



# North Carolina Forest Service

An agency of the N.C. Department of Agriculture & Consumer Services

## BMP Newsletter

Best Management Practices for Water Quality & Soil Conservation



This month's cover photo was taken in May at the NOAA lab in Beaufort during a "Getting to Know Wetlands" workshop. If you have logging operations near, around, or within coastal marsh, you are encouraged to speak with a NCFWS Water Quality Forester, or a representative from the N.C. Division of Coastal Management, to understand what is needed to comply with the N.C. Coastal Area Management Act (CAMA) marsh protection rules.

### Reporting Petroleum Spills

State law requires that you notify the N.C. Department of Environmental Quality (DEQ) if a petroleum spill occurs under the following circumstances:

- Amount is 25 gallons or more, *OR*
- Spill causes a sheen on nearby surface waters, *OR*
- Spill occurs within 100 feet of any surface water.

No notification is required, but cleanup must still occur if:

- Amount is less than 25 gallons, *AND*
- No sheen is produced on nearby surface water, *AND*
- The spill is located more than 100 feet from surface water.

Also, you must notify NC-DEQ if:

- Amount is less than 25 gallons, *AND*
- You cannot effectively clean it up within 24 hours, *OR*
- Spill causes a sheen on surface water.

This reporting requirement is spelled-out in the NC Forestry BMP Manual: [Chapter 8, page 117](#).

It is also included in the pocket-sized NC Forestry BMP Quick Reference Field Guide: [Chapter 9, page 9-1](#).

***Not only is it important to prevent petroleum from polluting the water and soil, but as more fluid leaks from your machines, that is like money running out of your pocket!***

***Protect Yourself and Others from Hazards...***

***Prevent Leaks...***

***Control Spills...***

***Contain Fluids...***

***Clean Up Spilled Material...***

***Contact the State if Required.***

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**Special Issue!**

**Meet the NCFWS Water Quality Foresters and state office staff.**

## *Show & Tell*



In mid-May, another in a series of water quality refresher training workshops was held in Statesville, this one led by Water Quality Forester Beth Plummer. The well-attended workshop included a review of the FPGs, buffer rules, how to identify streams for the riparian buffer rules, and examples of good site rehabilitation after logging. The day concluded with a field visit to a recently completed harvest site. If you would like a refresher workshop in your area, or some one-on-one 'tailgate' BMP training for your logging crew, contact the Water Quality Forester in your area; or the Water Resources Branch staff.



In late-June, for the fifth year, the NCFS and USFS met with forestry students attending the N.C. State University Forestry Summer School/Camp, seen above along a creek on the Hill Demonstration Forest in Durham County. Topics included watershed hydrology, forestry research, water quality rules, BMPs, harvest planning, stream identification and stabilizing logging jobs. This is just one example of the instruction and field exercises that NCFS conducts for college students each year.

## Western Region Focus



### What's Wrong With This?

Digging out a stream channel is not allowed without first obtaining permits from the appropriate state and federal environmental agencies, even if it is believed to be a 'dry stream' that only runs after it rains.

There is no reason to dig out a stream when conducting forestry operations such as logging or site preparation.

**Remember: The FPG .0201 rule standard requires that a protective Streamside Management Zone (SMZ) be established alongside any intermittent stream, or perennial stream, or perennial waterbody; even if that stream does not appear on a topo or soils map.**

The NCFS can assist you to determine what type of stream you may have. [Chapter 4 of NC Forestry BMP Manual](#) includes recommendations for suggested SMZ widths.

JULY 7 @ Gamewell, [Tuttle Educational State Forest](#).  
[Summer Fun](#). Contact Burke County Extension: 828-764-9480.

AUG. 22 -- 25 @ Asheville:  
[EcoStream Restoration Conference](#). Contact NCSU Stream Restoration Program: 919-515-6780.

AUG. 25 + 26 @ Asheville:  
[Appalachian Wood Energy Innovations Conference](#).  
Contact NCSU: 919-513-2579.

SEPT. 9 - 18 @ Fletcher:  
[Mountain State Fair](#).

### Meet Your Water Quality Forester

If you are a logger or timber buyer or consulting forester, do you know the Water Quality Forester in your area?

Beth Plummer is currently the only Water Quality Forester in the western region. She works the areas of District 2 and District 12, and is one of our longest-tenured water quality foresters.  
Cell ph: 704-616-0747.



*Refer to the NCFS District Map on the last page for coverage areas.*

## Piedmont Region Focus



### What's Wrong With This?

No matter how good of a job you do when sizing and installing culverts for a stream crossing, you must still regularly inspect the culverts and remove debris jams.

These culverts appear correctly sized for the watershed, but even large diameter pipes such as these can get clogged with naturally-occurring tree limbs and woody debris. This persistent problem of clogging is one reason we emphasize BMPs for stream crossings.

**Remember: The FPG .0203 rule standard states “stream crossings shall be avoided when possible”.**

*Ask yourself: Is this crossing really necessary?*

On low-volume, infrequently used roads, a permanent improved ford crossing may be a suitable alternative to culverts.

AUG. 10 @ Statesville. [Working Forest Summit for Landowners.](#)  
Contact NCSU: 919-515-9563.

SEPT. 14 + 15 @ Troy.  
Montgomery Comm. College.  
[ProLogger Base Course.](#)  
Contact NCFA: 1-800-231-7723.

### Meet Your Water Quality Forester

If you are a logger or timber buyer or consulting forester, do you know the Water Quality Forester in your area?



Laura Hendrick works the northern piedmont area. This includes District 5, District 11, and north half of District 10. Cell ph: 919-218-4263.



Matt Vincett works the southern piedmont and sandhills. This includes District 3, District 6, and south half of District 10. Matt is one of our longest-tenured water quality foresters. Cell ph: 910-334-0025.

*Refer to the NCFS District Map on the last page for coverage areas.*

## Eastern Region Focus



### What's Wrong With This?

Summer is a good time to renovate, rebuild, and restore forest roads. The hot, dry weather allows the road to more quickly dry off and become workable with graders or dozers. The road shown above needs considerable work. Water is pooling in the roadway because of heavy traffic during wet conditions. The roadside ditch is washing away soil from the roadbed, into the stream.

[Chapter 5 of the NC Forestry BMP Manual](#) has recommendations for planning, constructing, and maintaining forest roads.

Also, the USDA-Forest Service has an excellent, well-illustrated guide book available to download: "[Environmentally Sensitive Maintenance Practices for Dirt and Gravel Roads](#)". (NOTE: You will need high-speed internet to download this guide book, it is a very large file size.)

JULY 28 @ Hobbsville:

[Northeast Ag Expo Field Day](#).

Contact Gates Co. Extension:  
252-357-1400.

AUG. 18 @ Greenville: [APNEP Science and Technical Advisory Committee Meeting](#). Contact Dean Carpenter: 919-707-8634.

### Meet Your Water Quality Forester

If you are a logger or timber buyer or consulting forester, do you know the Water Quality Forester in your area?

Since the previous newsletter, the NCFS filled both Water Quality Forester eastern region positions.



Jamie Dunbar works the area of District 7, District 13, as well as Beaufort and Pitt counties.  
Cell ph: 252-286-0881.



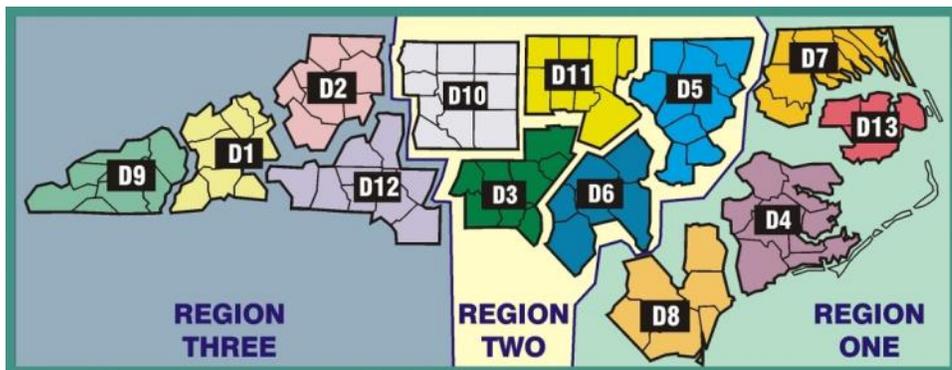
Paul Mowrey works the area of District 8, and the balance of District 4.  
Cell ph: 252-286-0862.

Refer to the NCFS District Map on the last page for coverage areas.

# North Carolina Forest Service

WATER RESOURCES BRANCH

1616 Mail Service Center, Raleigh, NC. 27699-1600



Protect, Manage and Grow Your Forest

[www.ncforestservice.gov](http://www.ncforestservice.gov)

Purchase NCFS Forest Tree Seedlings

[www.buynctrees.com](http://www.buynctrees.com)

NCDA&CS Agricultural Services

[www.ncagr.gov](http://www.ncagr.gov)

Keep Your Home Safe From Wildfire

[www.ncfirewise.org](http://www.ncfirewise.org)

Go Out and Learn in the Forest

[www.ncesf.org](http://www.ncesf.org)

Locate North Carolina Farm Products

[www.ncfarmfresh.com](http://www.ncfarmfresh.com)

[www.gottobenc.com](http://www.gottobenc.com)

## Western Region Water Quality Foresters

**Western Mountains (D9, D1):**  
[ vacant ]  
Office: 828-665-8688 (interim)

**Foothills & Catawba Valley (D2, D12):**  
Beth Plummer: 704-616-0747

## Piedmont Region Water Quality Foresters

**Northern Piedmont:**  
Laura Hendrick: 919-218-4263

**Southern Piedmont & Sandhills:**  
Matt Vincett: 910-334-0025

## Eastern Region Water Quality Foresters

**Northern Coastal Plain:**  
Jamie Dunbar: 252-286-0881

**Southern Coastal Plain:**  
Paul Mowrey: 252-286-0862

It's only fair that if the Water Quality Foresters have their photos shown, that the NCFS Water Resources Branch staff in the state office also get the same treatment. Since the previous newsletter, we filled two key staff vacancies, with Alan Coats and A.J. Lang. We are pleased that both Alan and A.J. chose to embark upon their professional careers with the N.C. Forest Service.



Bill Swartley is the Forest Hydrologist and Branch Supervisor, having joined the NCFS in 1998. Prior to state service, Bill worked a combined 15 years in private industry and the public sector, handling environmental compliance and permitting for multiple resources including air and water. He attained a BS in Biology from Penn State and a MS in Aquatic Biology / Civil Engineering from Tennessee Tech University.

Alan Coats is the Forest Water Quality Senior Specialist, and joined the NCFS in May of this year. Alan attained his BS in Forestry from Mississippi State Univ. in 2014 and a MS in Forest Resources from the Univ. of Georgia in 2016. His thesis project at UGA examined the impacts of riparian forest on stream health, particularly in terms of bank stability and temperature change. Through this project, Alan gained firsthand experience with GIS, soil conservation, aquatic habitat, and stream-forest interactions. Alan's primary job duties are to coordinate the BMP Implementation Monitoring Survey, manage the FPG database and reporting, and assist with stream restoration.



Tom Gerow, Jr. is the Water Resources Staff Forester, having joined the NCFS in 2002. Prior to state service, Tom worked 7 years in forest industry, primarily overseeing and coordinating timber harvesting operations. Tom attained a BS in Forest Management from NCSU. Tom's primary job duties are providing program guidance on the FPGs, riparian buffer rules, wetlands silviculture, and other water quality compliance rules; liaison to other agencies; stream identification training coordination; and forest management program assistance.

A.J. Lang is the Watershed & Conservation Staff Forester (reg. pending), and joined the NCFS in June of this year. AJ attained a BS and MS in Forestry, as well as accomplishing a PhD in Forestry Operations, all from Virginia Tech. His studies focused on investigating the frequency and surrounding site characteristics of areas where sediment penetrated SMZs on clearcut harvests. In addition, AJ quantified and modeled soil erosion from forest haul road stream crossing approaches, and evaluated long term effects of harvesting on soil properties. AJ's primary job duties are to coordinate ProLogger for the NCFS, oversee the bridgemat project, serve as lead BMP technical expert, coordinate BMP training and education, work on forest/watershed projects, and assist with stream restoration.

