



North Carolina Forest Service



A Division of the N.C. Department of Agriculture and Consumer Services
Steve Troxler, Commissioner

BMP Newsletter

Best Management Practices for Water Quality & Soil Conservation



(Top, l-r: Richard Cockerham, Brian Michaelsen, Matt Vincett, Brian Yeich, Cathy Gilkeson, Bill Swartley, Laura Hendrick, Alan Coats, Nancy Blackwood. Bottom l-r: Paul Mowrey, John Williams, AJ Lang, Tom Gerow, Aaron Levine)

This issue's cover photo was taken during a field trip of the N.C. Forest Service's Annual Water Quality meeting near the Rockingham District office in Richmond county.

All N.C. Forest Service employees play an integral role in promoting activities that protect and maintain waters throughout the state. N.C. Forest Service specialists from across the state meet annually to share lessons learned, review and discuss areas for improvement and to update each other on projects in their work areas. This year, we invited and learned from Sarah McRae and Laura Fogo from the U.S. Fish and Wildlife Service. A big thank you to our guests for their time and sharing some of their project information related to threatened and endangered aquatic species in North Carolina!

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What's New and What's Newly Available?

The N.C. Forest Service is continually working to improve our customer service by providing new products and updating others. Check out our great water-related products!

The **Bridgemat Loan & Education Service Report** is a new report and is available online. *Don't be put off by the word 'Report'*, this is much more than just a summary of our bridgemat loan service numbers and administration.

It contains information for ALL experience levels:

From: What is a bridgemat?
To: How have researchers evaluated erosion and sediment delivery reductions from implementing bridgemats?



www.ncforestsservice.gov



North Carolina Forest Service
Bridgemat Loan & Education Service Report
2009 - 2017



Water Resources Branch
North Carolina Forest Service
August 2018

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The N.C. Forest Service continues to lend bridgemats free of cost and provides educational opportunities to our customers when possible. We continue to evaluate ways to improve this service and welcome feedback to make it more successful. Thank you for your continued support and a special thank you to our field staff for their day-to-day management of this service.

What's New and What's Newly Available? Continued...

[The BMP video series is now available on YouTube!](#)

[Video 1: Forestry Stream Crossings with Bridgemats.](#)

July 2005, 11-minutes. This video explains the benefits and methods for using portable, temporary bridgemats for establishing stream or ditch crossings during forestry operations. A [companion document](#) outlines important concepts contained in the video.



[Video 2: Forestry Stream Crossings.](#)

July 2005, 24-minutes. This video captures much of the same material included with Video 1, but expands the discussion of BMPs to the other two major types of stream crossings commonly used in forestry; culverts and fords. A [companion document](#) outlines important concepts contained in the video.

[Video 3: BMPs for Logging Skid Trails.](#)

July 2006, 16-minutes. This video highlights the major BMP concepts that can be applied in most cases on timber harvests. A special feature of this video is a real-time segment showing the construction of a waterbar on a forest road. While waterbars are very useful water control devices, their proper installation pose some challenges in determining the correct angles and layout. A [companion document](#) outlines important concepts contained in the video.



[Video 4: Installing Silt Fence.](#)

August 2010, 15-minutes. This video demonstrates installation of silt fence for application on forestry sites. While silt fence can be a helpful BMP tool, it should not be relied upon as the primary means of sediment & erosion control. A [companion document](#) outlines important concepts contained in the video.

[Video 5: Installing Erosion Control Matting.](#)

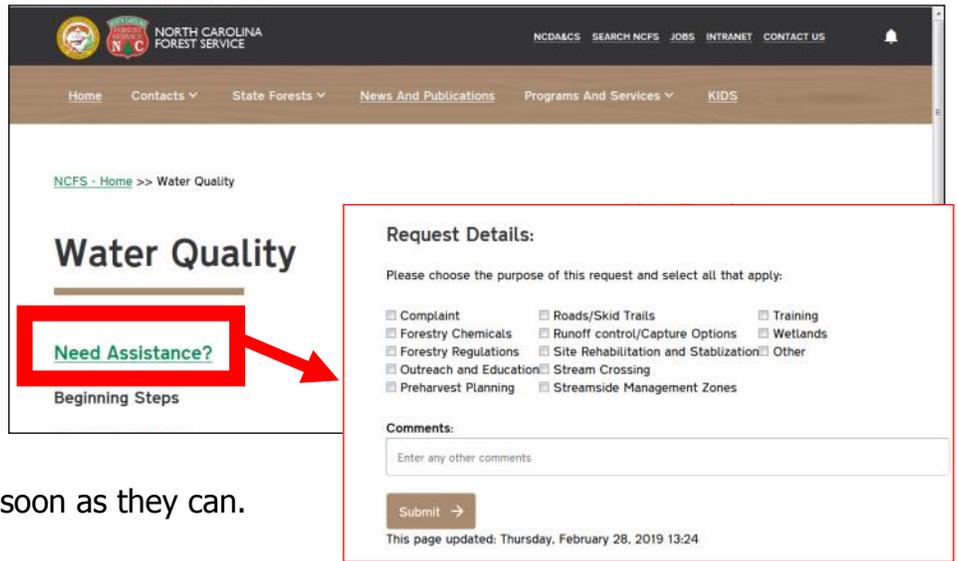
August 2010, 12-minutes. This video demonstrates installation of erosion control matting. Erosion control matting, sometimes known as excelsior matting, can be useful to allow grass seed to germinate on critical soil areas, such as alongside streams or on highly erodible soils. A [companion document](#) outlines important concepts contained in the video.



What's New and What's Newly Available? Continued...

New online customer request portal. A new method of reaching out to our agency staff for water quality and BMP assistance, information or other services is now available. At the forefront of our [Water Quality Program webpage](#), customers can click 'Need Assistance?' (see red box below).

This link will lead customers to a form that prompts the requester to enter contact information and specifics about their request. The form uses checkbox categories for ease, but also allows the requester to write a more detailed question or comment. An N.C. Forest Service representative will get in touch with the requesters as soon as they can.



New series of Forestry Leaflets focused on bottomland swamp forests were released at the beginning of the year.



They can be found on our agency website under the [Water Quality Publications section](#). The new leaflets are:

- [BF-1](#): Understanding North Carolina's Bottomland Swamp Forests.
- [BF-2](#): Natural Reforestation in Cypress-Tupelo Swamps.
- [BF-3](#): Planting Cypress and Tupelo Seedlings for Reforestation in Deep Swamps.
- [BF-4](#): Harvesting Timber Using the Shovel-Mat Logging Method.
- [BF-5](#): Understanding Turbidity as it Relates to Logging in Swamps and Bottomland Areas of North Carolina.

These leaflets are an outcome of the 2017 Bottomland and Swamp Forest Symposium that was hosted in Wilmington, NC. Presentations from that event remain available here:

go.ncsu.edu/bottomland-symposium

Redefining Waters of the United States: Why Does it Matter for Forestry?

Discussions about Waters of the United States (WOTUS) continue to be a hot topic in Washington D.C. Another round of re-defining protected waters covered within the Clean Water Act is underway. Published in the *Federal Register* on February 14, 2019, this proposed revision to WOTUS is open for comment until April 15, 2019. **We encourage our readers to read the *Federal Register* entry and form an opinion of their own.**

Why does it matter to the forestry community? Remaining in compliance with environmental rules is a critical aspect of a well managed forest that is promoted by any reputable business or agency. Waters that receive the status of WOTUS are subject to federal rules in addition to existing state water quality rules. Simply put, the forestry community needs to fully understand where each set of rules begin and end.

Tell me three things I need to know about this proposed revision.

1. 'Ephemerals' would be explicitly exempted in the revision.
2. Tributaries that would be subject to WOTUS rules are defined by flow.
3. Ditches in tributaries or in adjacent wetlands that have intermittent or perennial flow would be jurisdictional.

So what does this mean for forestry right now? Since this is a proposal, nothing has changed. The Section 404 exemption remains intact, but remember that this exemption has strings attached. See [Chapter 6 Part 2 of the BMP manual](#) for more information (page 91).

While the direct impacts on forestry activities remain unclear, the forestry community needs to continue to make their concerns known. Without our comments, the revised definitions and future regulations could significantly alter where and how forest management activities are conducted.

N.C. Forest Service staff have been working with other forestry advocacy groups to understand the proposed definitions of WOTUS and evaluate potential management implications.

Blog post on applied Forestry BMPs in the New York City Watershed

Check out a this recent blog post titled, "[Working to Protect Water Quality and Support Economic Viability on Woodlot Harvests in the NYC Watershed](#)" written by Kris Brown of the Watershed Agricultural Council. It provides an excellent, relatable description of the challenges of implementing forestry BMPs in New York. While the blog is about New York forestry, many of his same points can be applied here in North Carolina.

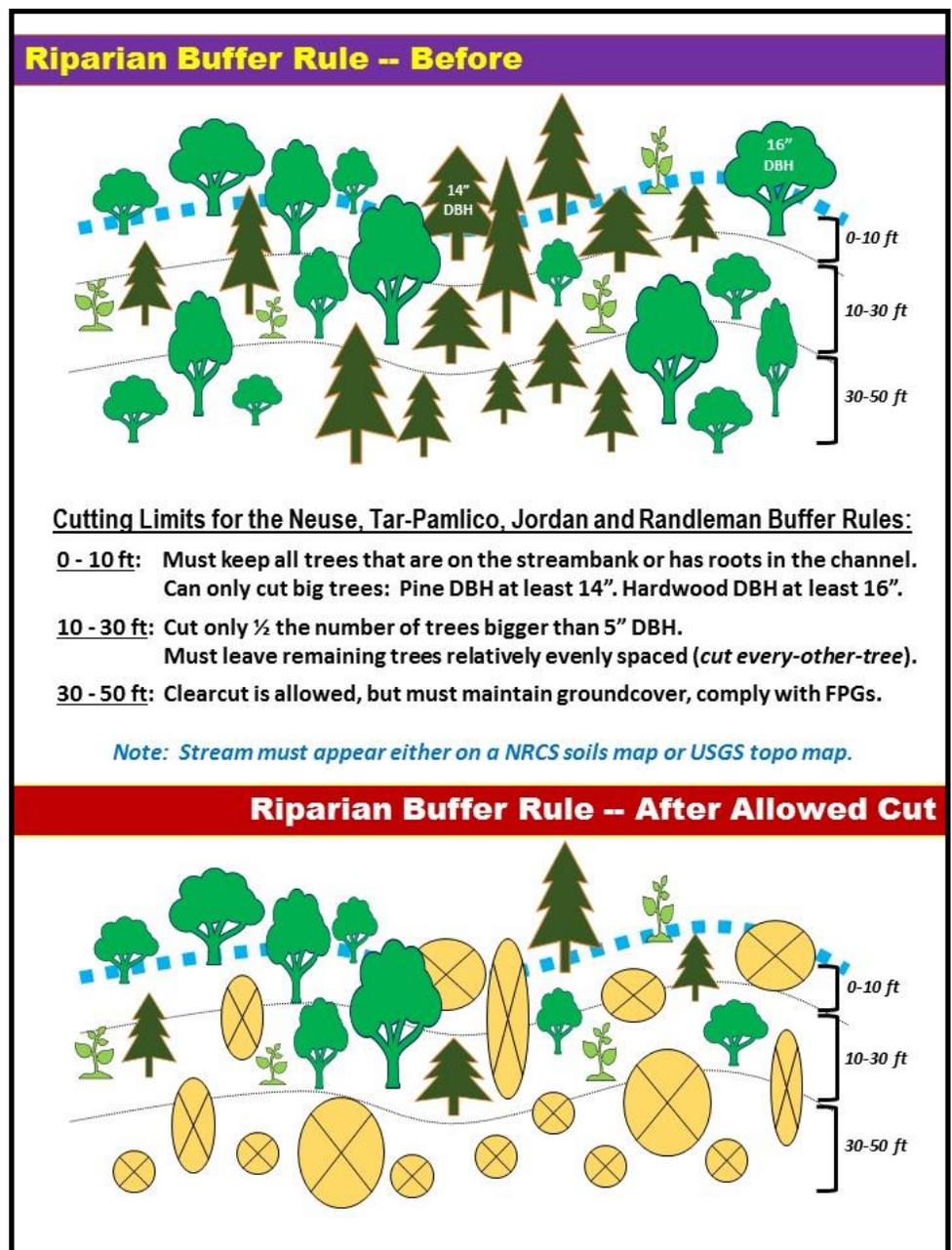
The blog explains BMP work to repair a logging road and install a proper reinforced ford crossing using geotextile. The post contains several pictures of the application process and a well presented perspective on the water quality challenges associated with forest roads and stream crossings. The post is well worth a read.

Riparian Buffer Rule Harvest Restrictions: New Illustrative Sketch

Unlike the statewide [Forest Practices Guidelines Related to Water Quality](#) (FPGs), the [Riparian Buffer Rules](#) only apply to certain parts of the state. The Riparian Buffer Rules further restrict forestry activity within 50-ft of a stream by limiting what size trees can be cut. To help our customers visualize one of the challenging aspect of these rules, N.C. Forest Service created a illustrative sketch. The sketch below illustrates before and after harvesting limits for four of the six Riparian Buffer Rule areas including: Neuse and Tar-Pamlico river basins and Jordan and Randleman Lakes. This illustration does not explain all of the many details for each Riparian Buffer Rule. A full explanation of the rules is available in N.C. Forest Service's Forestry leaflets, available from our agency website.

- [F.L. WQ-10: Catawba](#)
- [F.L. WQ-11: Neuse and Tar-Pamlico](#)
- [F.L. WQ-12: Randleman Lake](#)
- [F.L. WQ-13: Goose Creek](#)
- [F.L. WQ-14: Jordan Lake](#)

As a reminder, the N.C. Forest Service has foresters that can do on-site stream examinations before harvesting, to identify which stream(s) or waterway(s) require protection under a Riparian Buffer Rule, and/or the FPGs. [Contact the appropriate District Office](#) to schedule a stream determination.



Upcoming Events:

Western Region Events

- April 2 @ Charlotte, [NC Ag Export Seminar](#)
- April 8-12 @ Asheville, [Stream Mechanics](#)
- April 11-12 @ Boone, [New River Symposium](#)
- April 27 @ Charlotte, [NC Water for People 5k Run](#)
- April 22 @ Pilot Mt. State Park, [Assault on Invasives](#)
- May 24 @ TBD
Consulting Forester Meeting
Contact: 828-665-8688
- June 5-7 @ Charlotte
[NC Society of American Foresters Summer Meeting](#)

Piedmont Region Events

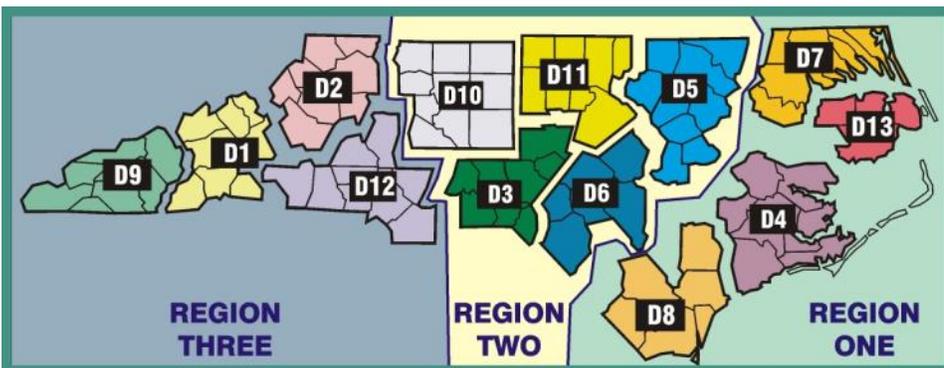
- April 3 @ Raleigh, [SAF Student Professional Dinner](#)
- May 3-4 @ Burlington, [NC Envirothon](#)
- May 3-4 @ Laurinburg, [Mid-Atlantic Logging Expo](#)
- May 4 @ Apex, [NC Water for People 5k Run](#)
- May 11 @ Hill Demonstration Forest, [Volunteer for Boy Scouts Forestry Merit Badge Day](#)
- May 14-15 @ Troy
[ProLogger Base Course](#)

Eastern Region Events

- April 9 @ Plymouth, ProLogger Module 19, contact: Charles.daniels@domtar.com
- April 17 @ Wilmington, [Carolina Canopy Workshop](#)
- May 6-8 @ Wrightsville Beach, [NC Assoc. Floodplain Managers Annual Conference](#)
- May 22-23 @ Wanchese, [LID Basics for WQ Protection](#)
- June 7 @ TBD
Consulting Forester Meeting
Contact: 252-520-2402

North Carolina Forest Service

WATER RESOURCES BRANCH
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Western Region

Western Mountains (D9, D1)
John Williams : 828-774-8362

Foothills (D2, D12)
Richard Cockerham: 704-616-0747

Piedmont Region

Northern Piedmont (D5, D10, D11 [North of I-40])
Nancy Blackwood: 336-500-3661

Southern Piedmont (D3, D6, D10 [South of I-40])
Matt Vincett: 910-334-0025

Eastern Region

Northern Coastal Plain (D7, D13, +Beaufort and Pitt)
Cathy Gilkeson: 252-286-0881

Southern Coastal Plain (D4 [-Beaufort and Pitt], D8):
Paul Mowrey: 252-286-0862

Protect, Manage and Grow Your Forest
www.ncforestservice.gov

Purchase NCFS Forest Tree Seedlings
www.buynctrees.com

NCDA&CS Agricultural Services
www.ncagr.gov

Keep Your Home Safe From Wildfire
www.ncfirewise.org

Go Out and Learn in the Forest
www.ncesf.org

Locate North Carolina Farm Products
www.ncfarmfresh.com
www.gottobenc.com