

Fire Learning Network

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 & 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 & **adaptive learning** to resolve key barriers to transformative resilience.

The Fire Learning Network is a network of hundreds of partners in 30 landscapes across the country; many of the landscapes work together in regional networks, and all are committed to sharing their challenges, expertise and learning nationally. FLN members collaborate to do what is needed locally to promote the resiliency of fire-adapted ecosystems and the safety of the communities that are a part of them. The efforts needed to do this range from collaboratively setting goals and making plans to meet them, to building, integrating and sharing the science and local knowledge needed

for adaptive management decisions, to public outreach that builds support for those actions, to training that provides the workforce for them, to the relationships that support the safe and efficient implementation of restoration treatments. With over 12 years of innovation and learning behind it, the FLN has built a strong foundation for a robust and evolving body of work. As regional FLNs have matured, they have taken a variety of paths, depending on local needs and partners, and the barriers and opportunities they face. Partnerships built through the FLN now form

the basis for a wide variety of work that promotes both ecosystem and community resilience.

The FLN's methods and partnerships have given rise to other successful programs under the Promoting Ecosystem Resiliency through Collaboration (PERC) cooperative agreement, such as prescribed fire training exchanges (TRES) starting in 2008 and Scaling-up to Promote Ecosystem Resiliency (SPER) implementation projects starting in 2011. Most recently, the lessons learned from the FLN have been applied to the formation of a new and complementary network, the

Fire Adapted Communities Learning Network, which furthers the Cohesive Strategy goal of making human communities part of the ongoing work in fire management for safer, more resilient natural and human systems. (The article "Adopting a Learning Network Approach for Growing Fire Adapted Communities" in *Fire Management Today* describes this.) Beyond PERC, the FLN is nurturing and steering a new generation of prescribed fire councils. And, on a yet larger scale, FLN strategies can be found in the Cohesive Strategy revised regional implementation plans.



Southern Blue Ridge FLN partners break for lunch at Jumping Off Rock during a field tour of Jocassee Gorges at the May regional workshop.

In large part due to the work of this FLN, burning in the region is becoming more routine: For example, this spring the north rim of Tallulah Gorge had prescribed fire for the third time in seven years. Another 2,000-acre unit just five miles to the west received fire the same day. This was undoubtedly the most acreage burned in a single day in Rabun County, GA. And despite the smoke, there were no complaints from the public.



Data are recorded during a plant community monitoring project jointly carried out by The Nature Conservancy and the Forest Service on the Ozark-St. Francis National Forest. In both the South Central and Southern Blue Ridge FLNs, partners have developed uniform monitoring protocols across wide landscapes to support adaptive management.

The Fire Learning Network is supported by *Promoting Ecosystem Resiliency through Collaboration (PERC): Landscapes, Learning & Restoration*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior. For more information, contact Lynn Decker (ldecker@tnc.org).

EXAMPLES FROM SPRING 2014

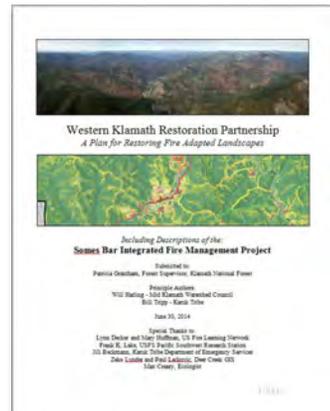
EFFECTIVE COLLABORATIVE PLANNING: WESTERN KLAMATH MOUNTAINS

A series of landscape planning workshops started last fall was hastily suspended one day into the second workshop when the first of several wildfires broke out at the edge of town. This spring, the Western Klamath Restoration Partnership returned to the task with renewed vigor, completing the remaining five workshops in five months. Along the way, the group developed a set of guidelines for itself, which exemplify the way the FLN can work:

- We are results-oriented.
- We work toward having beneficial fire operating throughout our landscape.
- We incorporate cultural values and traditional ecological knowledge into our work.
- Our activities seek to build our local workforce.
- We use the Open Standards for the Practice of Conservation as our guide to adaptive management and collaboration.

By June they had outlined three integrated projects, one in each national forest district in the landscape. While the projects are at different stages of development, each will:

- include both public and private lands;
- include an integrated workforce of public land managers, tribal members, Fire Safe Council members and other community members;
- use three types of treatments for fuel reduction and upslope restoration: manual fuel removal, mechanical fuel removal and prescribed burning;
- prioritize treatments based on multiple local values; and
- include a small business coaching element using principles of social entrepreneurship.



The Happy Camp project is the furthest along, with 40,000 acres of NEPA-ready projects, existing partnerships and an engaged Fire Safe Council.



LANDSCAPE LEVEL STRATEGY: RIO GRANDE WATER FUND

A landscape in northern New Mexico has been part of the FLN almost continuously since the network began in 2002. The scope—both geographic and in issues addressed—has been much less constant, as the FLN adapts to changing needs and opportunities. Partners there have worked deeply and locally in the Jemez Mountains, for example, but were also key leads in the regional Southwest Climate Change Initiative.

This year, the FLN has again embraced a new role and focus, and is playing a leading role in the Rio Grande Water Fund. The project is truly landscape-scale, encompassing the entire watershed (over 7 million acres) that serves the Santa Fe area. The partnerships are similarly broad, including a full range of stakeholders (see logos, right). The work of the Water Fund is innovative, as they seek to demonstrate a funding model that is sustainable and based on tangible benefits to the region, to conduct the treatments that will protect the water supply, forests and communities from wildfire. The work is also integrated, spanning all areas of the PERC agreement, bringing together the FLN, FAC Learning Network, prescribed fire training exchanges and SPER implementation projects in ways that complement and support each other.



MULTI-SCALAR COLLABORATION: SOUTH CENTRAL FLN ~ NW FLN

The South Central FLN supports robust working partnerships among state and federal land management agencies throughout the Ozark Mountains of Arkansas. Partners meet regularly to discuss a variety of shared management issues, and their collaborative work ranges from planning and burning together on individual projects to helping steer two Collaborative Forest Landscape Restoration Program projects.

The lessons learned in developing their program of cooperative work are now helping a landscape half the country away. The Northwest FLN in Oregon invited SC FLN leader McRee Anderson to mentor Forest Service and Conservancy partners in a workshop held this spring, planning a TRES they will jointly host.



Fire Adapted Communities Learning Network

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The Fire Adapted Communities Learning Network (FAC LN) fosters and manages a national network, models best practices at the local level, builds regional networks to support learning across communities of practice, synthesizes trends to advise programs and policies in support of fire adapted communities concepts, and builds support for a FAC approach among key stakeholders and leaders.

The FAC LN was launched at an April 2013 workshop, with eight “hub” organizations leading efforts in pilot communities in California, Colorado, Georgia, Minnesota, Nevada, New Mexico, Oregon and Washington. Those first eight pilot communities represent a cross-section of community fire management efforts in the US. The communities—of various sizes, with differing jurisdictional and regulatory structures, and unique cultural and institutional contexts—demonstrate a range of innovative approaches to community fire adaptation. Another 10 hub organizations joined the network in March 2014, guiding efforts

in communities in Arizona, California, Florida, Idaho, Montana, New Jersey and Texas. The addition of these organizations and communities to the network broadens both its geographic and contextual scope.

The FAC LN is grounded in the knowledge that in-person, interactive communications are the most effective way to make and move knowledge, best practices and innovations among individuals, institutions, communities and geographies. The hub organizations are thus a critical part of the FAC LN strategy: these local coordinating groups lead demonstrations of tools, programs and approaches in their communities, and they connect those communities to the national network to facilitate sharing and learning from peers. By leveraging, integrating and building upon existing FAC strategies, tools and programs, the FAC LN is an essential strategy for accelerating the growth and practice of fire adapted communities across the country.

Trial by Fire: Promoting Community Resiliency during the Mills Canyon Fire (WA)

The Chumstick Wildfire Stewardship Coalition created a customizable *After the Fire* toolkit to help homeowners and businesses prepare for flooding and other potential post-fire impacts. When the Mills Canyon fire started near Entiat, WA, Coalition director Annie Schmidt provided the materials to the Incident Management Team for use in public meetings and press releases. The kit was also shared with other FAC practitioners, so they could adapt it for their communities. In a blog about the kit, Schmidt stressed the importance of coordinating with IMTs early, and engaging other partners such as NRCS and the National Weather Service.

Toolkit: <http://afterthefirewa.org> Blog: <http://facnetwork.org/afterthefire-toolkit>

FAC PROFILE **Hub Organization: Florida Forest Service** **Pilot Community: Baker County, Florida**

The Florida Forest Service joined the FAC Learning Network in 2014 and is working with a county that has a long history of wildfire activity. Community members are also keenly aware of wildfire risk, and there is a spirit of teamwork and cooperation among all in county government and the forest management and wildland fire-fighting community.

Wildfire Prevention/ Mitigation Coordinator Ronda Sutphen of the Florida Forest Service shared her thoughts on the value of being part of the FAC Learning Network: “I see this in the long run as being able to showcase Baker County as a fire adapted community to the rest of the Florida Forest Service. The way we are set up with our mitigation specialists in each district, I think eventually they can take this model and expand it and ultimately we can become a fire adapted state through the support of the Florida Forest Service.”

Ronda also sees Baker County being able to expand their efforts by working with a number of community members, including civic leaders, to more broadly apply FAC concepts. She is excited to share the fire adapted communities message with others and learn what other hubs are doing in the field. “FAC made sense that when I first heard it. It was the approach we’ve all been looking at already but didn’t know what to call it. Now we know what a fire adapted community is and how to reach that goal.”

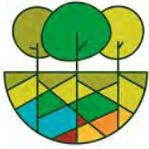
In their FAC LN work plan for the coming year, Florida Forest Service and its partners plan to hold a town hall meeting for community members to learn about FAC concepts and their importance to both Baker County and surrounding communities, integrate the concepts into Baker County’s CWPP, and conduct a mitigation mowing and burning demonstration for the community and media.

Florida FAC Learning Network Partners

Baker County Fire Department
Citizen Corps
Florida Division of Emergency Management
Greater Okefenokee Association of Landowners
North Florida Prescribed Fire Council
Northeast Florida Chapter American Red Cross
The Longleaf Alliance
U.S. Fish & Wildlife Service
USDA Forest Service

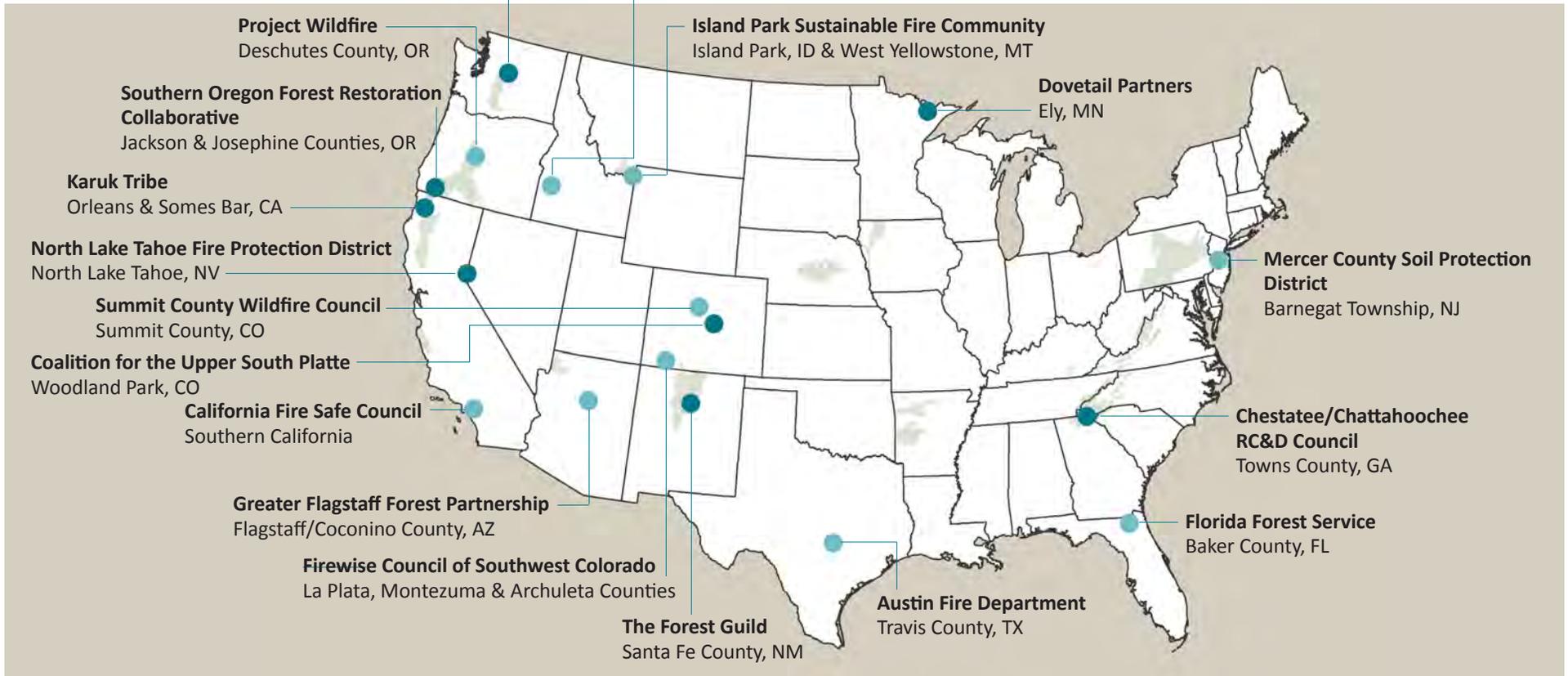


Community members take part in a Firewise clean-up day in the town of Taylor photo: FFS/Annaleasa Winter



FIRE ADAPTED COMMUNITIES LEARNING NETWORK

WHO WE ARE The FAC LN began in 2013 with eight hub organizations (darker blue dots), and another ten hubs (lighter blue dots) joined this spring. Each hub focuses on a pilot community near them (though they often work more widely as well). These are the hub organizations and their pilot communities as of summer 2014.



HOW WE WORK: BUILDING ON STATE STRATEGIES

Plugging into and enhancing existing state-level fire preparedness services and networks is a key strategy for the FAC Learning Network. Each state forestry or natural resources department already provides technical assistance to communities, arranges conferences and workshops, and disseminates resources that help communities with local programs. Whether organized

under the guise of “Firewise,” “wild-land urban interface,” “living with fire,” or any of the myriad other program names, they all strive to support the growth of fire adapted communities. At their best, state-level programs and activities bring together diverse governmental and non-governmental partners to leverage their ideas, resources and energy in service to FACs.

Our strategy involves empowering and supporting FAC Learning Network hub organizations in the non-profit and governmental sectors to incorporate the best practices and tools emerging from the U.S. Forest Service’s Fire Adapted Communities program, the FAC Coalition and the FAC Learning Network to enhance existing state-level capacity and networks. Each

state presents a unique social and institutional context, so we’re working on customized strategies with FAC Learning Network and agency leaders in states where we can add value and catalyze new strategies and investments. We will be profiling these unique strategies through our blog, briefing papers, and other channels throughout the coming year.

FIRE ADAPTED COMMUNITIES LEARNING NETWORK NUMBERS

18 hub organizations guiding community efforts across the nation

425 partner groups working together to make the places they live safer

69 people learning and sharing in conversation

5,836 visits to the www.facnetwork.org website and blog in the last six months

281 topics on the Podio workspace

50 communities learning to live better with fire

1 growing community of practice

HOW WE WORK: LOCAL ACTION & LEARNING

Every hub in the FAC Network is connected with communities that are taking actions that are helping them adapt to wildfire. These include coordinating with partners, planning, outreach—and, most critically, getting the on-the-ground treatments done. When it comes down to it, making homes and businesses fire-ready usually requires some fuel management. Based on their experiences, network hubs share their insights about how to get that work done.

Demonstrations help people understand what they need to do

In Ely, MN, Dovetail Partners have found that demonstration treatments are critical. “I think people need to see an



Chipper days can help people get fuel treatment work done, as well as see the results of treatments in their area. *photos: Dovetail Partners*

example of a good fuels reduction on a property to start to ‘get’ it. I think they also need some help in getting it done.”

For best results, share responsibility

In Colorado, the Coalition for the Upper South Platte hosted work-day events “with several communities completing projects ranging from sign installation to chipping.” One thing they learned about pulling off a great event is how important distributing responsibility for planning and executing a multi-community event is. They suggest a steering team as a good format for leading events.

Help implementation crews understand the “why” of their work

The Forest Guild in New Mexico demonstrated the importance of engaging all sectors of the community in FAC education and action. They worked with their Youth Conservation Crew to present FAC concepts to 55 youth from communities in wildland-urban interface (WUI) areas during their

training. The work these crews then implemented helped address fuels reduction needs. The Guild recommends connecting the work that crews will be doing with the concepts delivered in training to strengthen the workforce’s understanding of the treatments being implemented.



The Forest Guild trains youth to conduct fuels treatments—and share fire adapted communities concepts. *photo: The Forest Guild*

Financial assistance for fuels reduction is critical—and so is landowner awareness of those opportunities,

According to the Chumstick Wildfire Stewardship Coalition, “Financial barriers are an issue when it comes to the completion of fuel reduction work on private land. It is not enough that people know they should treat or that they understand they live in a fire adapted ecosystem. We have to translate that knowledge into action.” In places where financial assistance is available for private lands treatment, outreach to get landowners to participate is sometimes required. For example, the Coalition recently sent a mailing to encourage use of the state Department of Natural Resources Fuel Reduction Program to 600 homes. This network hub also gave presentations at several neighborhood meetings highlighting the state program and worked to promote it through the press.

Shared equipment is a cost saver, but plan for treatment delays

The Chestatee/Chattahoochee RC&D Council has discovered this in their work in Towns County. The Georgia Forestry Commission has a masticator that is shared among communities in the northern part of the state. The shared equipment is used to complete fuels treatments around communities at low cost. While this is certainly a great asset, the Council has learned that it is important to remain flexible with implementation timelines when using shared equipment.



The North Lake Tahoe Fire Protection District uses its work days to build community relationships while getting fuel treatments done. *photo: NLTFFPD*

Relationships developed during implementation projects pay off down the road

Free defensible space inspections and curbside chipping were offered to communities in six fire districts in the Lake Tahoe Basin this past year. The North Lake Tahoe Fire Protection District calls these activities “staple services provided by the fire districts... providing many opportunities to talk about fire adapted communities with residents.” While this model relies on the fire service to complete the treatments, engagement with residents and personal connections between citizens and their fire departments creates valuable relationships for future FAC activities.

HOW WE WORK: BRINGING PEOPLE TOGETHER

Online Conversations

Virtual tools help network members from across the country connect on an ongoing basis throughout the year. In addition to e-mail (and, of course, phone), informal conversations and sharing of resources take place on a private network workspace using the Podio platform. More formally, we facilitate exchange among participants in quarterly webinars. Topics cater to the interests and experience of network participants and partners. A wealth of information has been shared this way, and summaries/recordings of the



In June, leads from the FAC LN hubs each brought a key community partner to the national workshop in Colorado Springs, where they joined the Fire Learning Network for a poster session and field tour.

WEBINAR LINKS: Wildfire season lessons summary (<http://facnetwork.org/wp-content/uploads/2014/03/FAC-Net-Webinar-Summary-Sept-2013.pdf>) ~ Effective communications recording (<https://nethope.webex.com/nethope/lr.php?AT=pb&SP=MC&RID=68320677&rKey=0c1938502883264>) ~ FAC Coalition recording (<https://nethope.webex.com/nethope/lr.php?RCID=7b780cb43e35425eb5f41f96e48c8325>)

Face-to-Face Learning at Our Annual Workshop

More than 60 people from the Fire Adapted Communities Learning Network and Fire Learning Network met in overlapping workshops in Colorado Springs during the first week of June. In the first part of the week, members of the FAC Network discussed key issues they face, learned about a community self-assessment tool now in development, and began laying out their work for the upcoming year. The workshop also included a number of small group discussions on topics such as regional networking, grassroots leadership, collaboration and integrating Cohesive Strategy goals into planning and implementation.

A field tour, taken jointly with the FLN, facilitated in-depth discussions about post-fire flood mitigation, fuel reduction treatments in natural areas and best practices for encouraging neighbors to work together to create defensible space.

This was the first official FAC Network activity for the ten new hubs, and it was an effective way to start integrating them into the group and help them make connections with their peers.

webinar proceedings are archived for reference (see links below). Two webinars were offered last fall—“Lessons from the Fire Season” (from the four FAC Net communities that had experienced wildfires during the summer of 2013) and “Effective Communications and Partnership Engagement” (in which another four hub organizations shared some of the lessons they had learned). The third webinar, held in March, helped introduce the FAC Learning Network and several partners in the FAC Coalition to each other. Network participants heard overviews of the Firewise and Ready, Set, Go! programs and a review of FEMA’s FAC training program. The presentations highlighted opportunities and tools network participants can use in their local and regional work, and helped expand the network of resources available. Quarterly webinars will resume in August with a discussion of work plans for the coming year.

Feedback after the Workshop

“I love seeing the diverse backgrounds of everyone in the network and how we’ve come together to work on the same issue.”

“The sum total of energy, optimism and great ideas brought by the people in this network is inspiring.”

“The trick is finding and empowering the right people at the right time—persistence pays off!”

HOW WE WORK: MEASURING PROGRESS

New: Fire Adapted Communities Self-Assessment Tool

As the fire adapted communities concept is becoming more mainstream, so too are questions around what it takes to “create” or “become” a fire adapted community. The FAC Network coordinating team has been working to address this topic and help FAC Learning Network participants to define what it means for them to be fire adapted. The new Fire Adapted Community Self-Assessment Tool is part of this solution.

This tool is designed to help communities assess their level of fire adaptation and track changes in their capacity to live safely with fire over time. It draws on a number of successful models for measuring resilience and customizes them for wildfire. Through a series of questions, the tool helps a community identify and assess its values at risk, as well as the leadership, networks, motivation, skill sets, public outreach methods, policies, preparedness and training, and other resources and partnerships it brings to the challenge of addressing community wildfire risk.

Completing the FAC Self-Assessment is a four step process:

- 1) convene community members and stakeholders to discuss their goals for the assessment,
- 2) fill out an assessment table,
- 3) synthesize the assessment results by completing a prioritization table, and
- 4) outline the next steps—actions, partners and resources.

This process can be repeated at intervals to help communities continue evaluating and adjusting their adaptation to fire.

FAC Learning Network hubs have been, and will continue to be, integral to the development of this tool—several hubs provided initial feedback and comments, and all were introduced to the current version at the June workshop. At least half of the hubs have committed to using the assessment tool as part of their 2014-15 plan of work. Following this testing phase, a public version of the self-assessment tool will be released in 2015.



Self-assessment of progress will be key in helping more communities become more fire adapted more quickly. *photo: Andrew Holm*

The Fire Adapted Communities Learning Network 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 Nick Goulette (nickg@hayfork.net)

Prescribed Fire Training Exchanges

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Experiential training events with multiple objectives—training, outreach and treatments—are not part of the normal, comfortable status quo. But TRES provide precisely this, and all who are involved in the events work hard to maintain this balance.

Professional fire practitioners gain experience, learn about conservation, and receive position task book evaluations. Less traditional training partners—private contractors, ranchers, and others—engage in events that meet NWCG safety standards, gaining skills to work more safely and effectively. And TRES include some partici-

pants who have never burned before: biologists and air quality agency staff, for example, come to better understand how fire affects their work. TRES events strengthen partnerships and coalitions in the fire community and diversify the workforce by exposing participants to practitioners from other places and diverse backgrounds.

TRES events include training in crafting and delivering key messages about the benefits of prescribed fire and its use as a management tool, and designated days during each event for members of the media to experience the work at close range and talk with

practitioners. This has proved to be an excellent strategy for giving reporters a good understanding of basic concepts in a way that they can effectively share with readers, viewers and listeners.

Each TRES starts with introductions to local ecosystems and land management practices, and to fellow crew members and equipment. Crews then implement a series of prescribed fires, burning on average for 5-10 days, and accomplishing from a few hundred to several thousand acres of treatments on priority landscapes and around communities at risk from wildfire—simultaneously building skills and

fostering healthy natural and human communities.

TRES participants are immersed in demonstrations, discussions, required readings and experiential training to learn—and teach—about myriad aspects of prescribed fire. The training delivers a foundation of key safety, operational and tactical skills, including:

- NWCG basic firefighter safety training for those who need it;
- scouting, lighting, holding, mop-up and patrolling controlled burns;
- communicating effectively by radio;
- delivering & receiving briefings,

Spring Break TRES March 10-22 Niobrara Valley, NE

With 102 participants, this was the largest TRES offered to date. This allowed participants to break into several burn teams and conduct simultaneous burns, and the added level of complexity provided new opportunities for learning.

Loup Rivers TRES March 24-April 2 north-central NE

On a day when high winds precluded prescribed burning, this group saw wildfire smoke when engaged in other training. They made themselves available to local dispatch and provided welcome assistance on a rapidly-spreading blaze. Several FFT1 trainees were evaluated on wildfire tasks.



Virginia TRES March 31-April 11 coastal & Appalachian VA

The Central Appalachians FLN and its partners hosted the first TRES held east of the Mississippi. In addition to providing an excellent venue for regional training, several TRES veterans welcomed the chance to burn in these different fuel types, thus broadening their experience.

Yurok TRES May 24-June 4 Weitchpec, CA

Offered in partnership with the Yurok Tribe, this TRES helped get cultural burning re-started after a long hiatus in this landscape. Food security and reliable sources of materials for cultural traditions are the long-term goals of partners here.

conducting after action reviews, and documenting daily actions and activities; and

- using a variety of tactics and tools from different regions of the country (and world).

These are placed in a larger fire management context:

- the Incident Command System, use of daily planning cycles and planning documents;
- planning, organizing and implementing controlled burns; and
- monitoring fire effects, writing reports and reporting to senior managers.

And, perhaps most important, TREX integrate prescribed fire strategies and tactics into a holistic ecological and social context, that includes:

- regional fire ecology and local socio-economic impacts of fire management;
- work with groups like prescribed fire councils and landowner associations; and
- fire adapted communities concepts.

Participants also learn to craft key messages about wildfire and fire management, safely integrate media onto the fireline, and effectively deliver the messages in interviews.

In the spring of 2014, four prescribed fire training exchanges—two in Nebraska and one each in Virginia and northern California—resulted in over 8,000 acres of treatments in key landscapes and provided learning opportunities for 179 practitioners, building their skills, widening their experience, and contributing to local, regional and national capacity to get more “good fire” on the ground.



TREX are conducted in a wide range of landscapes, with a variety of ecological and social goals. In Nebraska this spring, burns restored and maintained prairie and reduced woody encroachment on rangeland. On the coastal plain of Virginia, underburns were conducted to maintain longleaf pine habitat. In northern California mountains, burning reduced hazardous fuel loads and rejuvenated cultural resources.



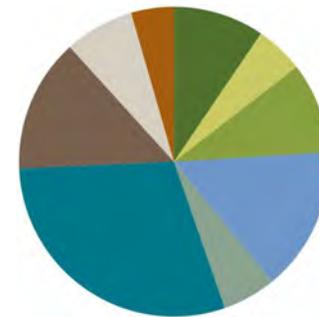
All TREX incorporate a range of skill levels and professional backgrounds in the people taking part. However the events often have a focus on a particular group of practitioners being engaged. The Niobrara Valley TREX was timed to coincide with universities’ spring breaks so that numerous students could attend, while the Virginia event included many state agency staff and the Yurok TREX had a strong tribal component.



In addition to focusing on local ecological and fire management issues, TREX explicitly embrace local fire culture. In northern California this spring, that included classroom presentations on traditional burning practices and the products they provide and, for example, the identification of basket-making materials in the field. In Nebraska, this might take the form of razor-straight blacklines on private units, in line with local practice.



One of the things that makes TREX successful is the “can do” attitude people bring: large groups gather, ready to work. They burn together when conditions are right—and take on other learning experiences when the weather doesn’t cooperate. This brings on-the-ground progress—whether it’s 37 acres in drought-struck California or a 1,000-acre day in Nebraska—as well as a better-skilled, and better connected, workforce.



Forest Service state & local private
 Dept. of the Interior NGO int'l
 TNC university other

In their early days, TREX were attended mainly by staff from the partners in the cooperative agreement: the Forest Service, Department of the Interior agencies and The Nature Conservancy. This spring, only about a quarter of the participants were from those three sources, as TREX are meeting their goal of engaging a diverse set of participants. This brings together a wide range of experiences and viewpoints for a richer shared learning environment.

Even before the spring TREX were done, planning was well underway for the next season, with fall TREX planned for Arizona, California and New Mexico. Spring 2015 events are also starting to take shape in Nebraska, North Carolina and Oregon.

Much of the effort at the national level is now focused on mentoring local leaders to deliver these events. This strategy of moving away from on-the-ground FLN staff leadership during the events is already expanding the scale of TREX, as multiple events can run back-to-back, or even overlap.

TREX are supported by *Promoting Ecosystem Resiliency through Collaboration: Landscapes, Learning & Restoration*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior. For more about prescribed fire training exchanges, contact Jeremy Bailey (jeremy_bailey@tnc.org).

Scaling-up to Promote Ecosystem Resiliency

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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-the-ground 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

Jeremy Bailey (jeremy_bailey@tnc.org)

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 cross-jurisdictional (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.

Leveraging Lessons Learned
 “We took our SPER proposal and used it as a model to apply for fuels treatment funds in socio-economically 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.”

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.



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.



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.



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.



The Central Appalachians Fire Learning Network engages federal, state and private land management agencies, academic institutions, and non-profit organizations in a collaborative effort to enhance capacity to implement ecological fire management. Partners in Virginia and West Virginia include: USDA Forest Service, The Nature Conservancy, Virginia Department of Conservation and Recreation, Virginia Department of Forestry, Virginia Department of Game and Inland Fisheries, Virginia Department of Corrections, West Virginia Department of Forestry, West Virginia Department of Natural Resources, National Park Service, U.S. Fish & Wildlife Service, National Weather Service, Arcadia University, West Virginia University, U.S. Geological Survey, Radford University and Virginia Tech.

This project is supported by Promoting Ecosystem Resiliency through Collaboration: Landscapes, Learning and Restoration, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior. This institution is an equal opportunity provider.



Fire Outreach & Media

Outreach, through the media and by communicating directly to individuals about fire and restoration, is a key part of the work done under PERC. Many actions needed to make forests and grasslands more resilient and protect human communities—thinning trees, lighting fires, putting smoke in the air—raise community concerns that can hamper the ability to get needed work done. In addition, the work needed to help communities become better adapted to living with fire requires a robust flow of communication in all directions; a variety of written resources and media coverage are thus valuable assets for the Fire Adapted Communities Learning Network.

Research has shown that among the most effective, trusted communicators about fire are “people with hats”—firefighters and other practitioners. The Fire Learning Network (FLN), prescribed fire training exchanges (TRES) and Scaling-up to Promote Ecosystem Resiliency (SPER) projects are therefore ideal means of getting the word out about “good fire.” With the addition of the Fire Adapted Communities Learning Network (FAC LN) to the suite of PERC programs, yet another avenue for improving communication among the various stakeholders in places affected by fire is available.

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 operational & **social 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 barriers** to transformative resilience.

NETWORK PRODUCT: “AFTER THE FIRE” TOOLKIT FOR COMMUNITIES

This spring a useful new toolkit was developed by the Chumstick Wildfire Stewardship Coalition, a Fire Adapted Communities Learning Network hub in central Washington, with support from the Fire Learning Network. “After the Fire” is a collection of easily customizable resources that communities and local groups can use to help individuals and businesses know how to recognize, to respond and minimize risks just after a wildfire. The collection of brochures, door hangers, PSA scripts and other materials had barely been launched—not all resources were in their final form, in fact—when it got its first test, in the town of Entiat, Washington, during the Mills Canyon Fire.

After the Fire toolkit: <http://afterthefirewa.org/>

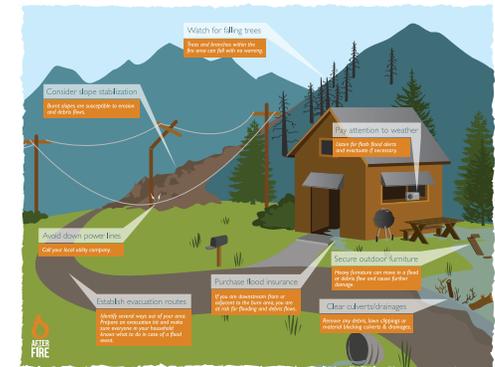
Blog post about its first use: <http://facnetwork.org/afterthefire-toolkit/>

Public Service Announcement (PSA) Script: Resilience

As the smoke clears and you return to the area burned by wildfire, you may notice some startling changes. Forest floors once green and thick with undergrowth may appear barren and black. However, fire is a natural process and regeneration and re-growth is likely already in progress.

Underground stems and dormant buds are capable of surviving fire—watch for plants like fireweed. Fire can even help to germinate some seeds. Birds will return quickly, with larger animals to follow. Though it can take time, the forest is resilient and will continue to grow and change.

While it can be tempting to investigate the changes in the burned area, forest users should be aware of the hazards. Damaged limbs and dead trees can fall with no warning. Fire can expose garbage and debris previously hidden by brush. Stumps may have burned away, leaving deep holes that can be dangerous. Be aware of the changed and changing environment. Watch out for post-fire hazards, but also watch for the strength and resilience of your forests.



In addition to direct communications through field tours and interpretive brochures, signs and video, in the first half of 2014, PERC programs and people appeared in more than 40 radio, TV, newspaper, and online media pieces, from the *Ainsworth (NE) Star-Journal* to the *Washington Post* (see Appendix F for a complete list). By investing the time in finding and talking with reporters, leaders of FLN, FAC Learning Network, SPER and TREX projects have helped make the public conversation about wildfire and its management more nuanced and positive in tone.



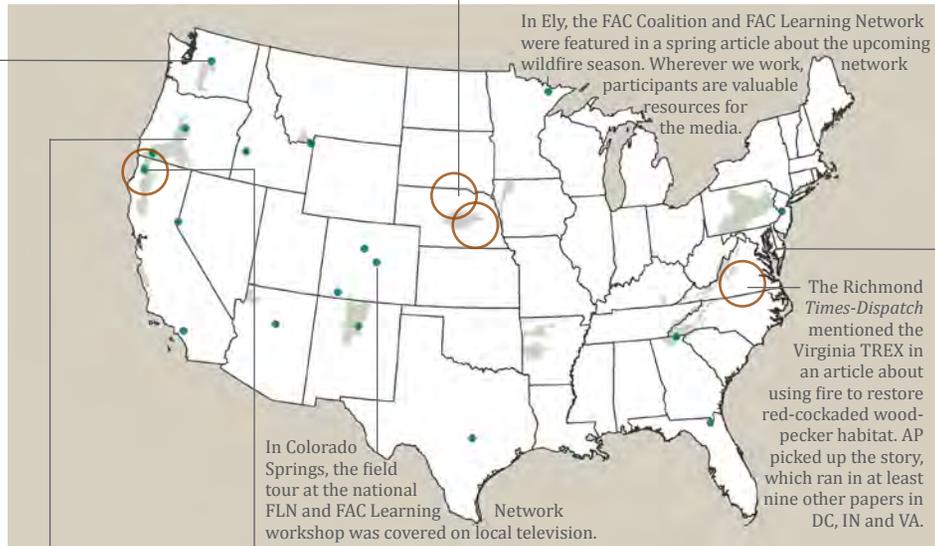
↑ Regular contact with a *Yakima Herald* reporter is helping further FAC efforts in the Washington Dry Forests FLN and the local FAC Learning Network pilot community of Leavenworth. The paper ran a number of stories in recent months, covering both FAC and fire management activities.



This spring, the Nebraska TREX were supported by a media committee that worked before, during and after the events to reach out to reporters, brief and train participants in messaging and interview skills, accompany reporters during burns, and follow up afterwards to answer questions and review stories when asked. The effort was significant, but paid off well, with reporters being highly interested in the opportunity to safely see fire up close, learn about it from its practitioners, and share it with their audiences. At least 10 newspaper, radio and TV stories were published, from the very local *Valentine Midland News* to papers and radio stations with statewide or regional audiences on the order of 80,000 people.

“Rancher and farmer Errol Wells was pleased with the [TREX] effort. ‘It went great,’ he said. ‘The fire opened up a lot of real estate for more desirable plants to come in and for more forage for cattle. Now there’s more sunlight. With the cedars out, we might see some oak trees again. We think lots of things will get better.”

from “Igniting Fires, Sparking Change: Fire Trainees Leave Nebraska with New Skills, Perspectives”
Prairie Fire (May 2014)



“Setting fire to fight fire may seem counterintuitive, says Blane Heumann.... But it’s not quite as contradictory as it sounds. ‘If your problem is too much hot fire,’ he says, ‘then your solution should be some good fire.’”

from “Climate Control”
Nature Conservancy Magazine (April 2014)

In April, partners from the Conservancy and the city of Ashland’s Forestry Department spoke with a Medford TV station about local fire history and the fuel reduction treatments being conducted by the Ashland Forest Resiliency project, resulting in three related segments on the news. The project, supported in part by SPER, is treating strategic parcels to protect the city’s watershed.



Regular communication, from articles in local papers to Facebook pages during wildfire events, keeps fire information flowing and productive conversation alive in the Western Klamath Mountains and California Klamath-Siskiyou FLNs.

A FEW GOOD LINKS: VIDEOS & MORE

Western Klamath Mountains partners produced two videos based on FLN, FAC Learning Network and TREX work in their landscape:

“Fall Burning in Orleans 2013”
<http://www.youtube.com/watch?v=l6mFZYDqtJE&feature=youtu.be>

“A Fire Wise Story: Klamath River 2014”
<https://www.youtube.com/watch?v=QIP2roGaNck>

Eytan Krasolovsky (Forest Guild) gave a presentation about lessons learned in last fall’s Black Lake, NM TREX in a Southwest Fire Science Consortium webinar:
https://forestguild.mitel-nhwc.com/perl/ilinc/lms/vc_launch.pl?activity_id=pcmszrh&user_id=

The FAC Learning Network hub in Towns County, GA shows up in the IAFC public service announcement that promotes www.fireadapted.org:
<http://vimeo.com/89195824>