# Scaling-up to Promote Ecosystem Resiliency

SPER fire and forest restoration projects are rooted in collaborative partnerships. Treatments are part of long-term plans, and leverage work on adjacent federal lands. The second round of SPER, now underway, builds on earlier SPER work and on that of the Fire Learning Network and prescribed fire training exchanges. The treatments improve system health and resiliency and contribute to longer term progress by strengthening partnerships and increasing workforce capacity.

All of the projects target treatments to key areas that help restore and maintain resilient landscapes. The projects in California, New Mexico and Oregon focus treatments on sites that also provide critical support to fire adapted communities in those landscapes. And in a variety of ways, all of these projects also support improved response to wildfire by bringing diverse partners to work together, by increasing contact between fire practitioners and communities, and by augmenting the fire workforce.

In short, SPER projects are on-theground embodiments of the Cohesive Strategy emphasis on a broad-based, integrated approach to fire management.

SPER is supported by the *Promoting Ecosystem Resiliency through Collaboration: Landscapes, Learning & Restoration* cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior. For more information, contact

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Partners work by accelerating the development of prototype **fire adapted communities** in a landscape context ... accelerating **integrated efforts** for restoring and maintaining resilient landscapes through multi-scalar collaboration, effective planning processes and transformative learning and networks ... building social and **operational capacity** for response to wildland fire in a changing world ... accelerating the adjustment of landscape-level strategies for a changing climate ... integrating science, cultural knowledge and adaptive learning to **resolve key barriers** to transformative resilience.

#### Ashland Forest Resilience Partnership

An exceptionally dry winter followed by dry spring and early wildfire season closed the anticipated spring burn window. Over the winter, however, this project was able to bring together several parties who had not previously been able to work together on treatments. With mentoring from South Central FLN lead McRee Anderson, the group was able to collaboratively develop burn objectives and build trust; this work will be reflected on the ground in coming years.

#### Trinity Integrated Fire Management Partnership

The first of two large parcels to be treated has been identified and drawing up the burn plan is under way. Several staff from the Watershed Center have also taken part in training with the Forest Service to keep their qualifications current and enable them to assist in burn implementation, and an agreement to share resources on burns has been completed.

#### Collaboration to Reduce Risk in the Fire Prone S. Sangre de Cristo Mts.

This project identified 52 priority acres where treatments will provide community fuel breaks or protect evacuation routes. Agreements and treatment prescriptions were then developed for each of the nine landowners involved. Treatments have begun on three of the parcels, and one has been completed.



#### Ozark Pine Woodlands & Glade Restoration Project

Crews from the Arkansas Natural Heritage Commission, Ozark Ecosystem Restoration Project and The Nature Conservancy cut, piled and burned invasive eastern redcedar from a quarter-mile of shoreline glade and 10 acres of woodland glades scattered through the project area. With the Arkansas Game & Fish Commission, they also conducted treatments for a dozen invasive species on about 40 acres of old fields, and along streams and roads. The burn plan for a 1,000-acre fall burn was also completed.

Two prescribed fire training exchanges (TREX)—which complete treatments while building long-term local capacity—were also supported by SPER this spring. For more information on those, see the TREX pages & Appendix C.

#### Allegheny & Potomac Highlands Restoration Project

The 1,400-acre Big Wilson South burn unit, one of the largest in the crossjurisdictional (TNC and Forest Service) Warm Springs Mountain Restoration Project, was completed this spring, along with 150 acres at Douthat State Park and 20 acres of high-elevation grasslands on a Virginia wildlife management area. Another two burns (400 acres) were completed by Department of Game and Inland Fisheries staff who received training through SPER in 2013.



Treatments conducted with SPER support this spring include fuels reduction for community protection, and thinning and prescribed fire treatments for habitat restoration. *Left*: In Santa Fe County, an access road to three homes was thinned (pictured here post-treatment, awaiting chipping). Before treatment the road was tunnel-like and wildland fire engines had insufficient room. An access road to a community was treated as well, with large fuels removed, and slash laid down to combat erosion and promote understory regeneration. *Center*: In the Ozarks, eastern redcedar was mechanically removed, re-opening 10 acres of glades scattered through the forest. *Right*: The Blue Suck Burn was the first prescribed fire used in Douthat State Park; the small, low-complexity burn in a heavily-used part of the park provided a good opportunity for new partners to work together, and to engage in public outreach at the same time.

## **Restoring the Natural Role of Fire**

Fire has been an essential natural process in Appalachian oak and pine forests for thousands of years. Lightning caused some fires, and Native Americans intentionally set others. Fires opened the forest understory, which increased plant diversity, improved browse for wildlife and made travelling easier. Early European settlers continued to use fire as a tool to shape their surroundings. Acorns, blueberries and blackberries are important food sources for white-tailed deer, wild turkeys, black bears, songbirds and many other wildlife species. Fire increases fruit production in some plants and helps improve seed germination for others.

Fire removes some or all of the thick layers of leaf litter that can inhibit the germination of native grasses and wildflowers. A series of controlled burns can thin crowded forests, resulting in less severe disease and insect pest outbreaks.

### FLN

I Appliabilism Fire Learning Network engages federal, state and private land management agencies, exademic institutions, and non-profit nos in a collaborative effort to enhance capacity to implement ecological fire management. Partners in Virginia and West Virginia Incident USEA Forest Relative Constrainty, Virginia Department of Constraint, Virginia Department of Constray (Nanis) Department of Constray of International Park Revice, U.S. High-stroke, Handrow Harving, Virginia Department of Constray, West Virginia Department of Natura Resources, National Park Revice, U.S. High-stroke, Malona West Service, Alexa Department of Parkers Natives II.S. Selfordia and West Natives and Virginia Parker, Virginia Department of Constray (Natives) Department and Virginia Parker, Virginia Department Alexandria Parker, Virginia Department Alexandria Virginia Parker, Virginia Department Virginia Parker, Virginia Department Alexandria Virginia Parker, Virginia Virginia Parker, Virginia Virginia Vir

Teams of skilled fire experts are using controlled burns to safely reintroduce fire to these forests. Burns take place only when the weather conditions are best to control smoke, manage fire behavior and ensure the safety of the fire team, nearby

residents and private property.

This project is supported by Profile of the support of the support



#### Leveraging Lessons Learned

"We took our SPER proposal and used it as a model to apply for fuels treatment funds in socioeconomically disadvantaged McKinley County. That project will support fuels treatments in two high-risk communities in the county that will be cost-share with landowners (similar to the SPER project) to reduce fuels in Firewise zone 1. The Timberlake Ranches community does have communal lands that could lend itself to a fuelbreak treatment as well. That project will start in earnest in August, with discussions of the details with landowners and communities."

## Controlled Burning



Why Use Controlled Burns? the right place at the right time, fire is a land anagement tool that can offer numerous benefits people and wildlife. Many plants and animals drot on the rojewarding rook that fire and play in the invironment. We fire can also have damaging effects people, homes and norigbborhoods, and cannot eleft unmanaged. Teams of skilled fire experts a controlled burns to addprove thore this natural access that our forests need to be healthy By dueing leaf litter and downed littes but increases



The Central Appalachians FLN produced both fixed interpretive signage (*left*) and brochures (*above*) explaining the role of prescribed fire in Appalachian forests. These were used to support outreach at SPER-supported burns, with some of the signs specifically tailored to the burn units selected.