208 Stream Temperature
- .0209 Rehabilitation of Project Site

The NC Forest Service (NCFS) monitors forestry operations for compliance with these aforementioned laws and/or rules. In addition, the NCFS works to resolve identified FPG compliance questions brought to its attention through citizen compliants. Violations of the FPG performance standards that cannot be resolved by the NCFS are referred to the appropriate State agency for enforcement action. During the period September 1, 2005 through August 31, 2010 there were 137 sites in the basin inspected for FPG compliance with 85% of the sites in compliance upon the initial site inspection.

## **OTHER WATER QUALITY REGULATIONS**

In addition to the multiple State regulations noted above, NCFS monitors the implementation of the following Federal rules relating to water quality and forestry operations:

- b The Section 404 silviculture exemption under the Clean Water Act for activities in wetlands;
- b The federally-mandated 15 best management practices (BMPs) related to road construction in wetlands;
- The federally-mandated BMPs for mechanical site preparation activities for the establishment of pine plantations in wetlands of the southeastern U.S.

## FORESTRY BEST MANAGEMENT PRACTICES

Implementing forestry Best Management Practices (BMPs) is strongly encouraged to efficiently and effectively protect the water resources of North Carolina. In 2006, the first ever revision to the North Carolina forestry BMP manual was completed. This comprehensive update to the forestry BMP manual is the

result of nearly four years of effort by the NCFS and a forestry Technical Advisory Committee consisting of multiple sector stakeholders, supported by two technical peer-reviews. The forestry BMP manual describes measures that may be implemented to help comply with the forestry regulations while protecting water quality. Copies of the forestry BMP manual can be obtained at a County or District office, or online: http://www.ncforestservice.gov/water\_quality/bmp\_manual.htm.

From 2006 to 2008, the NCFS conducted its second cycle of BMP implementation site assessment surveys to evaluate the use of forestry BMPs, and qualitatively assess the strengths and weaknesses of BMPs in regards to protecting water quality. Statewide, the BMP surveys were completed on 212 active logging sites and the average BMP implementation rate observed during this survey was 85 percent.

In the Hiwassee basin we surveyed 3 sites, evaluated 142 individual BMPs, and observed a BMP implementation rate of 51 percent.

A copy of the survey report (PDF, 5MB) is available from the website http://www.ncforestservice.gov/ publications/WQ0210.pdf. These periodic, recurring BMP surveys serve as a basis for focused efforts in the forestry community to address water quality concerns through better and more effective BMP development, implementation and training.

#### PROTECTING STREAM CROSSINGS WITH BRIDGEMATS

The NCFS provides bridgemats on loan to loggers for establishing temporary stream crossings during harvest activities in an effort to educate loggers about the benefits of installing crossings in this manner. Temporary bridges can be a very effective solution for stream crossings, since the equipment and logs stay completely clear of the water channel. Bridgemats are available for use in this river basin, and have been for several years. Periodic status reports, a list of bridgemat suppliers, and additional information are available at http://www.ncforestservice.gov/water\_quality/bridgemats.htm.

## FOREST HARVESTING, REGENERATION & PLANNING

During this last planning period, more than 880 acres of land were established or regenerated with forest trees across the basin. During this same time period, an estimated 930 acres had a final harvest conducted and a little more than 1,100 acres had an intermediate harvest conducted. In addition, 307 individual forestry-related management plans were produced for landowners, encompassing more than 19,300 acres of forestland.

## **CHRISTMAS TREE PRODUCTION**

The Christmas tree industry is predominant across many counties in the North Carolina mountains. It should be noted that the N.C. Forest Service does not oversee regulations or land-clearing activities associated with Christmas tree production. These activities are not considered forestry ("silviculture") activities, but are instead deemed to be an agricultural or horticultural activity. Personnel with the County Soil & Water Conservation District or USDA-Natural Resources Conservation Service (NRCS) can provide BMP assistance. Additional information about Christmas trees is available from the N.C. Cooperative Extension Service: http://www.ces.ncsu.edu/fletcher/programs/xmas/ctnotes/index.html.

North Carolina Forest Service (NCFS) Contacts for the Hiwassee River Basin:		
Office Location	Contact Person	Phone
Cherokee County	County Ranger	(828) 837-5426
Clay County	County Ranger	(828) 837-5426
Sylva District (District-9)	Assistant District Forester	(828) 586-4007
Western region (Region-3)	Asst. Regional Forester	(828) 665-8688
State Central Office, Raleigh	Nonpoint Source Branch - Forest Hydrologist	(919) 857-4856
Griffiths Forestry Center, Clayton	Water Quality & Wetlands Staff Forester	(919) 553-6178 Ext. 230