

# Semi-Annual Report

## January – June 2015

Promoting Ecosystem Resilience and Fire Adapted Communities Together (PERFACT):  
Collaborative Action and Co-ownership of Fire  
2014 – 2019

*and*

Promoting Ecosystem Resiliency through Collaboration (PERC):  
Landscapes, Learning and Restoration  
2011 – 2015

In compliance with Agreements No. 11-CA-11132543-094 (PERFACT)  
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# Promoting Ecosystem Resilience and Fire Adapted Communities Together (PERFACT)

Semi-Annual Report: January – June 2015

## Executive Summary

The Promoting Ecosystem Resilience and Fire Adapted Communities Together (PERFACT) partnership works to restore our relationship with fire, helping us get to “right fire” through:

- the Fire Learning Network (FLN), fostering collaboration for restoration and fire management in landscapes across the country;
- the Fire Adapted Communities Learning Network (FAC LN), which is doing the same for communities adapting to wildfire;
- Prescribed Fire Training Exchanges (TREX), experiential training that integrates a range of people, places and aspects of fire; and
- targeted restoration action under Scaling-up to Promote Ecosystem Resiliency (SPER).

PERFACT efforts—the FLN and FAC Net, TREX and SPER work that it has inspired and incubated—are inter-connected and continue to support each other. We are finding that our impacts are greater and results more durable where multiple overlapping and complementary efforts are directed. As the four strategies are becoming more interwoven, they are becoming more powerful.

**In the Fire Learning Network**, eleven regional networks and large landscapes were supported during this reporting period: California Klamath-Siskiyou, Central Appalachians, Centennial Valley, Great Plains, New Mexico, Northwest, Pike’s Peak, South Central, Southern Blue Ridge, Washington Dry Forests and Western Klamath Mountains. FLN staff also continue to lead planning workshops in the developing FireScape Mendocino landscape and in the Klamath Mountains and mentor the team in FireScape Monterey.

This spring FLNs met with partners in landscape, regional and national workshops to share learning and coordinate work. They held partner field tours to assess wildfire effects and plan burning. They provided leadership to prescribed fire councils, hosted TREX and established a new Burned Area Learning Network. As always, in doing this, FLNs engaged hundreds of partners, from state and federal agencies to private landowners and researchers, and from coast to coast.

**The Fire Adapted Communities Learning Network**—This network supported seventeen organizations that are working with communities in

California, Colorado, Florida, Georgia, Idaho, Minnesota, Montana, Nevada, New Jersey, New Mexico, Oregon, Texas and Washington. This spring a state-wide sub-network was also launched in Washington.

Working collaboratively with community teams, network members receive financial, technical and peer network support to implement and innovate fire adapted community concepts and best practices, and to share them within the network and beyond. In recent months, the network members again worked on a diverse array of projects. These included holding wildfire preparation day/week events, holding community contests, producing interpretive signage and other materials, and drafting technical briefs. They prepared evacuation plans, co-hosted a workshop on home ignition zones for contractors and conducted home risk evaluations. Partners from Austin and Boise held learning exchanges. Some members used the recently-developed FAC Learning Network Self-Assessment Tool. Communication within the network is supported by three liaisons, who keep in regular contact with all hubs, and through quarterly webinars and a shared online workspace. Communication with those beyond the network is supported through the FACNetwork.org website; central to this is a blog updated twice weekly by staff, hub leads and community partners. The national workshop in June enabled members and partners to meet in person to work on their vision for the coming year, and to cross-pollinate with the FLN.

Staff and network members continue to work with researchers Sarah McCaffrey (USFS Northern Research Station) and Bruce Goldstein (University of Colorado), to increase the rigor of network operations and activities, and investigate how networks and the FAC approach contribute to growing community resilience. This will help the network make the greatest possible impact on the development of fire adapted communities nationwide.

**Five Prescribed Fire Training Exchanges** built on the principles of integrated fire management were held this spring, in California, North Carolina, Nebraska and Oregon; four of these were hosted by FLNs. Together these TREX served 245 practitioners and treated 5,287 acres with fire. Planning was also completed for two TREX in South Dakota that had to be called off due to serious drought in the region; the relationships developed during this led to other cooperative work being done, however.

The integration of professional wildland firefighters with less-traditional training partners at these events expands both the capacity of the fire community and its breadth of knowledge. It strengthens the ability to conduct controlled burning effectively and with full social license, and develops connections that are helping wildfires be managed with more sensitivity to local concerns. TREX also actively engage local, regional and national media, and help participants communicate key messages with skill.

TREX are designed to meet multiple objectives: they build skills, strengthen relationships, and complete treatments that support landscape resiliency and community safety. For example, the Yurok TREX in California helped 28 people gain or maintain basic NWCG firefighter qualifications, and the burning at that event served important cultural and community safety ends.

PERFACT staff are continuing the shift from implementing TREX to guiding others as they organize and host the events. FLNs and contractors played lead roles in all of this spring's TREX, with close mentoring from staff. Planning for the four TREX to be offered this fall is now underway, and these are likewise being led locally, with staff guidance. A TREX Tool kit has been assembled and is now online to support this transition.

**Scaling-up to Promote Ecosystem Resiliency (SPER II)** supported five landscape projects in Arkansas, California, New Mexico, Oregon and Virginia that wrapped up their work this spring. These projects complemented work by the FLN and FAC Net in their landscapes, and leveraged efforts on adjacent federal lands. Together they completed more than 10,000 acres of prescribed fire, mechanical and chemical treatments with a variety of goals, including reducing fuels; managing invasive species; restoring forests, glades and grasslands; and protecting communities.

SPER III work began in earnest this spring, with projects in California, New Mexico and Oregon. They are integrating fire/fuels management and water security in their landscapes with fire adapted communities' actions to support enabling social conditions.

**More information** about PERFACT is available online. The FLN website, <http://www.conservationgateway.org/fln>, has general information on the FLN as well as links to the Learning Networks Field Guide, posters from the June workshop, and materials developed by FLN projects. Information about the FAC Net—including the bi-weekly blog—can be accessed at <http://facnetwork.org/>. Information about TREX, including applications, can be found at <http://nature.ly/trainingexchanges>.

## REPORT CONTENTS

### HIGHLIGHTS & LEARNING

Summaries focus on specific aspects of PERFACT, illustrated with examples from this reporting period. Of necessity, they cover but a small proportion of the work. These are suitable for use as handouts or information sheets.

- PERFACT**—two pages, giving a brief introduction to each of the four areas of work (FLN, FAC Net, TREX, SPER) and how they work together
- Fire Learning Network (FLN)**—three pages, briefly covering how the FLN works, illustrated with highlights from the first part of this year
- Prescribed Fire Training Exchanges (TREX)**—two pages, structured around some of the themes that guide TREX and their goals
- TREX Graphic**—a graph summarizing the growth and development of TREX, in numbers and diversity, from 2008 to the present
- Fire Adapted Communities Learning Network**—four pages, covering the goals of the network and some of its recent progress and successes
- Scaling-up to Promote Ecosystem Resiliency (SPER II)**—four pages, this is the final report for the five SPER II projects

### APPENDIXES

- A: Delivery on PERFACT Work Plan Actions:** work plan table for the year, with work delivered in both reporting periods
- B: FLN Regional Network & Landscape Work Plan Progress Detail:** work plan tables for funded FLNs for January-June, with work delivered
- C: Prescribed Fire Training Exchanges:** TREX offered January-June, and tables of number and affiliations of participants and acres treated
- D: FAC Learning Network Hub Organization Work Plans:** tables for FAC hub organizations for January-June, with work delivered
- E: Work Plan Details for Cross-Boundary Landscape Implementation Projects under “Scaling-up to Promote Ecosystem Resiliency” (SPER II):** work plan tables for January-May, with work delivered
- F: Work Plan Details for Cross-Boundary Landscape Implementation Projects under “Scaling-up to Enable the Social and Operational Capacity for ‘Right Fire’” (SPER III):** work plan tables for the three SPER III projects for January-June, with work delivered
- G: Media Coverage Resulting from PERFACT Actions:** media and website coverage of projects, and leaders quoted, with links



# Promoting Ecosystem Resilience and Fire Adapted Communities Together (PERFACT)

A cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior

This partnership works to restore our relationship with fire by helping us get to “right fire”—where good fire can do its necessary work on the landscape, and both human and natural communities are better able to live with fire. As partners, we work in key places with individual people, and also at regional and national scales. We also leverage the connections between those scales. This work is accomplished through:

- the Fire Learning Network (FLN), fostering collaboration for restoration and integrated fire management in landscapes across the country;
- the Fire Adapted Communities Learning Network (FAC Net), which is doing the same with communities adapting to wildfire;
- prescribed fire training exchanges (TREX), experiential training opportunities that integrate a range of people, places and aspects of fire; and
- targeted restoration action under Scaling-up to Promote Ecosystem Resiliency (SPER).

These efforts—the FLN and those that it has inspired and incubated—are interconnected and continue to support each other. We and our partners are starting to see that our impacts are greater and results more durable where multiple overlapping and complementary efforts are directed. As the four strategies are becoming more interwoven, they are becoming more powerful.



The June workshop brought together partners in the FLN and FAC Net, along with key guests, for a week of learning and networking. The Santa Fe location highlighted the integrated aspect of PERFACT, with the FLN, FAC Net, SPER and TREX all active in northern New Mexico. *Photos: TNC/Jim Beck, Liz Rank*

## Fire Learning Network

More than thirty landscapes—most working as part of regional networks—are now active in the FLN. In addition to long-established partnerships, collaborative groups in the early stages of their FLN work are growing in California and Colorado. The FLNs under development generally focus on using a collaborative planning process that brings stakeholders together to work through where they want to go and how they can get there. The more established FLNs, having done this planning work, are now engaged in a diversity of place-specific activities and adaptive learning. These include hosting workshops to share knowledge and develop local tools, as well as those that support the work of landscape-scale projects and statewide prescribed fire councils. They also nurture the development of fire adapted communities, host prescribed fire training exchanges, monitor fire effects, develop interpretive signage, and publish restoration resources. In doing so, they engage hundreds of diverse partners, from state and federal agencies to researchers and private citizens, and from coast to coast.

## Fire Adapted Communities Learning Network

Modeled after the FLN, the FAC Net was launched in April 2013 with a workshop for representatives and partners from eight community-based organizations. In March 2014, another group of organizations joined, and 17 are now active in the network. These groups work locally with collaborative teams, and receive financial, technical and peer network support to implement and innovate fire adapted community concepts and best practices in their communities, and to share them within the network and beyond. These groups are working on projects as diverse as updating CWPPs and county-wide integrated fire plans, securing funding for mitigation projects, and gathering and sharing the lessons learned from first-hand experiences with wildfires. The network communicates regularly through an online workspace and public blog, as well as in quarterly peer-learning webinars and an annual workshop, held in Santa Fe in early June this year. Staff and network members are working with researchers Sarah McCaffrey (USFS Northern Research Station) and Bruce Goldstein (University of Colorado), to increase the rigor of network operations and activities, and investigate how networks and the FAC approach contribute to growing community resilience. This will help the network make the greatest possible impact on the development of fire adapted communities nationwide.

The goal of this partnership is to help us all live with fire—with fire adapted human communities, resilient natural landscapes, and the operational and social capacity to flourish in a challenging, changing fire environment.

Our efforts are rooted in collaboration, and they integrate the best available science and cultural knowledge with a strong emphasis on co-learning and adaptive management.



## Prescribed Fire Training Exchanges

These training events, which combine experiential learning and principles of integrated fire management, are held in numerous locations each spring and fall; this spring saw TREX in California, North Carolina, Nebraska (two overlapping events) and Oregon. The integration of professional wildland firefighters with less-traditional training partners at these events expands both the capacity of the fire community and its breadth of knowledge. It strengthens the ability to conduct controlled burning effectively and with full social license, and develops connections that are helping wildfires be managed with sensitivity to local plans and concerns. TREX also actively engage local, regional and national media, and help participants communicate key messages with skill.

Since 2008, 40 events have served nearly 1,350 practitioners and treated more than 76,000 acres. The earliest TREX were in FLN grasslands, but they are now offered in forested landscapes and quite frequently in wildland-urban interface (WUI) areas, in support of fire adapted community efforts as well as landscape-scale ecological restoration. TREX efforts are now at an important growth point—in the past year or so it has almost simultaneously moved toward larger crew sizes, spread into new geographic areas (and habitats), become more closely tied to fire adapted communities efforts, and become more locally based. Numerous participants have attended multiple events, and are becoming sources of leadership and support. Staff roles are now shifting from running the events to mentoring others and developing an online TREX Toolkit to support them. These shifts are helping the TREX model—and its integrated way of viewing fire management and doing prescribed fire—become adaptable, self-sustaining, and ever more widespread.



PERFACT encompasses a wide array of learning, planning and actions that together make landscapes more resilient and communities better adapted to wildfire. *Clockwise from upper left: An Open Standards for Conservation Planning workshop at FireScape Mendocino; training and burning in the Lower Loup Valley; learning about Yurok use of fire at the first Cultural Burn Network workshop; and taking FAC concepts to schools.*

*Photos: TNC/Mary Huffman (top row), Tahoe Fire and Fuels Team, Stéfano Arellano*

## More Online

**Fire Learning Network** <http://www.conservationgateway.org/fln>  
**Fire Adapted Communities Learning Network** <http://facnetwork.org/>  
**Prescribed Fire Training Exchanges** <http://nature.ly/trainingexchanges>  
**Learning Networks Field Guide**  
<http://www.conservationgateway.org/ConservationPractices/FireLandscapes/FireLearningNetwork/USFLNPublications/Pages/FLN-Field-Guide.aspx>

## RECENT WORK

In the first half of 2015, PERFACT supported:

- 13 Fire Learning Networks (FLNs) that encompass more than 30 landscapes and 66 million acres;
- 17 Fire Adapted Communities Learning Network (FAC Net) organizations working with pilot communities in 13 states;
- 5 Prescribed Fire Training Exchanges (TREX) that provided training and experience for 245 people while treating 5,287 acres with fire, as well as planning for 4 fall TREX; and
- 5 Scaling-up to Promote Ecosystem Resiliency (SPER II) projects that completed treatments complementing federal projects, and 3 SPER III projects that began work enabling landscape-scale “right fire.”

## Scaling-up to Promote Ecosystem Resiliency

The first two phases of SPER targeted modest amounts of implementation funding to fill gaps in a landscape or provide a catalyst to accelerate work. Prescribed fire, thinning, helicopter logging and invasive species management treatments, mainly on relatively small, strategically-placed parcels, leveraged and connected existing or planned treatments on federal lands. Work under SPER II finished in May, with five landscape-based projects completing about 3,000 acres of treatments in support of fire adapted communities through the FAC Learning Network or FLN. Meanwhile, SPER III work began in earnest this spring, with projects in California, New Mexico and Oregon working intensively to bring “right fire” to scale in landscapes critical to communities embedded within, or dependent upon, them.

## Working Together

Staff and partners at all levels work to tie the networks, training and implementation into a larger whole. FLN and FAC Net leads and partners meet and work together on projects, and both have hosted TREX to increase their capacity to do the work they have identified as necessary for resilience. Similarly, SPER projects treat areas identified as priorities by the network partnerships, and in many cases provide the burn units needed for TREX training opportunities.

Learning and sharing knowledge also span all areas of work. In addition to the essential person-to-person contacts within and between the networks and the communities of practice we foster, we share knowledge through publications and connections with the larger conservation and fire adapted communities world, and with the general public, either directly or through the media. Each of these helps develop the set of conditions that will enable the wider spread of right fire.



*Promoting Ecosystem Resilience and Fire Adapted Communities Together (PERFACT) is a cooperative agreement between The Nature Conservancy, the USDA Forest Service and agencies of the Department of the Interior. For more information, contact Lynn Decker at [ldecker@tnc.org](mailto:ldecker@tnc.org) or (801) 320-0524.*

*PERFACT is an equal opportunity provider.*

# Fire Learning Network (FLN)

A cooperative program of the Forest Service, Department of the Interior agencies and The Nature Conservancy, the FLN has a thirteen-year track record of helping to restore our nation's forests and grasslands and to make communities safer from fire.



The FLN currently supports 13 partnership groups. These include multi-state regional networks with numerous landscapes in the Central Appalachians, Great Plains and Southern Blue Ridge; groups with multiple landscapes within a state, in Arkansas, Oregon and Washington; and large single-landscape projects in California, Colorado, Montana and New Mexico. Some of these partners have been in the FLN since its start in 2002 and are exploring new areas in which to collaborate and learn. Others have only just begun the FLN journey, and are gathering partners, learning from others in the network, and setting their courses. At all levels, the FLN continues to assess challenges and opportunities, work with old partners and reach out to new ones, push at boundaries and try new things, learn and change as needed. What the FLN has long been working toward has now been captured nationally in the goals of the Cohesive Strategy: resilient landscapes, fire adapted communities, and safe and effective wildfire response.

## Brings People Together

Fundamental to everything the FLN does is getting people together. Giving natural partners a forum for meeting is an obvious—though not always easy—part of this. But in addition, depending on circumstances FLNs bring in past (or potential) litigators, people from often-neglected departments, or stakeholders who may not fit traditional categories. This diversity not only helps prevent conflict down the road, but makes a more robust and better informed path for getting there.

The Pike's Peak FLN in Colorado is the newest member of the network. According to its lead, the most important work in their first year was “garnering and sustaining the commitment of a wide range of partners to working together on increasing the use of fire as a management tool in the region. The area has a long history of negative and damaging wildfire experiences. People could easily turn their back on thinking about returning fire to a more natural role, but they are choosing to be forward-thinking and proactive instead. It has been both fun and rewarding to work with this enthusiastic group of partners.”

For mature partnerships, like the Southern Blue Ridge FLN, the network provides a valuable opportunity for partners, peers and other colleagues from a four-state area to meet in person annually. The May workshop has grown so popular and useful that registration now needs to be capped (at about 100 attendees this year).

This spring the FLN also invested in leadership capacity in an area where many parts of the puzzle are rapidly coming together, the Klamath Mountains of California. A “Facilitative Leadership for Social Change” workshop was held in the small town of Happy Camp for the core team of the Western Klamath Restoration Partnership. With the skills



On a field tour to the South Mountains landscape, SBR FLN partners reviewed and discussed cooperative landscape-level burning projects that had been done there, as well as outreach and interpretation efforts at the state park. The other two days of the workshop covered topics ranging from fire history research and wildlife monitoring to working with nearby partners in the Fire Adapted Communities Learning Network. *Photo: TNC/Wendy Fulks*



During the workshop on facilitative leadership, Western Klamath Restoration Partnership members from the Forest Service, Karuk Tribe and Mid-Klamath Watershed Council celebrate the paper tower they built while exploring “process, relationships and results.” *Photo: Jon Grunbaum*

*“We can make [meetings] infinitely more valuable by applying the tools in this course to the process of planning and facilitating them. The skills in this workshop will bring us further and faster in our work, and towards manifesting the changes we want to see in the world.”*

and insights gained in the workshop, they are now better equipped to facilitate and lead the numerous related projects and partnerships working to lead the remote area to forest resiliency, community safety and economic security.

### **Builds Relationships that Support Other Collaborative Efforts**

Years of planning and learning together have built the relationships that are now helping people work together in the field in new ways. Cooperative cross-boundary burning that may have seemed nearly impossible is now almost routine in many FLN landscapes. In the Heart of the Appalachians landscape in Virginia and West Virginia, for example, FLN partners had their hopes dampened by a snowy spring—but still were able to complete 9,000 acres of burning by working cooperatively. In the Southern Blue Ridge FLN, planning is well underway to begin burning across the North Carolina-South Carolina border.

Regional FLNs have also taken on hosting many of the Prescribed Fire Training Exchanges (TRES), now offered from coast to coast. This spring the Southern Blue Ridge FLN and North Carolina Prescribed Fire Council hosted a TRES in February. The Great Plains FLN hosted two concurrent TRES—a first—in Nebraska in March. And FLN partners in Oregon held the first TRES in that state in May. These events got valuable treatments completed while building new local workforces,

and further reinforcing ties between people and organizations.

Similarly, long-term FLN partnerships form a solid base for the Scaling-up to Promote Ecosystem Resiliency (SPER III) that are getting under way this year. There are three projects—in northern California, grown from the California Klamath-Siskiyou FLN; in New Mexico, informed by years of work in the Jemez Mountains and Santa Fe watershed; and in Ashland, Oregon, led by the Northwest FLN. These projects will focus intensively over the next three years to move toward “good fire,” where fire is returned to a natural role in the landscape and human communities can flourish.

### **Helps Launch Complementary Efforts**

The FLN and its landscapes and networks across the country have also launched and nurtured a variety of complementary efforts that address other aspects of fire and restoration. Most notably, the FLN formed a model from which to develop the Fire Adapted Communities Learning Network, beginning in 2013. On a smaller scale, the Washington Dry Forests FLN has been working in the Yakima area for this past year or so, helping that county to become better adapted to wildfire. In April, the county adopted a county-wide Community Wildfire Protection Plan that was greatly influenced by this work. The county is also one of seven communities selected to be part of the state-wide Washington Fire Adapted Communities Learning Network, which was formed this spring.

FLNs also continue to play key roles in prescribed fire councils. FLN partners have leadership roles in councils in northern California and Washington, and networks from Oregon to North Carolina work closely with their state councils, and bring collaborative, holistic and solution-oriented voices to the table.



TRES in North Carolina (top), Nebraska (center) and Oregon together provided training, opportunities for learning from a diverse group of peers, and hands-on experience to 245 participants. They also completed 5,287 acres of burning in support of FLN goals. *Photos: Nancy Lee Adamson, José Luis Duce, Stéfano Arellano, TNC/Pete Caligiuri*

In Arkansas, partners from virtually all land-managing agencies have been working closely for years now on a wide array of projects as a result of the FLN. The most recent effort to be nurtured by this is the Shortleaf Pine Initiative. The South Central FLN hosted some of the early workshops of the twenty-two-state endeavor, which is now fledging: the initiative was recently able to hire a director, the workshop planned for the Southern Appalachian region is full, and planning has begun for workshops in New Jersey and Texas.



Relationships and trust built in the FLN form the core of numerous other efforts, such as the Shortleaf Pine Initiative. The South Central FLN was a key partner in getting this initiative off the ground.

### Looks Beyond Restoration to Resilience, Adaptation and Recovery

FLNs look ahead, to the next challenge, and the next opportunity. The network is nimble, and ideally suited to deal with emerging issues and to look at old issues in new ways. According to the lead from the Centennial landscape in Montana, their “climate adaptation approach for prioritizing watershed for restoration has been warmly received” and they are nearly finished with an expanded area of analysis. “In addition to providing a compelling vision, it provides an applicable and commonsense tool that promotes meaningful discussions with climate change skeptics.”

In New Mexico, the FLN is looking ahead to what to do after severe wildfire. In a region where climate change and other factors make it clear that mitigation and other preparations will not be enough, they have started a new Burned Area

Learning Network. A group of partners met for the first time in April, and will explore together how best to plan ahead so that there can be effective, timely management after the inevitable fires that burn too hot or too big. This network will start to find the solutions for how to recover landscapes, and minimize flooding and other post-fire damage. As with other FLN work, this group will learn and adapt together, and share what they are learning with the wider fire restoration community.

*“The first Burned Area Learning Network workshop was a collaborative venture—complex, and some planning partners were skeptical that we would have an event that would be useful and relevant to such a broad audience. It was rewarding to have several of these same partners congratulate us on the workshop’s success and to be excited by the idea of working together with new contacts they met there.”*



The FLN met in June in a national workshop with members of the Fire Adapted Communities Learning Network. The workshop provided opportunities for seeing the results of work in the Santa Fe landscape, as well as for capturing and sharing learning, both within and between networks. *Photos: TNC/Liz Rank*

### More Online

**Fire Learning Network** (general information, links to resources)

<http://www.conservationgateway.org/fln>

**Learning Networks Field Guide**

<http://www.conservationgateway.org/ConservationPractices/FireLandscapes/FireLearningNetwork/USFLNPublications/Pages/FLN-Field-Guide.aspx>

**Posters** from the June 2015 national workshop

<http://www.conservationgateway.org/ConservationPractices/FireLandscapes/FireLearningNetwork/USFLNPublications/Pages/Posters-FLN-2015.aspx>



The FLN is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together* (PERFACT), a cooperative agreement between The Nature Conservancy, the USDA Forest Service and agencies of the Department of the Interior. For more information, contact Lynn Decker at ([ldecker@tnc.org](mailto:ldecker@tnc.org)) or (801) 320-0524.

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# Prescribed Fire Training Exchanges (TREX)

Experiential training events in support of landscape restoration and resiliency, fire adapted communities and workforce capacity-building

Begun in 2008 as a way of easing perceived bottle necks in the training of a new prescribed fire workforce, TREX have evolved to meet a number of essential needs. They now serve wildland fire professionals in need of trainee experience and task book assignments—along with students who are beginning to shape their careers, agencies learning to work together to make more efficient use of their resources and burn windows to manage their lands, local fire departments who need to respond more effectively to wildland fires, tribes working to renew traditional burning practices, and rural communities working to make themselves safer from wildfire.

## Build Local Capacity for Safer Fire

Training exchanges that focus on providing basic firefighter training and integrating local fire and forestry contractors, local government agencies and non-profit conservation organizations are providing basic job skills training, creating relationships and building trust among groups. The training and certification of individuals enlarges and improves the skill level of a new workforce; the relationships and trust help fire management service providers find qualified crews and TREX participants find federal and private jobs in the field. Training exchanges also demonstrate how groups can cooperate and collaborate, and by working together, increase an area's available fire management capacity.



Members of a local volunteer fire department practice lighting techniques. A special weekend session on firing operations for VFDs was added to this spring's TREX in the Niobrara Valley of Nebraska; it was aimed at improving the local capacity to respond to wildland fires with safe and effective burnout techniques. Earlier in the season, 14 people completed their basic firefighter qualification training, and another 14 their required refresher training, at the Yurok TREX near Weitchpec, California.

*Photo: José Luis Duce*

## Help Communities Become More Fire Adapted

There is probably no better way for a community to prepare for the inevitable approach of unwanted wildfire toward their community than to burn in and around the community themselves. There is no doubt that controlled burns can reduce the damaging effects of wildfires and make communities safer. In addition to completing burns near communities and helping local practitioners gain

the experience to conduct further burns, TREX events spread this message, by integrating work with local media into their agendas.

## Bring Together Diverse Crews to Foster Learning

Diversity matters. Having contract crews intermix with federal crews, state firefighters work with tribal fire practitioners, and integrating students, scientists, researchers, private landowners and regulators into the mix has important and potent effects. Participants are able to spend time with a wide variety of people with different backgrounds and experiences, and everyone gains knowledge, insights and learning opportunities from these new perspectives. Land owners, scientists and regulators will often say “Wow, I had no idea how organized a prescribed fire is,” after participating in their first briefing, burn and after action review. And professional firefighters learn that lots of people—from air quality regulators to private citizens and students—bring strong ecological, practical, policy and management knowledge and experience with them, and have the ability to provide insight, thoughtful discussion and alternatives to the current fire suppression paradigm.



A crew member from a 2014 California TREX chats with the owner of the land they were treating. Almost immediately after the smoke cleared, planning for the next Klamath River and NorCal TREX got underway. The back-to-back events will again focus on building local capacity while completing treatments to support forest resiliency and protect communities. *Photo: MKWC*



The Loup River Valley TREX brought together a small handful of federal and Nebraska state fire practitioners with municipal firefighters from the Denver, South Metro and Castle Rock fire departments in Colorado; burners from Pheasants Forever and private contractors and a group of 11 fire practitioners from various agencies in Spain, who had come to the U.S. to train—and to share their experiences in a different fire management system. *Photo: Stéfano Arellano*

## Give Students Hands-on Experience with Ecologically- and Culturally-Appropriate Fire

We hear it all the time, and numerous studies verify it: hands-on learning is the best kind of learning. Getting out and practicing pre-burn briefings, working with a fire ecologist to establish a monitoring plot, walking the range with ranchers to understand grazing patterns and rotation schedules, or working as a trainee firing boss—these are the experiences that shape firefighters and practitioners. Each spring in northern Nebraska, we use collaboratively planned and cooperatively implemented prescribed burns to train the next generation. Through these, scores of students have a new found respect for prescribed burning, and an understanding that accomplishing prescribed burns is a reasonable expectation, and a worthwhile goal. Despite the numerous pressures to conform in a field that has long focused on suppression, we are nurturing a generation that will feel confident that they can scale up the use of fire and restore cultural and natural fire regimes at the landscape level.



Twenty-three students—from Colorado State, Northern Arizona, University of Idaho and University of Missouri—were among the 62 participants in this year's Niobrara Valley TRES. From its informal start in about 2011, the "spring break TRES" has grown to be an essential part of the curriculum at several of these schools.

*Photo: José Luis Duce*

## Support Interagency Cooperation

Agencies, organizations and individuals are learning that we can work together, and on each other's properties. By managing the liability through tested avenues like cooperative agreements, shared standards and collaborative planning, federal, state and private fire teams are learning that they can depend on one another to support prescribed fire projects just like they depend on each other to support suppression efforts.



Morning briefing before a day of burning on the Deschutes National Forest. The Central Oregon TRES required the drafting of a participating agreement—the first in the area—that allowed cooperative burning and training on the Deschutes and Ochoco National Forests to be conducted with non-federal partners. This was a great leap forward, with partners immediately recognizing it as a success—and a reason to continue offering TRES in central Oregon.

*Photo: TNC/Pete Caligiuri*

## Integrate Traditional Burning

Partnerships with tribes that are still practicing fire use for traditional purposes—such as for food security, regalia and basket making materials—has provided opportunities for integrating tribal members and their knowledge into training exchanges. By incorporating traditional burning practices into the learning session, TRES participants are learning from

people who often have a longer and more complex view of the role of fire in the ecosystems. Participants begin to learn that fire and people are inseparable, and that a full exclusion approach to fire may be not only impossible, but not appropriate.

## Work through the Barriers to Burning

By having a diverse body of participants, and by including ecology, cultural, regulatory and tactical components into the TRES learning sessions, participants are realizing that the often-touted barriers to implementing prescribed burns can be effectively managed. TRES participants are learning that by collaborating with partners you can build a team of experts that have the capacity to successfully navigate the process of achieving good fire at scale.



A participant in the North Carolina TRES shows off a pair of impromptu ice goggles. TRES organizers practice what they preach, and test whether perceived barriers are actually obstructions to burning. Narrow burn windows are a classic example. TRES events are scheduled to occur when the weather is likely to be suitable for burning; organizers accept that not all days will be good, and plan alternate learning experiences to balance the experience. This spring, two TRES went ahead in the face of bad weather forecasts—ice storms in the case of North Carolina, and an extended rainy spell in Oregon—and were both rewarded by being ready to take advantage of good weather windows as they presented themselves.

*Photo: José Luis Duce*

## More Online

### TRES general information

<http://nature.ly/trainingexchanges>

This page also includes links to information about upcoming TRES (and online application forms), and the new TRES Toolkit. The Toolkit has a wide range of resources for prospective participants, organizers and hosts.



During the Yurok TRES this spring, participants burned 120 acres to encourage the growth of hazel. Proper use of fire results in the straight twigs needed for basketmaking, which is of significant cultural importance to the Yurok.

*Photo: José Luis Duce*



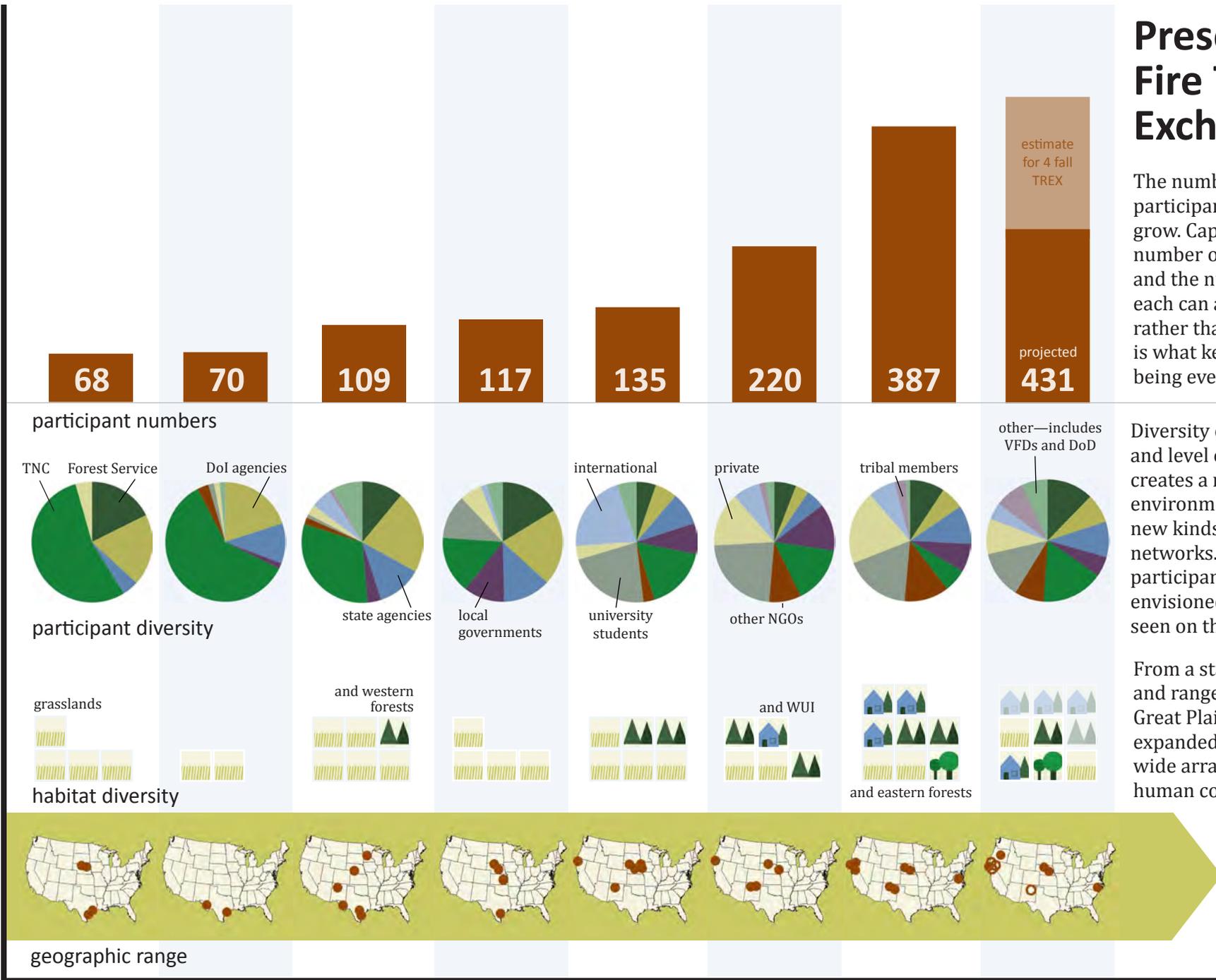
Prescribed Fire Training Exchanges are supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together* (PERFACT), a cooperative agreement between The Nature Conservancy, the USDA Forest Service and agencies of the Department of the Interior. For more information, contact Lynn Decker at ([ldecker@tnc.org](mailto:ldecker@tnc.org)) or (801) 320-0524. PERFACT is an equal opportunity provider.

# Prescribed Fire Training Exchanges

The number of TREC participants continues to grow. Capacity—both the number of events offered and the number of people each can accommodate—rather than lack of demand is what keeps growth from being even more rapid.

Diversity of background and level of experience creates a richer learning environment and fosters new kinds of professional networks. The mix of participants originally envisioned in 2008 is now seen on the ground.

From a start in the grasslands and rangelands of the Great Plains, TREC have expanded to encompass a wide array of natural and human communities.



**2008**      **2009**      **2010**      **2011**      **2012**      **2013**      **2014**      **2015** (spring, plus fall estimates)

# Fire Adapted Communities Learning Network

Members of the FAC Net share a vision of accelerating the adoption of fire adapted community concepts across the nation using a tested learning network approach.

## Increasing Wildfire Resilience in Communities Coast to Coast

The Fire Adapted Communities Learning Network (FAC Net) is designed to spread the best ideas and approaches to building wildfire resilience in communities throughout the U.S. When the FAC Net was launched in 2013—with eight diverse communities and organizations representing a wide range of places across the country—the intention was to use those locations as centers of excellence from which to grow a network of people and places committed to becoming better adapted to fire. Central to the effort has been the strategy of engaging FAC practitioners to be not only the people who take action in their own communities, but who carry and spread the message to their peers in other places. By creating a network of FAC practitioners, we are able to elevate real-life examples—and the people who live FAC on a daily basis become the messengers for the cause.

The FAC Net provides multiple layers of value to individuals, organizations and agencies, communities, and to the public as a whole.

- Individuals benefit through the opportunity to co-create a community of people who are passionate about FAC and who are willing to share their time and talents with other members of the network.
- Agencies charged with managing our natural resources, and organizations committed to community and environmental resilience, have a forum in which to deeply engage in taking action and sharing responsibility.
- Communities are connected internally to the capacity that emerges when people gather to coordinate about FAC actions, and to people in other places who are willing to offer new perspectives and to help each other across geographic space and organizational divides.
- Nationally, the FAC Net is helping to untangle the “wildfire problem” by spreading the best ideas and connecting people who are working at every scale to create a more wildfire resilient future.



## Collective Value Proposition

FAC Net members gathered in Santa Fe in June for the annual workshop. While there, they developed a value proposition for the network that will be a touchstone and guide as the network grows and evolves.



## We help society live safely with fire.

This is accomplished by network members as they:

- share inspiration, innovations, ideas, lessons learned and best practices;
- create and maintain connections;
- enable their communities to become more fire resilient;
- foster and grow sub-networks;
- create a broader understanding of FAC concepts and principles;
- influence policy and funding; and
- develop products that FAC practitioners can use in their communities and regions.

*“The value of the network is hard to quantify, but equally hard to overstate. The communication and sharing between network members, conversations with our liaison, and lessons learned from others have been invaluable. Even ‘small’ questions and contacts have fostered a more connected network so it is easier to call with ‘big’ questions!”*



At least nine FAC Net members hosted events for the national Wildfire Community Preparedness Day on May 2. In Ashland (OR), Project Wildfire hosted FireFree, a yard waste disposal event; on the first weekend, residents brought in 31.5% more than they did last year. The city's Firewise Clean Up Day, held a week earlier, collected 152 carloads of yard debris—and provided people with help unloading and information on wildfire safety. In Colorado, the Coalition for the Upper South Platte organized a crew of 30 cadets from the nearby Air Force base; along with some community volunteers, they logged more than 500 hours, removing overly-dense, standing dead, poor-performing and unhealthy trees from easements and private and community property. Towns County (GA) staged a full-scale training exercise in a community subdivision, simulating a house fire turned wildfire. More about these projects is in the network's blog at <http://facnetwork.org/national-wildfire-community-preparedness-day-2015/>.

Photos: Alison Green, Steve Parks, CUSP, Frank Riley

### Organizing Volunteers

In early June, the Chumstick Wildfire Stewardship Coalition partnered with the Chelan County and Washington Department of Natural Resources to host a free brush disposal day at the county transfer station. Twenty-eight landowners participated, logging 246 volunteer hours to prepare their homes for wildfire. Staff also implemented a mobile chipping program where 24 participants contributed a total of 1,400 hours of in-kind match (or the equivalent of \$28,000 cash match) performing fuel reduction work on their properties.

### Winning at Reducing Risk

The Flagstaff Watershed Protection Project entry in the Solution Search “Reducing Our Risk” contest won the People’s Choice Award this spring. The contest helped raise awareness of wildfire risk—and actions that can mitigate that risk—and the funds will help them implement treatments in two key watersheds, making the city and its water supply less vulnerable to severe fire and post-fire flooding. Read about the project at <http://solutionsearch.org/entityform/139>.

### Growing a Movement

The FAC Net was originally launched as a pilot project to test a network approach to fire adapted communities. The central question was, “Can we spread innovation and ideas and improve community wildfire resilience by building a nation-wide network of FAC practitioners?” Within the first year, we began seeing results: more partnerships, and deeper ones; higher profiles for members, enabling them to attract resources and investments in FAC work; peer learning and exchanges that seeded new approaches and started helping solve problems. The network approach was working. On determining that the FAC Net was, in fact, an effective way to spread FAC ideas, network organizers, members and funders began rapidly

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*“I think at a state level and national level...the more of these relationships we’re building and information we’re sharing, I really feel like there’s enough energy and push to make changes at the policy level, or the landscape level. People are thinking differently about how to live with fire and I think this is part of the reason.”*

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*“The relationships that are built through the FAC network really leave a strong and safe place to talk about the challenges that we have and ways to move past those challenges. It’s a place we can really talk about failures and a place where we can really share our successes, and there is a lot in between.”*

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expanding and strengthening the network. Our approach has been to grow the network—and our impact—while remaining nimble and responsive to the needs and changing conditions of communities taking FAC actions.

The original eight network members all remain engaged and committed to the FAC Net, and all of them have deepened their FAC practice and grown the movement by spreading ideas to hundreds of local, regional and national partners. Since the FAC Net’s launch we’ve added nine additional “core members,” further diversifying the kinds of communities and organizations that demonstrate FAC activities within the network. In the coming year we are poised to grow the network even more.

Investments in state and regional sub-networks that operate as affiliates

## USDA Forest Service and the Fire Adapted Communities Learning Network

Network members are working closely with Forest Service Fire Management Officers, District Rangers, Public Information Officers and others to implement sophisticated FAC programs across the country. In addition to conducting prescribed burns and other fuels reduction projects, these Forest Service staff carry out various types of public outreach, make grants, participate in training exercises, attend planning meetings, organize field trips, provide technical assistance and participate in long-range visioning and capacity building. Thirteen National Forests and three Forest Service research stations are partnering with FAC Net member organizations. For example:

- In Southern Oregon, the Ashland Forest Resiliency Stewardship Project is an example of how formal partnerships and the right tools can help accomplish work across ownership boundaries. Forest Service staff and their partners are not only implementing fuels treatments that protect the community water supply, they are also planning for long-term resilience. By investing in coordination, the Forest Service, City of Ashland, The Nature Conservancy and other partners are taking meaningful, far-sighted FAC actions.
- In California, staff from the Klamath and Six Rivers National Forests are working closely with the Karuk Tribe and community partners to adapt fire management in the region to provide cultural and resource benefits and community protection. A Two Chiefs' Joint Landscape Restoration Partnership award—along with support from the Fire Learning Network and FAC Net—is helping take their vision to scale, and spread their learning across the country.



*Top:* The USFS Region 8 Regional Frester visited the Towns County (GA) FAC program, including (at left) the FMO for the Chattahoochee-Oconee NF. *Bottom:* An Island Park (ID) resident discussed fuels management with District Rangers from the Caribou-Targhee and Gallatin NFs during a FAC Net field tour. *Photos:* USFS/A. Polk, TNC/W. Fulks

## Fire Drill!

The North Lake Tahoe area FAC Net helped lead a city-wide evacuation drill in Incline Village, Nevada. According to the FAC Net lead, “The evacuation drill enhanced regional emergency response partnerships, and improved community readiness for evacuation. The drill involved 1,200 residential structures. Approximately 250 regional agency staff were involved in the drill, and 750 residents evacuated and attended the safety expo” as part of the drill.

*BloombergBusiness* had a good article about the drill (<http://www.bloomberg.com/news/articles/2015-06-08/everybody-out-evacuating-an-entire-city-to-prepare-for-fire-season>).

of the national network are also being planned, in California, Colorado, Nevada, New Jersey, New Mexico, and in the Southeast. In Washington, a state network has already launched with seven participating communities. Among the new network's members are communities that sustained serious losses in the 2014 Carlton Complex Fires. The Washington network is helping them share their learning as they rebuild a more resilient state.

## Taking Collective Action

As relationships among FAC Net members have deepened—and the connections between the FAC work in various member communities has become more apparent—participants have begun to find ways to leverage their involvement in the network by co-designing and implementing projects. For example, FAC Net members in Texas and Idaho were surprised to discover they had much in common: both departments face significant WUI challenges, and both have turned to FAC approaches to help their communities live safely with wildfire. And so the Austin and Boise fire departments identified an opportunity to develop a set of learning exchanges that helped expand both departments' views on how they can take FAC actions and support wildfire resilience in their respective places. Members of the two fire departments conducted in-person learning exchanges, in February and May, during which the firefighters discussed a range of topics, from natural resource management, controlled burning, using goats to reduce

hazardous fuel levels and types of wildland firefighting equipment, to evacuation planning, preparedness and public outreach. They also shared tips on effecting cultural change within fire departments. A video, with interviews, insights and lessons from the first exchange, which took place in Austin, was produced by the FAC Net and is available to other communities on the network's YouTube channel (<https://youtu.be/rKVGiLpxnnA>). This exchange has sparked the interest of the International Association of Fire Chiefs (IAFC), a FAC Coalition partner, and FAC Net and IAFC plan to work together to expand this initiative in the coming year.

In addition to connecting fire departments to help transform their approaches to helping their communities better adapt to fire, network members are seeing



Austin-Boise learning exchange. *Photos:* TNC/W. Fulks

opportunities to work together on municipal watershed source protection, customized approaches to engaging home and landowners, ways to use fire as a tool, and incorporating FAC practices into revisions of Community Wildfire Protection Plans. These were among the topics identified at the annual workshop as themes for a series of communities of practice (CoPs) that will connect people working on similar issues. These CoPs will support knowledge-sharing relationships and learning, and will also help identify opportunities for collective projects. The FAC Net will be engaging many additional partners and issue area experts as we explore and build these eight communities of practice together.

### Growing in Washington

At the end of June, the Washington FAC Learning Network officially launched, taking the FAC Net model to the state scale. The first seven members of this new network are Seattle City Light-Skagit Hydroelectric Project, Flowery Trails Homeowner Association, Hidden Valley/Swauk, Okanogan County Conservation District, San Juan Island, Lincoln County Conservation District, and Yakima County Fire Adapted Communities Coalition. For more, see their blog entry at <http://facnetwork.org/washington-fac-network-press-release/>.

*“The main thing we’ve gotten out of [being in the FAC Net] that has been so critical, is being able to leverage the resources within the network, the things that other people have done that we can replicate, learn from, and just the resources provided from the network help get us off the ground and ... we can be part of a national effort. That’s very important ...this is a national priority, a national effort that were a part of. So we’re getting so much out of being part of the network. We wouldn’t be doing this without it.”*

### Looking Ahead: Communities of Practice

At a joint national workshop in June, the FAC Net and Fire Learning Network together began laying out a plan to identify and develop communities of practice in key areas that will improve our collective ability to live with fire. The work began with a presentation by Bruce Goldstein to create a shared understanding. In the model we are using, a CoP has three parts: The *domain* is what the people in a CoP care about or do, their common ground issues. The *community* is the set of people who trust one another enough to interact effectively—it includes shared goals and beliefs, collective stories, a sense of purpose and common identity. The *practice* is the work or activity—the way things get done through methods, techniques, tools, specialized language and the stories told about using these. Practice is not just expertise—it is also social interaction and cultural understanding.



### Domains Selected for Development by Networks

- Community Capacity Building
- Fire as a Tool
- FAC and the Fire Service
- “Next Generation” Community Wildfire Protection Plans (CWPPs)
- Watershed Management
- Forest Treatment Economics
- Public Outreach and Engagement
- Working with Landowners and Homeowners

### Stories from the Fire Adapted Communities Learning Network

One of the activities at the annual workshop was a variation on the idea of “StoryCorps,” in which members of the FAC Net, Fire Learning Network, partners and guests recorded interviews with each other. The quotes in this document were selected from some of those interviews.

For more stories from members of the FAC Net, visit the network’s blog (<http://facnetwork.org>). New stories about their work and lessons learned are posted twice weekly.



Member posts on the blog cover a wide range of topics—reflecting the wide array of issues to be addressed by communities becoming fire adapted. For example, members from Flagstaff wrote about their “Yellow Belly Ponderosa” student outreach effort, while New Mexico shared a success story about expanding the ability to conduct pile burns to remove thinned fuels.

Photos: Greater Flagstaff Forests Partnership; Forest Guild



Fire Learning Network, Fire Adapted Communities Learning Network, Scaling-up to Promote Ecosystem Resiliency and Prescribed Fire Training Exchanges are supported by *Promoting Ecosystem Resiliency and Fire Adapted Communities Together* (PERFACT), a cooperative agreement between The Nature Conservancy, the USDA Forest Service and agencies of the Department of the Interior. For more information, contact Lynn Decker at [ldecker@tnc.org](mailto:ldecker@tnc.org) or (801) 320-0524.

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# Scaling-up to Promote Ecosystem Resilience (SPER II)

Final report on targeted implementation projects in support of fire adapted communities and landscape resilience

The second phase of Scaling-up to Promote Ecosystem Resiliency (SPER II) work began in late 2013 and was completed by May 2015. Five projects with a sound foundational base from Fire Learning Network participation, built on the first SPER pilot program to further accelerate all-lands, landscape-scale implementation, and worked on ways of increasing the scale and capacity for forest and fire restoration work. Those with ties to key Fire Adapted Community Learning Network sites also added a vital component to the development and resilience of fire adapted communities in a landscape context.

These five projects originally proposed to complete a total of 3,247 acres of prescribed fire treatments, 50 acres of thinning and slash management, and about 1,550 acres of non-native invasive species (NNIS) treatments. Workforce capacity-building training opportunities and community engagement activities to support implementation were also part of the proposed work. Over the year-and-a-half course of SPER II, weather—in the form of both drought and excessive rains—and untimely green-up required revisions in the workplans. However, because of the flexibility of project partnerships and some strategic redistributions among them, SPER II as a whole was able to deliver 7,542 acres of prescribed fire, 114 acres of mechanical treatments and 1,950 acres of NNIS work. In addition, capacity-building was supported through partial support of Prescribed Fire Training Exchanges (TREN) in California and New Mexico, as well as individual training opportunities incorporated into other burns, and community outreach products included a video that will be used locally in outreach under the next phase of SPER.



Removal of eastern redcedar furthered restoration of glades in Arkansas' Devil's Eyebrow landscape.



Prescribed fire supports the diversity of the Devil's Eyebrow landscape. Photo: TNC/McRee Anderson

In all, SPER II helped build resilience in an ecologically-diverse wildlife management area in Arkansas and oak woodlands in California; directly supported the fire adapted communities efforts in four small rural towns in California; kick-started wildland-urban interface fuels treatments in a New Mexico community—and set a new standard for pile-burning in the county; helped watershed resiliency efforts in a municipal watershed in Oregon move to the next level; and helped knit together both treatments on the ground and the organizations implementing them in Virginia, thus improving long-term collaborative outcomes.



Staff from TNC and two state agencies formed the core of the cooperative prescribed fire team in Arkansas. Photo: TNC/McRee Anderson

## Arkansas: Ozark Pine-Oak Woodlands & Glade Restoration Partnership: Phase Two

Work in the Devil's Eyebrow project built upon previous successes there, with a combination of glade restoration, invasive species control, fireline construction and landscape-scale prescribed burns. The 1,950-acre Devil's Eyebrow Natural Area Wildlife Management Area—the state's newest—is a diverse site, with more than 550 vascular plant species documented, 25 of which are of state conservation concern. It remains the only confirmed site in Arkansas for black maple (*Acer saccharum* var. *nigrum*) and is home to what is likely the state's largest population of ovate-leaved catchfly (*Silene ovata*). It is also one of very few sites for rock elm in the state and supports large, viable populations of glade onion (*Allium canadense* var. *lavendulare*), Mackenzie's wildrye (*Elymus glaucus mackenzii*), and Ozark cornsalad (*Valerianella ozarkana*), all of which are of global conservation concern. Two other species of global concern are historically known from the area, Trelease's larkspur (*Delphinium treleasei*) and sand grape (*Vitis rupestris*).

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The areas restored with SPER II support complement and expand ongoing work on federal and state lands on the Ozark and Mark Twain National Forests, Buffalo National River, Beaver Lake (Army Corps of Engineers), and three state Wildlife Management Areas (Gulf Mountain, Gene Rush, and Loafers Glory). The project also supported increased cooperative burning between partnering agencies and expanded the partnership's ongoing habitat restoration; all told, project actions included more than 1,000 acres of prescribed burning and nearly 500 acres of invasive species treatments.

### California: Trinity Integrated Fire Management Partnership

The Trinity Integrated Fire Management Partnership (TIFMP) made significant progress on local fire management goals with the support of SPER II. This support enabled partners to complete burn planning for more than 2,000 acres and implementation of controlled burns on over 700 priority acres. These treatments have contributed to fire adaptation and resilience in the communities of Hayfork, Hyampom, Ruth and Weaverville, and the work in oak woodlands restoration is contributing to habitat improvement and landscape resilience and diversity. Local fire management capacity goals are being met through the support of key staff positions at the Watershed Research and Training Center (WRTC), and through training opportunities. These opportunities—which included basic firefighter (FFT2) training for 22 people, firefighter type I training for three people, and work on fire effects monitoring (FEMO) taskbooks for two staff members—are helping to build a cross-trained local workforce.

Some of the less tangible outcomes from this SPER II project are also worth noting. With partial support from SPER II, the Fire, Fuels, and Forestry Program at WRTC has been able to expand and diversify. This growth has significantly increased the organization's capacity to lead the TIFMP and has expanded capacity for planning and implementing large-scale, multi-landowner burns. Strengthened relationships with TIFMP partners and agreements with the Forest Service and local volunteer fire departments have created a solid foundation for cooperative burning that will



*Above:* Smoke rises in the distance from the 72-acre Big Creek Burn conducted in northern California in April 2015. *Center top:* A WRTC staff member pauses near her vehicle before the burn. *Right:* The crew, with members from WRTC, a local volunteer fire department and a private contractor, is led through pre-burn scouting by the burn boss. *Bottom center:* As a March 2015 burn wrapped up, the WRTC fire manager and the landowner smile about a job well done. *Photos: WRTC*

allow WRTC and partners to accomplish fire management work throughout the county.

SPER II also helped catalyze regional partnerships with non-profits, federal land management agencies, researchers, tribes, land trusts and others building a network of oak woodlands restoration partners in northern California. The partnership—which spans parts of four counties and including nearly 20 partner organization and management units—is currently working to leverage Natural Resource Conservation Service funding (through the Regional Conservation Partnership Program) to restore and protect these important ecosystems.

### New Mexico: Collaboration to Reduce Risk in the Fire Prone Southern Sangre de Cristo Mountains

Working in a high-risk wildland urban interface zone near La Cueva, the Forest Guild completed 50 acres of mechanical fuels reduction treatments with SPER II support. The projects were on private land, spanning nine landownerships. In addition, 6.5 acres of piles were burned, and another 15 acres of piles were set to be treated next winter. This project more than quadrupled the footprint of fuels treatments in this community: in the past decade, only about 15 acres had been treated through state forestry assistance programs.

This project was also significant in that it was the first time the Forest Guild worked strategically across a community, engaging multiple landowners. This provided an opportunity to incorporate fire adapted community concepts and practices into the project. It was also the first time the Forest Guild led a pile burn on private land. This burning was particularly significant because it was the first private-land pile burn for which Santa Fe County issued a permit that allowed



Slash from thinning treatments in New Mexico was arranged to minimize runoff and protect water supplies. Photo: Forest Guild

meaningful impact well beyond the acres treated—in the community of Glorieta-La Cueva, with Santa Fe County Fire, for the Forest Guild, and for the Fire Adapted Communities Learning Network here.

### Oregon: Ashland Watershed Resilience

In Ashland, support from SPER II enabled partners to expand their all-lands-all hands approach to the city’s municipal watershed. An interagency workshop—with mentoring support from McRee Anderson of the South Central FLN in Arkansas—helped partners solidify an agreement on prescribed burn objectives. Planning was completed, but fire weather prevented implementing the private-lands burns. Mechanical treatments and preparations on critical private land tracts adjacent to Forest Service lands, however, have set the stage for larger scale burning under SPER III.

Work under SPER I and SPER II has been highlighted on stakeholder tours as part of the process of building the enabling conditions for advancing “right fire” in the watershed. It also helped partners win a Joint Chiefs landscape restoration partnership award; as a result, the Ashland Forest Resilience project has expanded into the Ashland Forest All-lands Restoration project in which 1,000 acres of private lands will be treated with NRCS funding. The video “Bringing Fire Back,” which

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multiple piles at a time. Permitting and planning for prescribed fire on private land in New Mexico varies widely from county to county. Work on this project established a process and burn plan template that Santa Fe County Fire has accepted and will use in the future. In short, the SPER II funding had a

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*“Since SPER II brought the Forest Guild into the private land burning arena, there is now potential for the Guild to coordinate a 150-acre ponderosa pine burn on private land with the New Mexico fire manager.... Neither the burning in La Cueva or the larger burn farther west would be possible without the support and success of this SPER II project.”*

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was completed this spring, will be used to recruit private landowners for needed work, and build community support for using fire and for tolerating the smoke of managed fires.

### Virginia: Allegheny and Potomac Highlands Ecosystem Restoration Project

Two of the primary goals for SPER II in this landscape were to facilitate integration of the Central Appalachians Fire Learning Network and Potomac Highlands Cooperative Weed and Pest Management Area (CWPMA) initiatives, and to expand their prescribed fire and non-native invasive species (NNIS) treatments to

previously underserved partner lands. These goals were met. SPER II helped build critical capacity in two state agencies—the Virginia Department of Conservation and Recreation (State Parks) and the Virginia Department of Game and Inland Fisheries—and implement collaborative burns on their respective lands. SPER II also allowed partners to expand NNIS treatments to the George Washington National Forest, and led to the CWPMA expanding its boundary to incorporate additional counties. Both of these are significant steps towards these

partners becoming—and perhaps more important, feeling like—full collaborators in the two networks: not only taking part in projects on other partners’ lands, but bringing partners to their sites and accomplishing the goals they have set for them.

SPER II support for a contract crew from Wildland Restoration International (WRI) this spring came at a crucial time, and provided the flexibility needed to seize opportunities to get good fire on the ground. The partnership had just lost significant burn preparation capacity in the Allegheny Highlands with the closure of a correctional facility that housed a wildland fire crew that had been critical to partnership work for years. With late snows and a wet spring, burn windows were

tight in the mountains this year; without the WRI crew several of the high-priority burn units could not have been prepared in time to take advantage of the few burn days available. The flexibility to use the crew across the Commonwealth of Virginia allowed partners to adjust their work to the weather: Eight inches of snow fell in the mountains as the crew reported for duty on President's Day, and burning in the mountains wasn't possible for nearly a month after that. During this time, the crew lent critical capacity to coastal plain and longleaf pine management and restoration efforts at a time when that work could not have been completed by FLN partners.

## Acres Implemented under SPER II by Landscape-Based Projects

	prescribed fire			mechanical			NNIS		additional site prep	total		
	proposed	revised	actual	proposed	revised	actual	proposed	actual	actual	proposed	revised	actual
AR	1,000	1,000	<b>1,055</b>	13	13	<b>13</b>	50	<b>460</b>		1,063	1,063	<b>1,528</b>
CA	100	800	<b>713</b>						<b>84</b>	100	800	<b>797</b>
NM		6	<b>7</b>	50	50	<b>50</b>				50	55	<b>56</b>
OR	50	0	<b>20</b>		50	<b>51</b>				50	50	<b>71</b>
VA	2,097	4,900	<b>5,747</b>				1,500	<b>1,490</b>	<b>2,823</b>	3,597	6,400	<b>10,060</b>
TREX			<b>1,121</b>									<b>1,121</b>
total	3,247	6,706	<b>8,663</b>	63	113	<b>114</b>	1,550	<b>1,950</b>	<b>2,907</b>	4,860	8,368	<b>13,633</b>



**Acres Implemented under SPER II:** This table includes only implementation outcomes. In addition to the 13,633 acres treated, several projects delivered capacity-building training opportunities or outreach actions.

SPER II contributed support to five Prescribed Fire Training Exchanges (Trex) in 2014 that treated 1,121 acres in addition to delivering capacity-building training. The Arkansas and Virginia projects focused primarily on landscape-scale restoration, while those in California, New Mexico and Oregon addressed treatments in WUI areas.

*Notes:* Prescribed fire included both broadcast and pile burns; mechanical treatments included thinning, thinning with slash management for watershed protection, and removal of eastern redcedar from glades; NNIS covers treatments, generally with herbicides, to manage non-native invasive species. The totals in the column at the far right are total acres treated, which is slightly less than the sum of the treatments because some acres received multiple treatments.

*“All said, it’s been a transformation period for bringing prescribed burning back to the Trinity Mountains landscape, which we could not have realized without SPER funding.”*

*Above:* In the Central Appalachians, a burn boss from The Nature Conservancy briefs a multi-agency crew before the Blue Suck Burn in March 2014. *Photo: TNC/Marek Smith*

*Right:* In Ashland’s municipal watershed, SPER I and II treatment areas and partnerships were highlighted in tours for stakeholders and funders. These helped build community support for larger-scale treatments, and helped partners make the case for the funds needed to complete them. *Photo: TNC/Chris Topik*

*Far right:* A four-person crew from Wildland Restoration International prepped units, and helped implement the burns, on 2,942 acres in the mountains and 1,235 acres on the coastal plain of Virginia. They prepped another 2,823 acres of units that will be burned later. *Photo: WRI/Bill Ragsdale*



Scaling-up to Promote Ecosystem Resiliency, Fire Learning Network, Fire Adapted Communities Learning Network and Prescribed Fire Training Exchanges are supported by a cooperative agreement between The Nature Conservancy, the USDA Forest Service and agencies of the Department of the Interior. For more information, contact Lynn Decker at [ldecker@tnc.org](mailto:ldecker@tnc.org) or (801) 320-0524. *An equal opportunity provider.*