



State and Private Forestry Fact Sheet North Carolina 2021



Investment in State's Cooperative Programs

Program	FY 2020 Final
Community Forestry and Open Space	\$583,250
Cooperative Lands - Forest Health Management	\$5,724,848
Forest Legacy	\$4,825,000
Forest Stewardship	\$208,102
Landscape Scale Restoration	\$917,822
State Fire Assistance	\$1,483,066
Urban and Community Forestry	\$565,321
Volunteer Fire Assistance	\$520,516
Total	\$14,827,925

NOTE: This funding is for all entities within the state, not just the State Forester's office.

The N.C. Forest Service continues to protect, manage and promote forest resources for the citizens of North Carolina through the use of proactive measures that include creating fire adapted communities and restoring fire adapted ecosystems; reducing the risk of wildfire; identifying, managing and reducing threats to forest and ecosystem health; enhancing the benefits and sustainable management of urban forests; conserving working forestland; and, sustaining the economic, environmental and social benefits of North Carolina's forests.

Program Goals

- The cooperative programs are administered and implemented through a partnership between the State of North Carolina, the USDA Forest Service as well as many other private and government entities. These programs promote the health and productivity of forestlands and rural economies. Emphasis focuses on timber and other forest products, wildlife, water resources, rural economies and conservation practices.
- The overarching goal is to maintain and improve the health of rural and urban forests and related economies, as well as to protect the forests and citizens of the state. These programs maximize cost effectiveness in program delivery and increase forestland value and sustainability through partnerships, doing so in a voluntary and nonregulatory manner.

Key Issues

- Promotion of the expansion of forest products markets both domestically and internationally. A key component of this effort is timely forest inventory and analysis (FIA) data. This effort should be maintained at current levels or enhanced to provide the most current information. Another key component is the education of landowners to the numerous benefits of forest certification.
- Providing technical assistance to a changing woodland owner demographic to keep working forests working.
- Continued development of ecosystem markets in collaboration with state agencies and nongovernmental organizations (NGOs), as well as federal partners such as the Department of Defense.
- The N.C. Forest Service and our military partners have a mutually beneficial relationship. The agency's goals of "keeping working forests working" and forest conservation closely align with efforts to maintain our military's training capacity. To reach these goals, both groups must continue to effectively reach out to private woodland owners.
- Population growth, land use change and development patterns continue to complicate land management and natural resource conservation efforts.
- Continued outreach to an urbanizing and growing population about the multiple benefits that forests provide to North Carolina is needed.

- Providing technical assistance, education and outreach to communities to enhance the benefits and sustainable management of urban forests.
- With 13.5 million acres, North Carolina leads the nation in wildland urban interface (WUI). Many of the thousands of communities across the state face WUI hazards. Efforts to prevent and mitigate hazards and raise awareness are ongoing and need to be continued.
- Continued development and use of technology in the planning, response and reporting of wildfire risk and the impacts to timber, air, water and wildlife resources.
- Fleet management continues to be an agency priority and is critical to maintaining successful delivery of programs and services in North Carolina.

Forest Facts and Accomplishments

Selected Facts	Value	FY 2020 Accomplishments	Value
Population	9,535,483	Landowners Receiving Educational or Technical Assistance	13,872
Acres of Forest Land	18,750,217	Acres Covered by New or Revised Forest Stewardship Plans	8,100
Acres of Nonindustrial Private Forest Land	13,969,000	Acres in Important Forest Resource Areas Covered by New or Revised Stewardship Plans	3,776
Number of NIPF Landowners	525,000	Volunteer Fire Departments Assisted	250
Acres of Federal Land Under State Fire Protection	1,900,000	State Fire Communities Assisted	490
Acres of Private Land Under State Fire Protection	15,601,438	Coop Forest Health Acres Protected	24,827
Number of Rural Fire Departments	1,325	Forest Legacy Project Acquisitions	0
Cities and Towns	553	Communities Provided Urban Forestry Program Assistance	117
Forest Based Employment	74,975	Population Living in Communities Provided Urban Forestry Program Assistance	4,004,501
Economic Impact of Forestry (by rank)	1	Urban Forestry Volunteer Assistance	88,108
State Forestry Budget (All Sources)	65,802,285		

Program Highlights

Cooperative Fire Protection

Firewise USA® continues to be a strong program in North Carolina with 38 active communities in the state. The Firewise USA® program also receives promotional assistance through four Resource Conservation and Development (RC&D) Councils across Western North Carolina, which receive grant money through the U.S. Forest Service to promote mitigation activities in North Carolina. N.C. Forest Service wildfire mitigation staff have given presentations to nearly 30 different groups comprised of private homeowners, the general public and other fire service officials. Highlights include a Carolina Weather Group podcast and various Firewise USA® and simTable presentations. In 2020, 17 assessments have been completed using the Community Assessor for the South (CAfS).

The Federal Excess Personal Property program assists North Carolina fire departments in acquiring and placing fire equipment in rural communities throughout the state. The N.C. Forest Service administers Volunteer Fire Assistance program funds to support the fire prevention and protection efforts of rural community fire departments that support firefighting resources throughout North Carolina, including the development of Community Wildfire Protection Plans (CWPPs). There are currently 899 approved CWPPs at the fire district level in the state, and 94 are in various stages of development. Working with federal partners, the N.C. Forest Service Fire Environment program continues to be a leader in fire research, improving the safety of firefighters and the public through science-based applications.

Economic Action

The N.C. Forest Service continues to provide support to North Carolina's \$33.6 billion forest products industry while also increasing efforts to attract new industry to the state. North Carolina's forest products manufacturing industry supports about 150,000 full- and part-time jobs in the state with a payroll of \$8.2

billion. International markets play a vital role for the forest products industry as North Carolina benefits from export activity with 120 nations, representing approximately \$1.44 billion in trade value. The forest sector in North Carolina contributes about \$274.2 million to state and local taxes and \$850.4 million to federal taxes.

Engaging Women Woodland Owners

ForestHer NC is a North Carolina partnership effort centered around educating and engaging women landowners about forestry, wildlife, water resources, native plants and other natural resource-related topics. The Forest Stewardship program along with representatives from the N.C. Wildlife Resources Commission, N.C. State Extension, Audubon, National Wild Turkey Federation, Sustainable Forestry and Land Retention Initiative, and USDA-APHIS have all partnered with ForestHer NC. The partnership has shown great success. During FY20, 500 landowners participated in ForestHer NC workshops, and 85% of those participants were women. Virtual workshops are being conducted regularly, and workshop participants can also connect with each other via the ForestHer NC Facebook page.

Forest Health Protection

The N.C. Forest Service is responsible for assisting forest landowners in the detection and control of destructive forest insects and diseases. Services are provided to landowners at the county and district levels with NCFs forest health staff providing training and professional/technical expertise in identification, biology and control of destructive insect and disease epidemics. The program has been increasingly challenged by threats from nonnative invasive forest pests. Established nonnative invasive forest pests in North Carolina include balsam and hemlock woolly adelgids, beech bark disease, dogwood anthracnose, butternut canker, Phytophthora root rot and gypsy moth, and more recently emerald ash borer, redbay ambrosia beetle/laurel wilt and thousand cankers disease. Several nonnative invasive pests found elsewhere in the U.S. -- including Asian longhorn beetle, spotted lanternfly and sudden oak death -- are also capable of impacting our forests in the future. Forest health staff, in collaboration with other state and federal agencies and universities, monitor the movement of these pests through trappings and surveys. Staff then alert and train N.C. Forest Service personnel, forestry, agricultural and environmental interests, and landowners to recognize and deal with these pests. In FY20, N.C. Forest Service personnel surveyed 10.0 million acres of forestland for insects, diseases and storm damage. Nearly 6,100 hemlocks were treated on state and private lands for control of hemlock woolly adelgid.

Forest Legacy

There are currently 10 projects involving 18 tracts in the North Carolina Forest Legacy program. The tracts include 11,526 acres. Of these acres, 4,260 acres are owned in fee, and 7,265 acres fall under a "working forest conservation easement."

Forest Stewardship

North Carolina has 157,713 acres in forestland currently covered by the North Carolina Forest Stewardship program. Priority forest resource areas, as identified by the North Carolina Forest Action Plan, are comprised of 92,615 acres. FY20 monitoring data indicate that these Forest Stewardship plans are being implemented on at least 1,065 acres.

In FY20, the Forest Stewardship program added 78 new and revised Forest Stewardship plans, addressing multiple resource management objectives on 8,100 acres. According to the North Carolina Forest Action Plan, these stewardship plans addressed more than 3,776 acres that are considered priority forest resource areas.

The N.C. Forest Stewardship and N.C. Tree Farm programs continue to work together, sharing data and technical assistance that will ideally make the N.C. Tree Farm's third-party forest certification available to Forest Stewardship program participants. A secondary result is the leveraging of each program's strengths related to landowner assistance and outreach.

The N.C. Forest Stewardship program was awarded funding from the U.S. Forest Service through the 2020 Forest Stewardship Supplemental Grant. A portion of these funds are being used to provide cost assistance to North Carolina landowners receiving N.C. Tree Farm certification. During FY20, the grant provided cost assistance to 52 landowners with a combined total of 27,186 forested acres.

Landowner Assistance

Through the N.C. Forest Service Information, Education and Outreach program, rangers and foresters statewide provide valuable information to forest landowners and the public about N.C. Forest Service programs, services and forestry-related issues. Each year, N.C. Forest Service personnel participates in outreach events, engaging farmers, forest landowners and the public across the state. These events include landowner workshops, natural resource conferences, media interviews, newspaper and magazine articles, a variety of advertising opportunities, state and county fairs, as well as other community connections. In FY20, the number and frequency of outreach events were significantly impacted by the COVID-19 pandemic. While in-person events were limited, many landowner workshops, media interviews, and other community connections were continued virtually. This virtual connection not only allowed for continued delivery of information, programs and services but also introduced virtual technology and tools to assist with growing our reach with farmers, forest landowners and the public in the future.

North Carolina Climate Risk Assessment and Resilience Plan

In June 2020, the State of North Carolina released a comprehensive assessment of climate change projections, hazards and non-climate stressors facing North Carolina. The assessment recommends resilience strategies and solutions. A key component is nature-based solutions focusing on natural and working lands, including a path forward to protect, restore and enhance forestlands including urban forests, wetland forests and pocosins. Forestland is recognized as the predominant land use in North Carolina and is vital to ensuring resiliency in the face of climate change.
<https://deq.nc.gov/energy-climate/climate-change/nc-climate-change-interagency-council/climate-change-clean-energy-17>

North Carolina Woods for Wildlife Conservation

The North Carolina Woods for Wildlife Conservation Initiative strives to engage more woodland owners in forest management and certification; to enhance habitat for species of conservation concern; and, to promote the conservation of imperiled habitats including longleaf and bottomland hardwood forests. The project area includes 14 counties in southeastern North Carolina, focusing on American Forest Foundation's Opportunity Areas (as designated in the Southern Wildlife at Risk report), Working Lands for Wildlife focal areas, and priority counties identified by the project's partners. Through FY20, this project has helped to improve 695 acres of bottomland hardwoods; complete 13,719 acres of prescribed burning in longleaf forests; improve 3,624 acres of longleaf; restore 6,713 acres of longleaf through plantings; and, reach more than 16,000 landowners and citizens through outreach, technical assistance, management plan preparation and cost share assistance. Additionally, 17,205 acres have been recertified or certified for the first time on 43 Tree Farms. Note: The Southern Wildlife at Risk report is available at https://www.forestfoundation.org/stuff/contentmgr/files/1/7947a526cb2ff17daec756b86b866549/misc/aff_southernreport_web.pdf.

Renewable Energy

North Carolina remains heavily engaged in utility-scale wood pellet production with operations based in the Eastern portion of our state, including four facilities currently producing wood pellets for electricity generation by Western European power companies. A deep-water marine terminal at the Port of Wilmington facilitates wood pellet transport to European ports. Additionally, numerous combined heat and power (CHP) projects using woody biomass as a primary feedstock source are currently in operation across North Carolina. North Carolina is at the center of local and international debates surrounding the utilization of wood pellets as a renewable energy source to meet EU obligations under the Paris climate agreement.

Shared Stewardship

The N.C. Forest Service continued to develop partnership opportunities related to a Shared Stewardship agreement with the USDA Forest Service and Natural Resources Conservation Service, the N.C. Department of Agriculture and Consumer Services, and the N.C. Wildlife Resources Commission signed September 2019. The agreement provides a framework for federal and state agencies to collaborate better, focus on accomplishing mutual goals, further common interests, and effectively respond to the increasing ecological challenges and natural resource concerns in North Carolina. Through this Shared Stewardship agreement, the N.C. Forest Service is committed to a collective effort that will produce results that exceed what any one agency or organization could accomplish alone.

Urban and Community Forestry

The Urban and Community Forestry program continued its charge to promote the health and sustainable management of urban forests in North Carolina. This is accomplished through the delivery of grants, technical assistance, education opportunities and program support to municipalities, organizations, agencies, industries and private landowners. In FY20, 11 urban and community forestry cost share grants totaling \$160,230 in grant funding were awarded to communities and organizations to assist with funding projects that enhance urban forest management programs or that provide education and training. Six projects were completed with \$106,200 in grant funding and matched with \$256,100 cash and in-kind efforts, including more than 1,800 hours of volunteer service. Support and assistance provided to the North Carolina Urban Forest Council delivered 25 urban forestry educational, job training and outreach programs serving 855 attendees, a 41% increase over FY19. Direct urban forestry services provided to landowners and communities totaled 1,012. N.C. Forest Service staff, including 25 staff who are International Society of Arboriculture Certified Arborists, provided technical assistance to 144 communities. In FY20, 81 communities were awarded Tree City USA designations.

Water Resources

During FY20, the agency conducted 3,145 initial water quality compliance inspections on timber harvests and an additional 3,945 follow-up inspections. In addition, we completed 115 BMP monitoring site survey assessments, following a protocol established across the Southern Region for determining and reporting BMP performance. This effort is supported by a FY18 LSR Grant to evaluate erosion potential at stream crossings across varying degrees of BMP use. The N.C. Forest Service Water Resources Branch continued to proactively support stream crossing BMPs by loaning portable bridgemats to loggers. In FY20, agency bridgemats were used on 11 harvests, for 13 crossings, to access an estimated 828 acres of timber. Training for the year included co-instruction of 12 classes and 3 field labs for two colleges, covering a range of BMP topics and reaching 82 students. In addition, the N.C. Forest Service assisted with the production of an annual refresher training video module on streamside management zones and stream crossings for the N.C. ProLogger Program which reaches about 1,600 loggers annually. Approximately 5,000 seedlings and live stakes were planted along a restored reach of the Linville River on a State Forest. N.C. Forest Service staff wrote a peer-reviewed journal article that was published in 2020 as an outcome from a prior Redesign Grant. The article is titled "A Limited Rapid Assessment of Forest Regeneration in 24 Cypress and Tupelo Bottomland Swamps Following Clearcutting and Shovel Logging in the Coastal Plain of North Carolina," [FORESTS: 11(8), 854], <https://doi.org/10.3390/f11080854>. The NCFS Forest Water Quality program is funded through leveraged sourcing of state appropriations coupled with a vital annual allocation of USEPA-derived funds via the Nonpoint Source 319-Grant program, supplemented by occasional contributions from state grants, S&PF funds and/or LSR Grant awards.

Working Lands and Prescribed Fire Education Supporting Military Readiness

In FY20, the Working Lands program continued to focus on prescribed fire education, forging strong partnerships to support prescribed burning associations (PBAs). Despite limited ability for in-person training due to COVID-19, our prescribed fire education specialists have provided more than 650 combined hours of individual and small group instruction in the application of prescribed fire. We have provided prescribed fire tools and equipment to PBA members. Interest and participation from landowners have increased, resulting in more than 2,000 acres of prescribed fire applied by Eastern and Bladen Lakes Area PBA members. With strong interest around PBAs in other areas of the state, the N.C. Forest Service will continue to support and expand this concept. This initiative supports the military's training mission by promoting compatible-use private, working forestlands within the Eastern North Carolina Sentinel Landscape.

Contact Information



North Carolina Forest Service

Scott Bissette
Assistant Commissioner
1616 Mail Service Center
Raleigh, NC 27699-1616
919-857-4844
Scott.Bissette@ncagr.gov

US Forest Service Southern Region

Jan Davis
Deputy Regional Forester - State and Private Forestry
USDA Forest Service
1720 Peachtree Street, Suite 760S
Atlanta, GA 30309
202-860-6275
janette.davis@usda.gov
