YEAR IN REVIEW

Success stories and accomplishments N.C. Forest Service, Nonpoint Source & Water Quality programs 2024

TEMPORARY FORESTRY BRIDGE PROGRAM AND SERVICE

Temporary Bridges for Forestry Crossings Program

Funding was awarded from the U.S. Forest Service (USFS) through the Infrastructure Investment and Jobs Act, PL 117-58, Section 40804(b)(5) to establish a temporary bridge program that would minimize stream bed and bank disturbance on non-federal and federal lands. The N.C. Forest Service (NCFS) used this award to develop and deploy a cost share program for primary and/or secondary forest product operators to purchase temporary bridges. Funds were allocated using random draw method to 12 of the 97 applicants in three



Program handbook for the Temporary Bridges for Forestry Crossings Program.

regions of the state (Mountains, Piedmont, and Coastal Plain). Applicants were responsible for the purchase of a temporary bridge and were reimbursed 75% of the expenses, up to \$12,500. Applicants agreed to use the purchased bridge for temporary stream crossings during forestry operations over the next five years.



NCFS owned bridgemat used on a skid trail stream crossing.



A set of temporary bridges placed at a ditch crossing on a thinning operation.



Temporary bridge panels purchased by a Temporary Bridges for Forestry Crossings Program participant.

Bridgemat Loan and Education Service

The NCFS also continued to loan portable, temporary bridgemats to loggers as a service that demonstrates how well they can protect water quality on stream and ditch crossings. Throughout 2024, records of NCFS owned bridgemats were used to protect four waterways on four logging operations, and the bridgemats provided access to 49 acres.







EDUCATION, TRAINING AND OUTREACH

- Participated in more than 20 events reaching more than 500 people to deliver forestry and nonpoint source pollution prevention messages across the state.
- Provided outreach in educational settings spanning students from sixth grade to collegiate level.
- Supported N.C. Forestry Association's (NCFA) ProLogger Program by training 64 loggers at the base courses.
- NCFS staff were filmed discussing forest road construction for a continuing education segment of the 2025 ProLogger module to be viewed by more than 1,200 ProLoggers.
- Engaged with NCFA Sustainable Forestry Teachers Experience, Division of Water Resource's Surface Water Identification Training Course, consulting foresters and forest industry programs.
- Joined as a new committee member of ForestHer NC Planning Committee to assist with outreach program delivery.
- Forged new connections with N.C. A&T University and guest lectured at N.C. A&T University, N.C. State University and Wayne Community College.



NCFS delivered a forest water quality message and assisted with tree and bird identification during a ForestHer event in Currie, NC.



Forestry students at Wayne Community College participating in a NCFS led field lab on forestry best management practices.



N.C. State University forestry operations lab on an active operation in Moncure, NC where NCFS staff discussed forestry operations and best management practices.



Discussing forestry career paths following N.C. A&T University quest lecture.

PROVIDED TECHNICAL ASSISTANCE

The NCFS provided technical assistance on a variety of BMP, nonpoint source pollution prevention and forest water resource topics. Examples of technical assistance we provided include:

- Educated an adjoining landowner by describing which BMPs were in place to minimize erosion and sedimentation from a timber harvest in the Western North Carolina mountains (pictured right).
- Provided preharvest planning advice and demonstrated use of the Forestry Preharvest Planning Tool.
- Contributed forestry information and data to the NCDEQ-DWR River Basin Water Resources Plans.
- Served as a member of the Sediment Control Commission's Technical Committee and provided recommendations to improve/ update erosion control standards.
- Assisted NCFS Bladen Lakes State Forest with the planning and post construction soil stabilization of a new access road. The construction and NCFS staff were filmed by NCFA for use in the 2025 ProLogger education module.
- Reviewed a technical report of the Interagency Wild and Scenic River Coordinating Council titled Water Quality Management and Protection for Wild and Scenic Rivers.
- Provided input to a Climate Forestry BMP Summit held by Massachusetts Department of Conservation and Recreation as they gathered information for their forestry BMP manual update.
- Compiled water quality inspection records and produced four quarterly reports describing compliance status with Forest Practices Guidelines Related to Water Quality. Reports were shared with forest industry representatives across the state.



Timber harvest where BMPs applied were explained to the adjoining landowner.



NCFS and U.S. Army Corps of Engineer representatives on a forest road during the construction phase.

EMERGENCY RESPONSE

NCFS staff have the honor of serving people by responding to in-state and out-of-state emergencies such as wildfires and hurricanes as part of incident management teams (IMTs). IMTs are crucial to the management of large-scale emergency response incidents. Water Resources Branch staff assisted in these incidents for 2024:



Pioneer fire in Chelan County, Washington as a Geographic Information Systems Specialist.



Hurricane Debby in North Carolina as a Geographic Information Systems Specialist and a Situation Unit Leader.

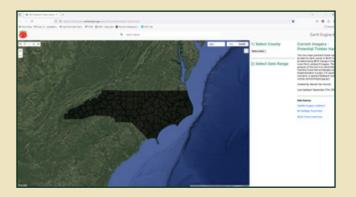


Hurricane Helene in North Carolina as a Geographic Information Systems Specialist and a Situation Unit Leader.

BMP IMPLEMENTATION ASSESSMENTS ON LOGGING SITES

The fifth cycle of statewide forestry BMP implementation assessments is underway. These surveys reflect various forest operations conducted across the state. In this cycle, we will capture data from 226 tracts where a forest operation recently occurred. Some highlights from 2024 include:

- Created a Google Earth Engine web application to identify potential BMP survey sites in each county.
- Created an ESRI® ArcGIS web application Experience Builder for NCFS staff to better disseminate and promote utility of BMP implementation data.
- Completed 43 survey assessments in 22 counties. This completes 60 surveys for this project.



Screenshot of the Google Earth Engine web application.



Screenshot of the ESRI® ArcGIS web application Experience Builder web application.

WATER QUALITY AND EROSION AND SEDIMENT CONTROL SITE INSPECTIONS

For FY23-24, the following results were observed by the NCFS while conducting inspections of forestry related, land disturbing activities to determine compliance with the standards of the Forest Practice Guidelines Related to Water Quality ("FPGs": 02 NCAC 60C .0100 to .0209), as part of the N.C. Sedimentation Pollution Control Act.

Type of operation	In-compliance	Out-of-compliance	Total
Timber harest: Active	1,426	6	1,432
Timber harvest: Completed	603	10	613
Reforestation and site prep	176	0	176
Other*	177	0	177
Sub total	2,382	16	2,398
Re-inspections, all types	n/a	n/a	2,594
Grand total, all inspections	n/a	n/a	4,992

^{*} Other activities include silvicultural management practices such as precommercial thinning, crop-tree release, herbicide or fertilizer application, prescribed burning or forest road construction not associated with a timber harvest.