



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



This issue's cover photo is a set of steel bridgemats spanning a perennial stream in the mountains region of North Carolina. This stream crossing minimizes disturbance to the stream channel. The three steel panels are tightly adjoined together to keep soil and other debris out of the stream.

To help protect water quality and promote the use of bridgemats as a Best Management Practice (BMP), the N.C. Forest Service loans bridgemats to loggers and timber buyers for use during forestry-related operations. Read more about the [Bridgemat Loan and Education Service](#).

Thanks for helping keep our waters clear!

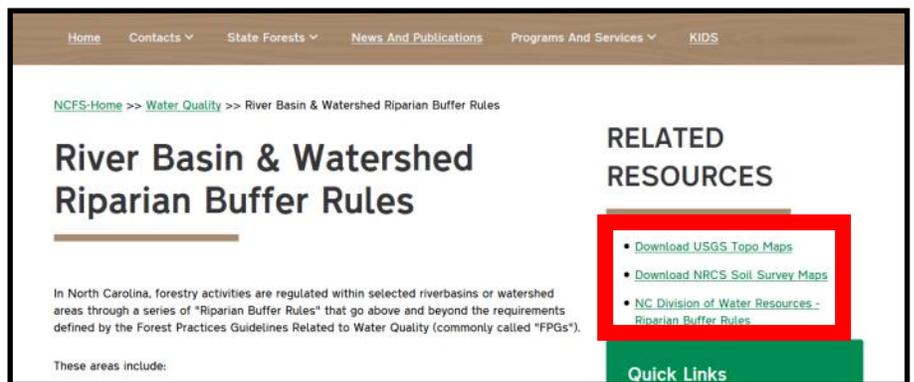
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Topographic and Soils Maps for Riparian Buffer Rules

The N.C. Forest Service is continually working to improve our customer service by streamlining resources for customers. A link to the most recent U.S. Geological Survey topographic maps and a link to the Natural Resource Conservation Service printed soil survey maps are now available on the N.C. Forest Service's Water Quality webpage under "Related Resources".

Also under "Related Resources", you will find a direct link to the N.C. Division of Water Resources Riparian Buffer Rules webpage, which contains a link to each Riparian Buffer Rule, a FAQ, and other helpful links to aid you in helping to protect water quality in our state!



Newly added resources found on the N.C. Forest Service website, under [Programs and Services](#)>>[Water Quality](#)>>[River Basin & Watershed Riparian Buffer Rules](#). Here under "Related Resources" (see red box) you will find a link to "[Download USGS Topo Maps](#)", where you can download the most recent USGS topographic maps. Additionally, there is a link to a document explaining, with step-by-step instructions, on how to "[Download NRCS Soil Survey Maps](#)".

Contact the appropriate [District Office](#) or Water Quality Forester (see page 6) to request a buffer rule stream determination *before* harvesting timber.

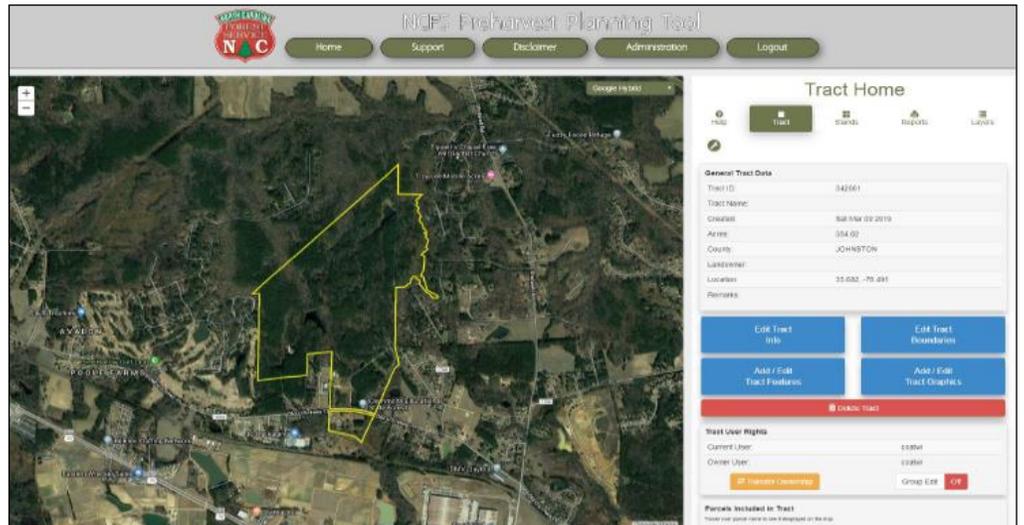
Updates to the Online Forest Preharvest Planning Tool

That's right! [The Online Forest Preharvest Planning Tool \(FPPT\)](#) has been updated! You will now see a few changes with the tool during use. We believe these changes improve the users experience. The most significant change you will see will be the Tract Home Interface page.

Tract Home Interface

Now, users can view tract information, edit the tract boundary, create maps, and edit management areas.

Once a tract is created, the user only needs to work within one page, instead of flipping back and forth between pages.

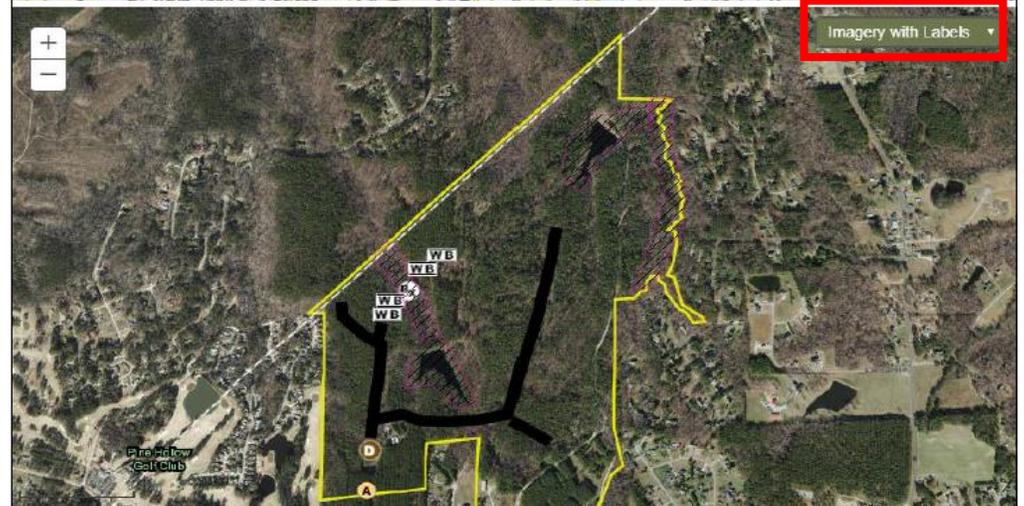
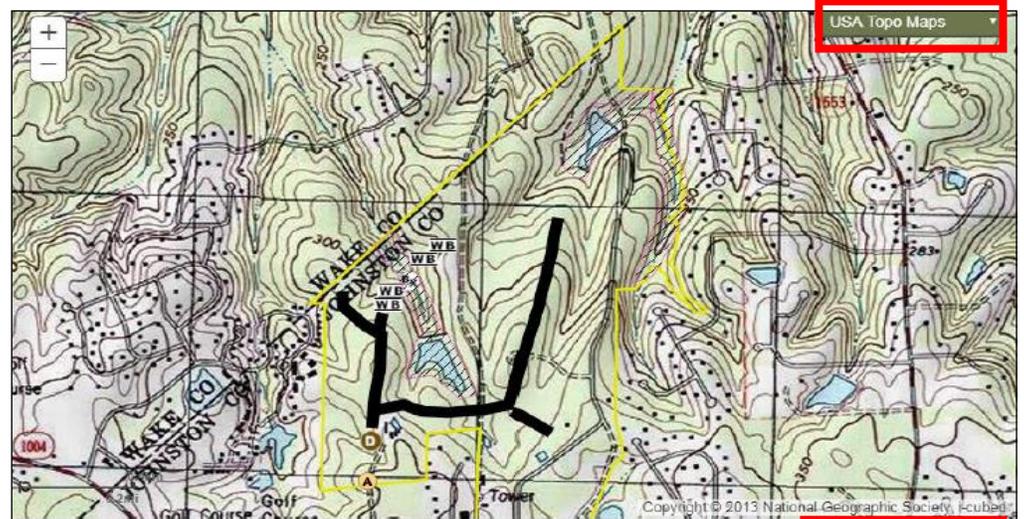


Site Summary Report

This updated report contains information and a number of helpful resources for forest landowners. Broken links have been fixed as well.

New Basemaps

Users can now choose from a total of 15 different basemaps, including Google Roads and Aerial Imagery, USGS topo maps, ESRI® online maps, and the Open Street Map®. Basemaps can be selected by clicking the basemap name shown in red boxes pictured right.



Updates to the Online Forest Preharvest Planning Tool (FPPT) Continued...

Individual Users

New users can now register as an individual (pictured below). Before, new users were forced to join a group. Some of these groups were very broad such as "Forester" or "Landowner", resulting in unwanted map sharing. Map products are no longer shared with others in the "Individual" group, which allows for greater privacy of map products. **Users that were initially in one of the broad groups have been separated out and reclassified as individual users.**

Drawing Tract Boundaries

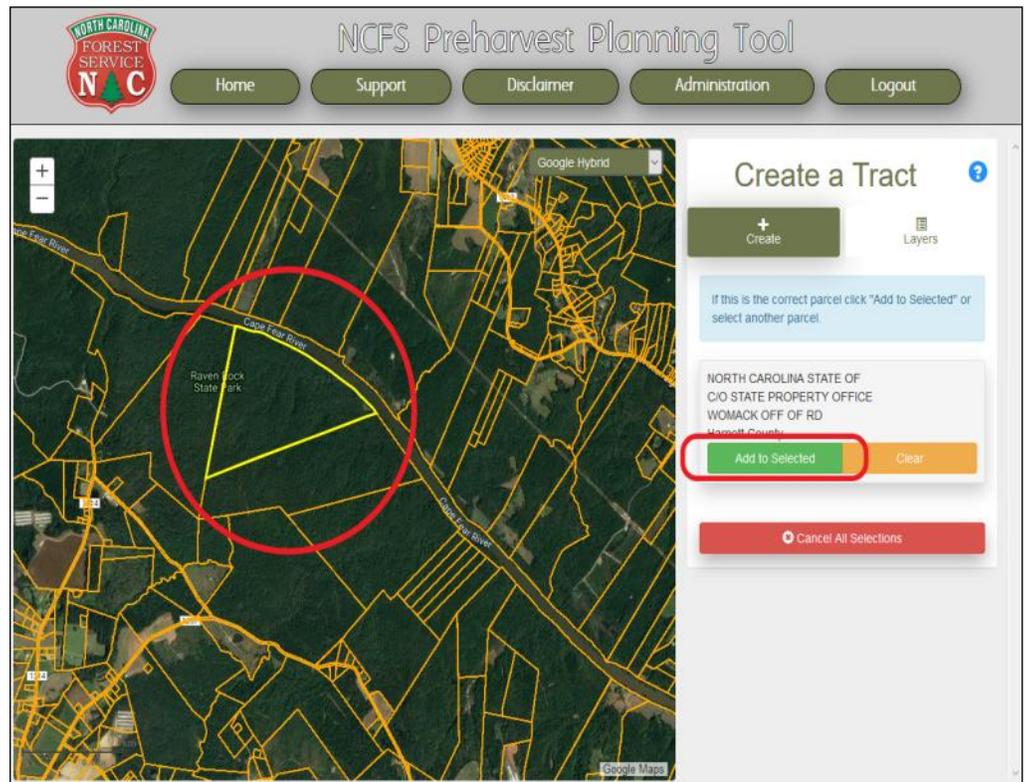
When creating a tract, users will no longer be able to draw polygons to define a tract's boundary. The only way to create a tract now is to select the parcels that make up the tract. If a tract only takes up part of a parcel, we recommend that the user defines management areas that show this difference.

If you created a custom drawn tract in the past, you will no longer be able to use that tract. Please create a new tract by selecting parcels that include your intended area.

Other Changes

The tool works well on Google Chrome, Microsoft Edge, and Mozilla Firefox, though users may still experience issues when trying to use it on Microsoft Internet Explorer.

In the past, users may have also encountered a security warning when trying to navigate to the FPPT. The tool was previously found at a site with a security certificate that was out of date. The tool has been relocated, and the links from our N.C. Forest Service website have been corrected. If you experience any problems/errors or have a group of 10 or more wanting training on the tool, please contact Alan Coats at alan.coats@ncagr.gov.



Blog on Building Skidder Bridges

A great blog post, "[Building Skidder Bridges for the WAC Bridge Loan Program](#)" written by Kris Brown of the New York Watershed Agricultural Council provides an excellent look at the process of building wooden skidder bridges.

The blog features a step-by-step construction process of wooden bridgemats and includes other helpful links to a bridge design and specifications.

These portable bridges help to protect water quality by keeping heavy logging equipment out of streams, or can be used as mats on stream approaches, which reduce the amount of rutting, compaction, and soil erosion.



Photo credit: Kris Brown, WAC

Forests, Water, and Beer...Oh My

The Forest Friendly Brewery Project known as "[Forest to Tap](#)" is a non-profit based project created in Minnesota, sponsored by numerous groups of natural resource professionals. This outreach project connects managed forests, clean water, and beer. Supporters recognize that good forest management translates into clean, healthy water. That clean, healthy water is used by wildlife, businesses, communities, and local breweries to produce craft beer!

This project's initiative is to use the program in conjunction with local breweries in the Mississippi Headwater's Basin of Northern Minnesota, to help spread awareness of how forest management affects water quality, and in turn, affects a lot more!

Dovetail Partners has a YouTube Channel where they post videos under a series called Forest Fast Break. Check out this YouTube video (pictured and linked above) titled,

"[Forest Fast Break: Water](#)"



Learn more about Forest to Tap [here](#).

What Are Geotextiles and How Can They Be Used on Your Harvesting Operation?



Have you ever graveled/rocked a road only to have to keep reapplying because the gravel that you originally applied was buried by traffic?

If so, you should consider geotextiles. Geotextile is a fabric that can be used on roadbeds to help keep fine soil particles from pumping upwards and getting mixed into gravel or rock.

There are 2 general types of geotextile underlayment used on roads: *Woven and Non-Woven*.

Woven geotextile underlayment is made of flat, thin strips of poly material (similar to silt fence). Those strips are literally woven together in a very tight grid pattern, creating strong tensile strength. This is used when building on poor/soft soils that cannot support heavy loads. The woven geotextile has stronger load-bearing capacity than non-woven. If you're building a road through mucky soft soils, then you want to use woven geotextile placed upon the native soil, to help carry the load of the roadbed fill material. It will allow water to pass through, but slowly.

Non-woven geotextile underlayment is felt-like cloth material that easily allows water

to pass through. It has lower strength than the woven and is easily ripped or punctured. It is used as a separation layer, or to allow filtration such as wrapping a French drain, or placing under gravel when the roadbed is already strong/firm and can carry the load by itself and is well-drained. In this case, non-woven geotextile simply separates the gravel from the soil, keeping the stone from mashing down into the roadbed. It is not providing structural carrying capacity.

Tests show it takes only 20% (by weight) of roadbed soil mixed into the surface gravel to reduce its load bearing capacity. This problem is usually due to the movement of water. When heavy loads cross the surface of a roadway, they essentially "pump" water upwards and move soil particles, which increases the likelihood of road failure. Re-application of rock and gravel costs money. Using products like geotextile underlayments reduce costs from lower gravel reapplication, and we all like to save money! Consider using geotextiles at your next job.

Reference the [BMP manual: Appendix 4](#) for more information.

Upcoming Events:

Western Region Events

July 17 @ DuPont SRF,
[Lake and Stream Ecology](#)

July 25 @ Hickory,
[Water Quality Conference](#)

Sept. 10-11 @ Marion,
[ProLogger Base Course](#)

Sept. 5-15 @ Fletcher,
[N.C. Mountain State Fair](#)

Sept. 18 @ Statesville,
[Using the Phosphorus Loss Assessment Tool \(PLAT\)](#)

Sept. 23-26 @ Asheville
[NASF Annual Meeting](#)

Piedmont Region Events

July 10 @ Raleigh,
[NC Catch](#) (Caring for Aquatics Through Conservation Habits)

July 28-Aug. 3 @ Raleigh,
[NCF Envirothon](#)

Aug. 24 @ Raleigh,
[Shell-berating Turtles](#)

Aug. 30 @ Chapel Hill,
[Registered Foresters Exam](#)

Sept. 19 @ Clinton, & Oct 11 @ Raleigh,
[Using the Phosphorus Loss Assessment Tool \(PLAT\)](#)

Eastern Region Events

July 11 @ Beaufort,
[Social Science Basics for Coastal Managers](#)

July 18-19 @ Weldon,
[North Carolina and Virginia Forest Landowners Conference](#)
(Register by July 12)

Sept. 21-28 @ several local events,
[National Estuaries Week](#)

Oct. 2-4 @ Wilmington,
[NCFA Annual Meeting](#)

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

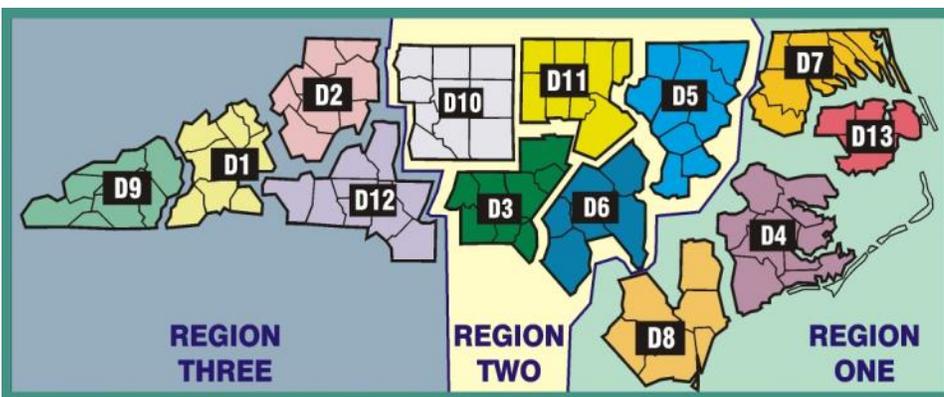
Go Out and Learn in the Forest

www.ncesf.org

Locate North Carolina Farm Products

www.ncfarmfresh.com

www.gottobenc.com



Western Region

Western Mountains (D9, D1)

[VACANT]: 828-665-8688 R3 office

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