



The National Cohesive Wildland Fire Management Strategy is a national collaborative effort to bring a broad cross-section of stakeholders together to address wildland fire management challenges. The Strategy directs wildland fire planning activities and has three primary goals: restore and maintain landscapes, develop Fire-Adapted Communities, and improve wildfire response.

Activity	Impact
Vegetation communities targeted for restoration	Shortleaf pine oak, pine-oak-heath, dry-mesic oak-hickory, and high-elevation red oak forests
# acres prescribed burned at Skull Knob (2014)	1,130
# acres prescribed burned at Woods Gap (2014)	1,700
# acres prescribed burned at Lake James State Park (2014)	225

Partnership Success with the Southern Blue Ridge Fire Learning Network

The Southern Blue Ridge Fire Learning Network (SBR FLN) engages land management agencies (federal, state and private) in capacity strengthening across jurisdictional boundaries to restore prescribed fire on historically fire-dependent landscapes in the Southern Blue Ridge ecoregion. SBR FLN partners agree to:

- Use monitoring, modelling, and expert opinion to develop and implement management plans supported by partners, stakeholders, and local communities.
- Establish and maintain a network of monitoring plots for evaluating efficacy of management activities, guiding management, and sharing results with the public to establish understanding and support for the work.
- Collaborate with Consortium of Appalachian Fire Managers and Scientists so partners are well informed of research findings and so additional research questions that can enhance restoration efforts are addressed.

The four targeted vegetation communities for restoration are shortleaf pine-oak, pine-oak-heath, dry-mesic oak-hickory and high-elevation red oak forests. The focus areas identified within the region, where fire treatments are ecologically most important and most

effective, are: the Balsam Mountains, New River Headwaters, Central Blue Ridge Escarpment, Northern Escarpment, Great Smoky & Unaka Mountains, South Mountains, Nantahala Mountains, and the Southern Blue Ridge Escarpment.

South Mountains

The South Mountains landscape includes approximately 40,000 acres that are managed by the NC Wildlife Resources Commission (NC WRC) and the NC Division of Parks and Recreation (NC DPR). It is typical of the southern Blue Ridge with fire history and forest transition from the piedmont hills through the foothills. This landscape is made up of narrow ridges and ravines with steep slopes to 3000 feet elevation. Common forest types include chestnut-oak, montane oak-hickory, pine/oak-heath, rich cove forests and acidic coves.

When the Fire Learning Network started in 2002, NC-DPR's fire management program at South Mountains State Park was well established; however, most state park burn units were small. NC-WRC was burning several hundred acres, but there was no collaborative fire management across agency boundaries. Now, burns are larger and safer and have a focus on forest types that benefit most from burning.

Success stories highlight regional wildland fire accomplishments that support implementation of the National Cohesive Wildland Fire Management Strategy in the Southeast. The stories demonstrate how the Southeast is improving its "fire resiliency" through technology, education and outreach, forest management, collaboration, and more. Success stories also serve as a model for other communities to follow.

Skull Knob, 1,130 acres, and Woods Gap, 1700 acres, have been the largest cooperative burns to date (April 2014) for the NC-WRC and NC-DPR. The partners are using burn priority mapping to determine burn units and unit size. The objectives of this project are forest restoration in fire-adapted oak and pine communities and fuels reduction on the landscape. These burns have emphasized mixed-severity fire, and post-fire monitoring has revealed that in one 900-acre unit, savannah-like conditions are apparent after only two burns. Field crews acknowledge that burning combined units increases efficiency and that hand-held GPS technology is useful in keeping track of unit personnel when hand-igniting large, complex units. Crews are utilizing HY-SPLIT smoke modeling with Bill Jackson, U.S. Forest Service, to increase burn efficiency and tracking.

Central Blue Ridge Escarpment

At the Central Blue Ridge Escarpment, multi-agency collaboration, large scale burns, expanded burn windows, and improved smoke modelling, all important to large scale ecosystem management. Within this landscape, Lake James State Park carried out the first prescribed burn in the history of the park on 225 acres in 2014, beginning the process of restoring its fire dependent landscape, while also reducing the threat of future catastrophic fires.

Thanks to the work done by local North Carolina Forest Service staff, burns like the Lake James prescribed burn were the first occasions that NC-DPR incorporated privately-owned properties in any of its fire management activities. Although the acreage was comparatively small, it was vital to get all of the stakeholders to the table before attempting to burn large units. Having successfully “scaled out to get buy-in”, it should now be easier to scale up and increase the size of future burns. In fact, collaborative fire management between NC-DPR and the North Carolina Forest Service is now in development on more than 1,000 additional acres of NC-DPR property at Lake James.

NC-DPR is also working with North Carolina Forest Service staff to develop forest restoration plans on several of these burn units. The long term goal for all of these sites is to move toward mixed-severity, growing season fires, with an emphasis on natural community restoration. As noted by NC-DPR biologist Marshall Ellis: “Even after decades of prescribed fire, we’ve failed to change trajectories in heavily fire-suppressed ecosystems. Instead, all we’ve done is to push leaf litter around with low intensity, dormant season

fires. We are fundamentally rethinking fire severity, fire effects, and seasonality. And it’s working!”

Challenges such as negotiating agreements so private lands could be included with public lands in state park prescribed burn units required a new level of collaboration with the NCFS. “The FLN has really opened the door for collaboration, and I just can’t say enough about the help we’ve gotten from the NC Forest Service, the NC Wildlife Resources Commission, and TNC, which is allowing us to do things that we’d have never pulled off on our own,” said Marshall Ellis.



Prescribed fire at Skull Knob. Credit: North Carolina Wildlife Resources Commission.

Additional Information:

2012 Fire Learning Network Field Guide describing the Southern Blue Ridge regional network and each of its landscapes:

<http://www.conservationgateway.org/Files/Pages/southern-blue-ridge-fln-l.aspx>

Summary of 2012 Fire Effect Monitoring for the SBR FLN:

<https://www.frames.gov/rcs/15000/15424.html>

8th Workshop (2013) of the Southern Blue Ridge Fire Learning Network: <http://2013sbrfln.weebly.com/index.html>

An Assessment of the Ecosystems of Nantahala-Pisgah National Forest & Surrounding Lands (2013) at: <https://www.conservationgateway.org/ConservationPractices/FireLandscapes/FireLearningNetwork/NetworkProducts/Pages/Final-Report-SBR-Assessment-Kelly-2013.aspx#sthash.JDjaV4dK.dpuf>

HYSPLIT Smoke Model:

http://www.arl.noaa.gov/HYSPLIT_wildfire.php

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Partners: The Nature Conservancy, U.S.D.A. Forest Service, U.S. Department of the Interior: Bureau of Indian Affairs, Bureau of Land Management, US Fish and Wildlife Service, and National Park Service, Consortium of Appalachian Fire Managers



Southern Regional
Extension Forestry

