

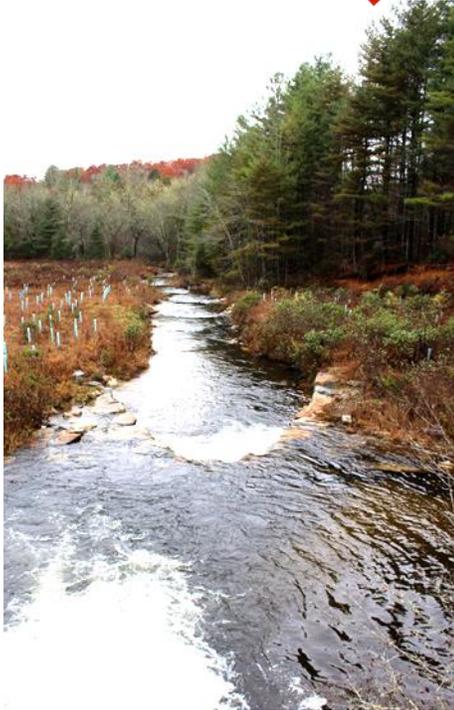


North Carolina Forest Service

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

BMP Newsletter

Best Management Practices for Water Quality & Soil Conservation



New Year's Resolutions



1 - Flag or paint all of the SMZs and Riparian Buffers on my logging jobs + make sure my logger complies with them

2 - Try some new(?) BMP tools

3 - Call NC Forest Service for advice, before we start logging + when we finish

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If you do logging, site prep, road work, or other forestry operations, then you should consider adding these three goals to your list.

In the 4th quarter of 2015, the NCFS observed multiple logging jobs that exceeded the harvesting limits of the riverbasin or watershed Riparian Buffer Rule that applied to that site.

In these cases, the root cause was either:

- ⊗ Nobody marked the buffer zone with flagging or paint, or
- ⊗ The logger ignored the flagging or paint, and cut the buffer anyway, or
- ⊗ The logger, timber buyer, and consultant all claimed that they didn't know that the stream required a Riparian Buffer Rule.... despite the stream appearing on a topo map or soil survey.

As a reminder, these Riparian Buffer Rules only apply in certain areas of North Carolina, but together, those areas cover about 30% of the state! Plus, the NCFS must automatically notify the N.C. Division of Water Resources when we observe a potential buffer rule violation. To help understand the do's and don'ts of each Riparian Buffer Rule, read the NCFS Forestry Leaflet for each rule, available from our agency website; look in "Water Quality >> Publications": ncforestservice.gov.

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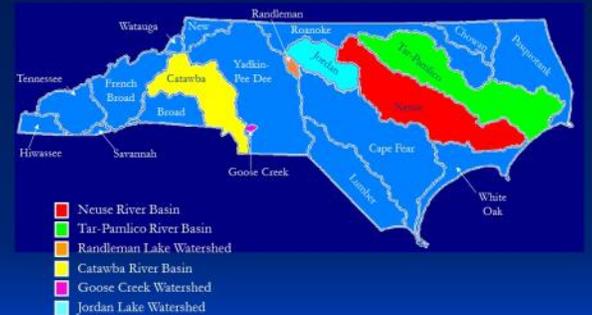
New Year's Resolutions *(continued)*

Those [special Riparian Buffer Rules](#) apply in these areas, listed alphabetically:

- Catawba River and mainstem lakes
- Goose Creek watershed (Mecklenburg and Union counties)
- Jordan Lake watershed
- Neuse River basin
- Randleman Lake watershed
- Tar-Pamlico River basin

Map courtesy of N.C. Division of Water Resources

Riparian Buffer Protection Programs



Don't get confused! Statewide, the Forest Practices Guidelines Related to Water Quality

(we all call them FPGs) require that a protective streamside management zone (SMZ) must be established along any intermittent stream or perennial stream or perennial waterbody. **For FPGs, it does not matter if that stream appears on a map, or not.**

Bottomline: Identify where the streams are.
 Know what kind of SMZ and/or Riparian Buffer is needed.
 Flag or paint the SMZ and/or Riparian Buffer.
 Adhere to the marked SMZ and/or Riparian Buffer.
Protect water quality and stream integrity ... act responsibly.

What's Old is New Again

Seed & Straw. New? Not Hardly.

Apply ample straw on critical bare soil to prevent accelerated erosion and sedimentation. This is especially important over the winter when it is hard to get vegetation to grow.



This photo shows a rainfall simulation done by [NCSU](#) at a 2015 training workshop using four treatments, from left to right:

- * 100% straw cover
- * 75% straw cover with [polyacrylamide](#)
- * No cover (bare soil)
- * Erosion control matting

Water was sprayed on each box of soil at the same rate, and same time. The runoff was collected in each plastic tray. Basic straw wins again. Nothing new here. It just requires doing what we know works.

Western Region Focus

Try Something New for the New Year



UPCOMING EVENTS

FEB. 9 + 10 @ Brasstown:

[ProLogger Base Course.](#)

Contact NC Forestry Association:

1-800-231-7723.

FEB. 26 @ Asheville:

Urban Forestry Workshop.

Contact NCFS: 919-857-4842.

Visit the *Hot Topics* at the NCFS website for other events.

On steep ground, skidding can be tricky because of slippery slopes. One tried & true tactic of gaining more grip is to add specially-adapted chains to the skidder tires. That method has been around for decades. But there may be a better mousetrap. Many companies now manufacture steel cleats that wrap around the tire. The photo above was taken at the 2015 Mid-Atlantic Logging & Biomass Equipment Expo... were you there? If not, then you missed a great show.

Piedmont Region Focus

Try Something New for the New Year

Straw wattles. Coir logs. Fiber rolls.
They have different names but serve the same purpose: slow down runoff within a shallow ditchline or on a sloping embankment.

In some places, they can replace expensive rip-rap stone as check-dams. The natural filtering capacity of the fibers also helps to collect sediment in the runoff.

The photos below were taken at a 2015 NCSU training workshop before (left, downhill) and during (right, uphill) simulated runoff in a shallow ditchline.

UPCOMING EVENTS

JAN. 27,28,29 @ Durham:
[Appalachian Division of Society of American Foresters Winter Meeting.](#)
Contact: 919-610-2852.

FEB. 17+18 @ Kernersville:
[Stormwater BMP Inspector Certification.](#) Contact NCSU
Stormwater Engineering Group:
919-515-6780.

MAR.4 @ Duke University Gardens:
[Wetland Resilience in NC Seminar.](#)

MAR. 17+18 @ Raleigh:
[Annual Conference of the NC Water Resources Research Institute.](#)
Contact NC-WRRI: 919-513-1216.



Eastern Region Focus

Try Something New for the New Year



Install road mat pallets on soft, mucky access roads. They can support loaded log trucks and reduce your cost of buying, hauling, and spreading rock. These types of mats have been around for a long time. But, how often do you see the geotextile underlayment applied on the soil before laying the mats, as seen in this photo?

Doing this creates an even firmer bed for the trucks to drive upon. If the landowner wants a cheaper and easier solution for access after the logging is done, and doesn't want to pay for a lot of rock, then this may be an alternative to consider by leaving the mats in-place. Also, you might be able to reduce the height and amount of roadfill that would otherwise be needed if you built a traditional permanent road using the ditch - backfill - rock method.

This photo was taken at the 2015 Annual Meeting of the NC Tree Farm Program, hosted at Shaver Wood Products.

UPCOMING EVENTS

FEB. 3+4 @ Jacksonville:
[Stormwater BMP Inspector Certification](#). Contact NCSU Stormwater Engineering Group: 919-515-6780.

FEB.16 @ New Bern: [Freshwater in the NC Coastal Plain, Understanding Challenges for 21st Century](#). Contact NC-WRRI: 919-513-1216.

MAR. 1 @ Smithfield:
Urban Forestry Workshop.
Contact NCFS: 919-857-4842.

Visit the *Hot Topics* at the NCFS website for other events.

North Carolina Forest Service

WATER RESOURCES BRANCH
1616 Mail Service Center, Raleigh, NC. 27699-1600



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

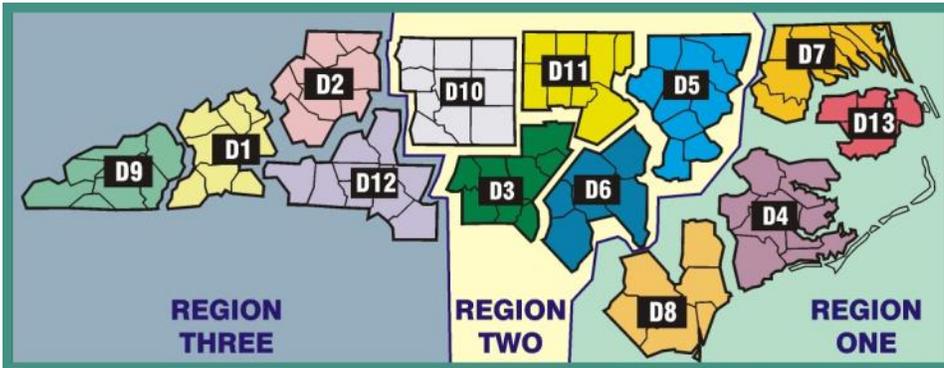
Go Out and Learn in the Forest

www.ncesf.org

Locate North Carolina Farm Products

www.ncfarmfresh.com

www.gottobenc.com



Western Region Water Quality Foresters

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

Foothills (D2, D12):
Beth Plummer: 828-438-3793

Piedmont Region Water Quality Foresters

Hillsborough District (D11, northern D10)
Laura Hendrick: 919-698-2457

Rockingham District (D3, southern D6+D10)
Matt Vincett: 910-334-0025

Rocky Mount District (D5, Johnston, Sampson)
Aaron Levine: 252-442-1626

Eastern Region Water Quality Foresters

Northern Coastal Plain (D7, D13):
[vacant]
Office: 252-520-2402 (interim)

Southern Coastal Plain (D4, D8):
[vacant]
Office: 252-520-2402 (interim)



What's Wrong With These Pictures?

From the front page story, here are examples of Riparian Buffer Rule violations that the NCFS has had to deal with in recent months. These are not what you might consider 'minor' infractions; the entire buffer was clearcut in nearly all of these violation cases. Left photo, Pitt County. Middle photo, Wayne County. Right photo, Johnston County. They all involved different loggers, timber buyers, and landowners.

***Know the rules. Mark the SMZ and/or Riparian Buffer.
If you're not sure, call NCFS for assistance. Act responsibly.***

It's tree planting season! If you need to purchase seedlings or native understory grasses, call the North Carolina Forest Service nursery program toll-free at 1-888-NCTREES, or order direct from their new website: www.buynctrees.com