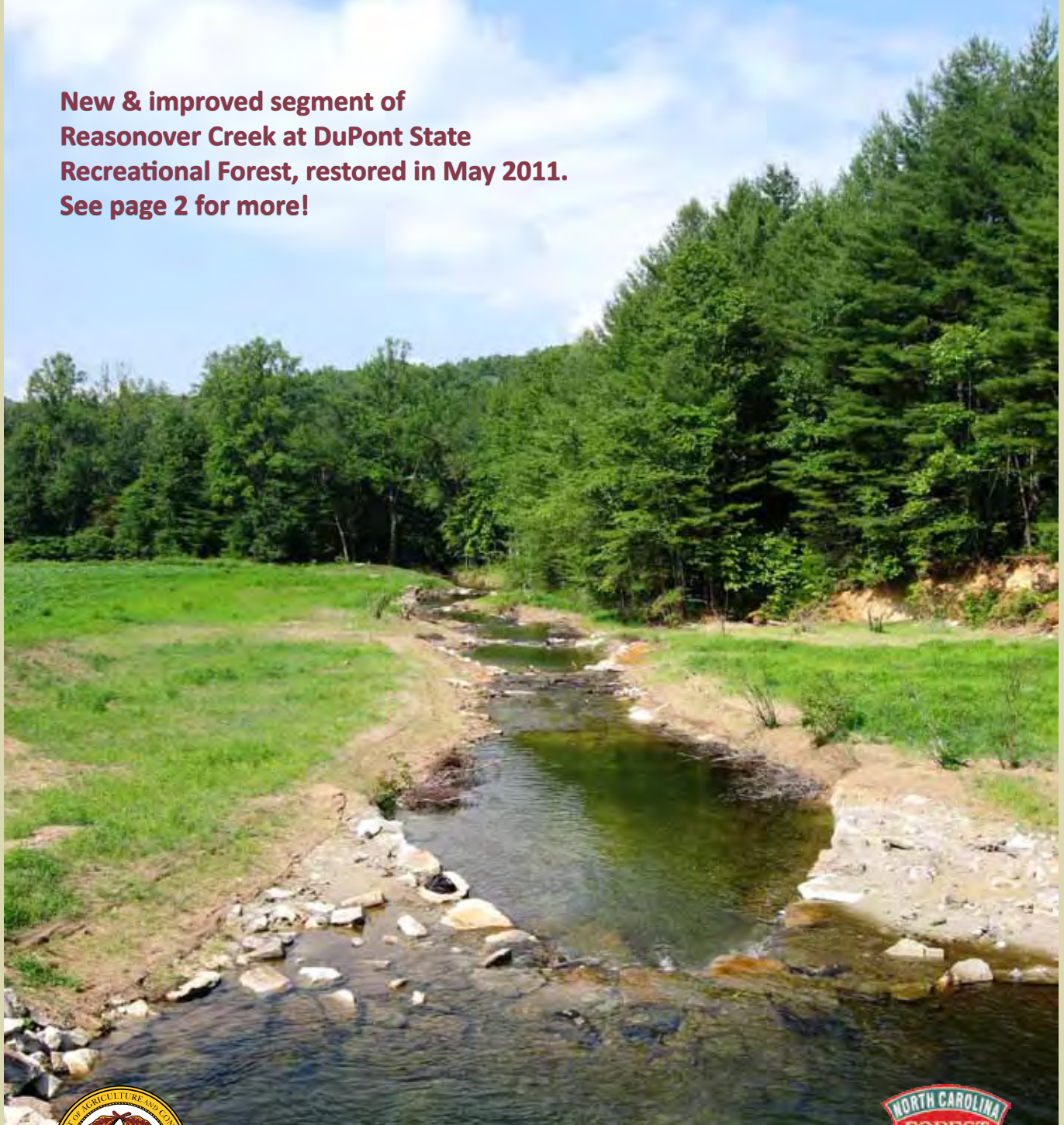


Year in Review 2011

Success Stories & Accomplishments

North Carolina Forest Service, Nonpoint Source & Water Quality programs

New & improved segment of Reasonover Creek at DuPont State Recreational Forest, restored in May 2011. See page 2 for more!



Website: ncforestservice.gov



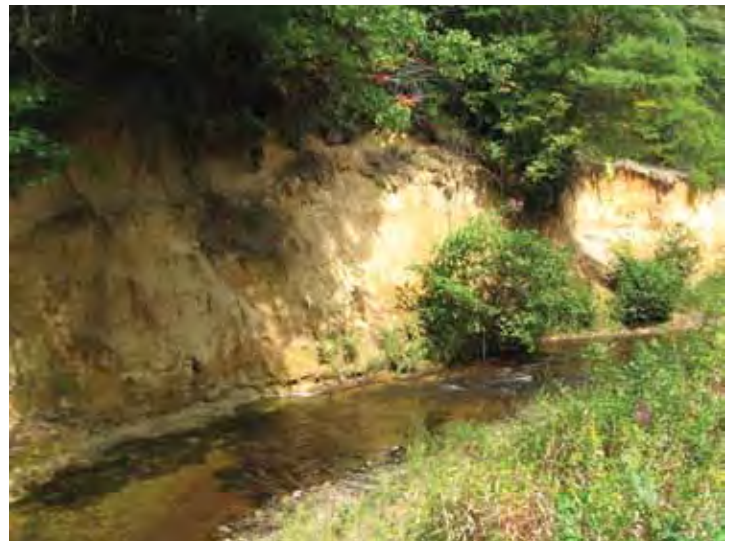
500+ feet of trout stream restored at DuPont State Recreational Forest in Transylvania County

A lengthy segment of Reasonover Creek used to flow along the base of an exposed earth embankment. This segment was situated there back in the 1950's when the previous property owner constructed Lake Julia. This stream segment is the outfall from the spillway on the lake's dam. In 2011, we accomplished the following improvements to this section of Reasonover Creek:

- ☑ Moved the channel away from the embankment to prevent further sedimentation
- ☑ Relocated the stream within its historical floodplain area
- ☑ Installed multiple V-shaped rock vane structures to manage water flow and stabilize the channel
- ☑ Created deep pools for the water to calm and provide cool refuge habitat for fish
- ☑ Incorporated loose bundles of small limbs and brush to improve aquatic habitat

Approximately 90 individuals have visited this restoration site so far through a series of multiple training workshops hosted by our partners at N.C. State University. Self-guided interpretive signs will be produced and installed along the stream in 2012 to inform the public about the techniques used for this restoration.

Before: The stream was undercutting this embankment, allowing soil to erode into the stream



A new stream channel comes to life!



A portion of the right bank was kept exposed to retain swallow nest cavities in the earthen embankment.

Cooperative funding and technical assistance for this restoration were provided by these partners:



Bridgemat Demonstration Area in Wilkes County

A set of three engineered-lumber Emtex™ bridgemats were installed over Purlear Creek at Rendezvous Mountain Educational State Forest in Wilkes County.

These 3,500-pound mats are fabricated of pressure-treated, and stress-tested laminated lumber. The mats are coated with a water-resistant coating to prolong their use. This is the first time that the N.C. Forest Service has purchased and tried this type of new technology for constructing bridgemats.

The bridgemats provide a sturdy, all-weather crossing over Purlear Creek, which was restored in 2007. To protect the aquatic habitat of the stream and to minimize soil disturbance within the riparian zone, we determined that a bridge crossing was the most suitable option for allowing access to the east side of the creek for State Forest personnel to patrol, conduct timber management activities, and for wildfire control.

A special thanks to those who assisted with the purchase and safe installation of these bridgemats:

- Emtex™ mat distributor SVE Portable Roadway Systems and manufacturer Anthony Hardwood Composites
- N.C. Forest Service personnel from the Lenoir District Office, Wilkes County Headquarters, and Rendezvous Mountain Educational State Forest
- Nonpoint Source 319-Grant Program of the N.C. Division of Water Quality and the U.S. Environmental Protection Agency



The stream crossing location prior to bridgemat installation.



The first panel carefully being maneuvered into position.



Two views showing the bridgemat demonstration area safely and successfully installed.

Show Me The Numbers....

Water Quality Compliance Inspections*

*Compliance and personnel time figures represent state fiscal year 2010-2011.

- 3,442:** Number of forestry sites inspected by North Carolina Forest Service field personnel, to monitor compliance with the statewide rules known as the Forest Practices Guidelines Related to Water Quality, (FPGs: 15A NCAC 01I .0100 - .0209)
- 112:** Number of inspected sites which were not in compliance upon the initial inspection
- 96%:** Statewide FPG compliance rate
- 9:** Number of cases that were referred to an environmental enforcement agency due to non-compliance
- 97:** Sites that were inspected as a result of receiving a complaint
- 26:** Number of complaint sites that were not-in-compliance upon inspection

<p>Personnel Time* 27,760: Hours devoted to water quality program delivery by all N.C. Forest Service employees statewide.</p>	<p>ProLogger Training 85: Loggers who attended BMP and environmental training through ProLogger.</p>	<p>Student Instruction 44: N.C. State University & Wayne Community College forestry students that received instruction on the topics of BMPs, hydrology, preharvest planning, and water quality regulations that effect forestry operations.</p>
<p>Stream Crossing Study 3: Number of stream crossings on logging jobs in which water quality samples were taken to determine the effectiveness of forestry BMPs.</p>	<p>Bridgemats 31: Number of sites in which loggers used portable bridges loaned-out by the N.C. Forest Service.</p>	<p>80: High-school students that participated in a water quality curriculum at the Resource Conservation Workshop led by Nonpoint Source personnel at Clemmons Educational State Forest in Clayton.</p>
<p>BMP Implementation Survey Report 220: Forestry professionals and other individuals who have attended presentations on the findings of the 2011 BMP Implementation Survey Report, which evaluated over 200 logging sites across North Carolina</p>		

BMP Effectiveness Monitoring Watershed Study, Durham & Granville counties

Funding was provided by Weyerhaeuser Company to sample, collect and analyze aquatic insect populations which are a valued indicator of water quality and watershed health.

Outreach Events

We provided BMP and nonpoint source related outreach information at the following events in 2011:

- Albemarle-Pamlico National Estuary Program's State of the Sounds Symposium
- Mid-Atlantic Logging & Biomass Equipment Expo
- North Carolina Association of Soil and Water Conservation Districts Annual Meeting
- North Carolina State Fair
- Southern Appalachian Man And The Biosphere 21st Annual Conference
- Southern Farm Show
- Summer Meeting of the Society of American Foresters - North Carolina Division

Additional Partners and Cooperators



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