



# LEARNING NETWORKS FIELD GUIDE

Fire Learning Network

Fire Adapted Communities Learning Network

Prescribed Fire Training Exchanges

Scaling-up to Promote Ecosystem Resiliency

January 2016





Copyright 2016 The Nature Conservancy

The Fire Learning Network, Fire Adapted Communities Learning Network, Prescribed Fire Training Exchanges and Scaling-up to Promote Ecosystem Resiliency projects are part of the “Promoting Ecosystem Resilience and Fire Adapted Communities Together” (PERFACT) cooperative agreement among The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior (Bureau of Indian Affairs, Bureau of Land Management, Fish & Wildlife Service, National Park Service).

For more information about the FLN, please visit [www.conservationgateway.org/fln](http://www.conservationgateway.org/fln)

about the FAC Learning Network, please visit [www.FACNetwork.org](http://www.FACNetwork.org)

about TREX, please visit <http://nature.ly/trainingexchanges>

#### Cooperative Agreement Contacts

FLN Director	Lynn Decker	<a href="mailto:ldecker@tnc.org">ldecker@tnc.org</a>	(801) 320-0524
USDA Forest Service	Tim Melchert	<a href="mailto:tmelchert@fs.fed.us">tmelchert@fs.fed.us</a>	(208) 387-5512
Dept. of the Interior	David Overcast	<a href="mailto:david_overcast@ios.doi.gov">david_overcast@ios.doi.gov</a>	(202) 606-3206

#### The PERFACT Team

The Nature Conservancy North America Fire Team: Lynn Decker, Jeremy Bailey, Guy Duffner, Wendy Fulks, Mary Huffman, Heather Montanye, Liz Rank

The Watershed Research and Training Center: Nick Goulette, Michelle Medley-Daniel, Lenya Quinn-Davidson, Emily Troisi

The Field Guide is compiled and produced by Liz Rank ([lrank@tnc.org](mailto:lrank@tnc.org)). Thanks to the numerous landscape and community leaders and partners who provided text, photos and review for this document, and for the valuable work they do in the field.

#### Photo Credits

Front cover (left column, top to bottom): Riley Bergseng, Coalition for the Upper South Platte, Robert B. Clontz/TNC (2); (right column, top to bottom) Northern California Prescribed Fire Council/Lenya Quinn-Davidson, Forest Stewards Guild.

This page: Jeffrey Kane.

Back cover (left to right): Liz Rank/TNC, Katherine Medlock/TNC, Chris Topik/TNC, Mary Huffman/TNC, Liz Rank/TNC (2), Frank Riley, Florida Forest Service, Guy Duffner/TNC.



# Contents

## Introduction & Overview

**A Brief Introduction to the Learning Networks** 1

**Map: Where We Work** 4

FLN landscapes, Fire Adapted Communities Learning Network members, 2015 Prescribed Fire Training Exchanges (TREX) and Scaling-up to Promote Ecosystem Resiliency (SPER III) projects

## Fire Learning Network Regional Networks & Large Landscapes

**California Klamath-Siskiyou FLN** 7

**Centennial FLN** 8

**Central Appalachians FLN** 9

**FireScape Mendocino** 10

**FireScape Monterey** 11

**Great Plains FLN** 12

**New Mexico FLN** 13

**Oregon FLN** 14

**Pikes Peak FLN** 15

**South Central FLN** 16

**Southern Blue Ridge FLN** 17

**Washington Dry Forests FLN** 18

**Western Klamath Mountains FLN** 19

## Fire Adapted Communities Learning Network Members

**Overview of the FAC Learning Network** 20

**Austin Fire Department (Texas)** 22

**Boise Fire Department (Idaho)** 23

**Chestatee-Chattahoochee RC&D Council (Georgia)** 24

**Chumstick Wildfire Stewardship Coalition (Washington)** 25

**Coalition for the Upper South Platte (Colorado)** 26

**Dovetail Partners (Minnesota)** 27

**FireWise of Southwest Colorado** 28

**Florida Forest Service** 29

**Forest Stewards Guild (New Mexico)** 30

**Greater Flagstaff Forests Partnership (Arizona)** 31

**Island Park Sustainable Fire Community (Idaho/Montana)** 32

**Karuk Tribe (California)** 33

**New Jersey Fire Safety Council (New Jersey)** 34

**Project Wildfire (Oregon)** 35

**Southern Oregon Forest Restoration Collaborative (Oregon)** 36

**Tahoe Fire & Fuels Team (Nevada/California)** 37

## FAC Learning Network State-Wide Efforts

**California Fire Safe Council** 39

**Nevada Network of Fire Adapted Communities** 40

**Washington Fire Adapted Communities Network** 41

## Prescribed Fire Training Exchanges

**Overview of TREX, and highlights of 2015 events** 42

## Scaling-up to Promote Ecosystem Resiliency

**Overview of SPER, and highlights of SPER III projects** 44

## FLN Indexes

**Areas of Focus & Expertise** 46

FLNs cross-referenced by habitats & human context factors worked with, and by areas of expertise

**Partner Types** 48

FLNs cross-referenced with agency or organization types of key partners

**Managing in Landscapes with Threatened & Endangered Species** 49

FLNs cross-referenced with T&E species

**Managing Invasive Species** 52

FLNs cross-referenced with invasive species they manage for

## FAC Learning Network Indexes

**Actions Taken & Values at Risk** 54

FAC hubs cross-referenced with actions to address values at risk

**Resources & Strategies** 55

FAC hubs cross-referenced with resources, programs and strategies

**Public Outreach & Partnerships** 56

FAC hubs cross-referenced with outreach efforts and partnerships





Photo: Liz Rank/TNC

*“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.”*

FAC Learning Network member  
interview recorded at national workshop, June 2015



# A Brief Introduction to the Fire Learning Network

**The Fire Learning Network** and its related programs are part of “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. The partnership works in particular places with individual people, and also at regional and national scales—and it makes the connections between those scales.

Key aspects of this work are:

- 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;
- targeted restoration action under Scaling-up to Promote Ecosystem Resiliency (SPER); and
- communication and public outreach about fire, restoration, and the collaborative work being done on them.

All of these aspects are interconnected, making all parts more effective at promoting healthy ecosystems and fire adapted human communities than they would be on their own. In many of the places where these partnerships work, it is becoming difficult to tell where the FLN leaves off and other efforts begin—which is as it should be.

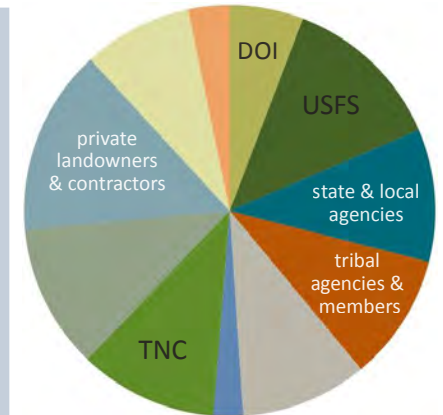


TREX participants take part in a field tour with author and ecologist Bruce Sorrie. The first TREX in North Carolina was held in the spring of 2015. It was supported by Southeast Regional Partnership for Planning and Sustainability (SERPPAS) Prescribed Fire Working Group led by North Carolina State University, The Nature Conservancy, the Southern Blue Ridge FLN, the North Carolina Prescribed Fire Council and others. As with all TREX, learning comes in a variety of forms, including from burning, classroom presentations and discussions, and field tours.

*Photo: Nancy Lee Adamson*

## By the Numbers (2015)

- > 30 **FLN landscapes**
- 9 regional networks
- > 250 partners
- 81.1 million acres
- 20 states
- 19 **FAC Net core members**
- > 125 communities in 14 states
- > 360 partners
- 9 **Prescribed Fire Training Exchanges (TREX)**
- 432 participants
- 6,965 acres of prescribed fire
- 478 acres of thinning & burning treatments by **SPER III** projects



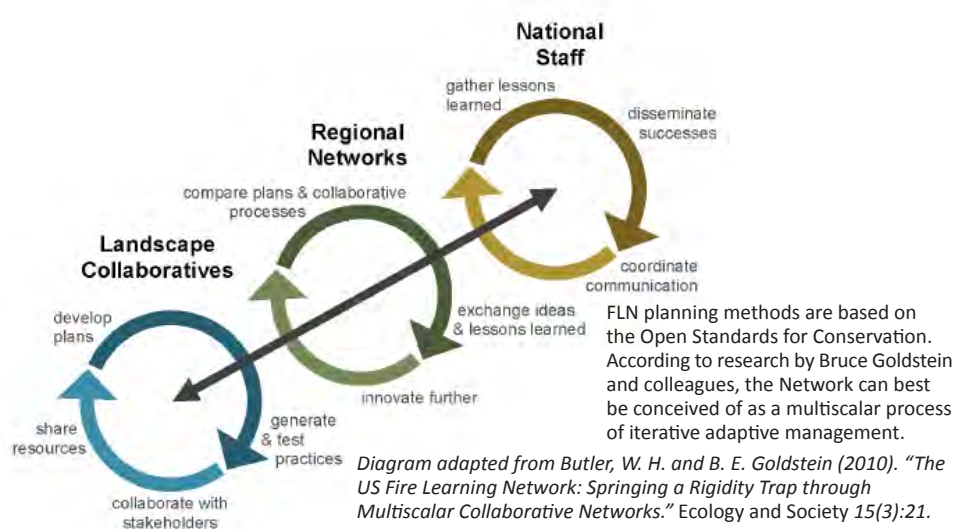
**Prescribed Fire Training Exchange Participant Affiliations—2015**

## The Fire Learning Network

More than 30 landscapes—most of them working as part of regional networks—are now active in the FLN. These partnerships generally begin by focusing on a collaborative planning process that brings stakeholders together to work through where they want to go and how they can get there. Partners in established FLNs, having done this planning work, engage in a diversity of place-specific activities together. These include hosting workshops to build knowledge and develop local tools, and to support the work of landscape-scale projects. They also lead and support

statewide prescribed fire councils, nurture the development of fire adapted communities, host Prescribed Fire Training Exchanges, develop cooperative burning programs, monitor fire effects, develop interpretive signage, and publish restoration resources.

In the course of their work, FLNs engage hundreds of diverse partners—from state and federal agencies to researchers and private landowners—from coast to coast. In a multitude of interactions, both formal and informal, they further the cause of collaborative restoration, and serve as incubators for innovation in the field.

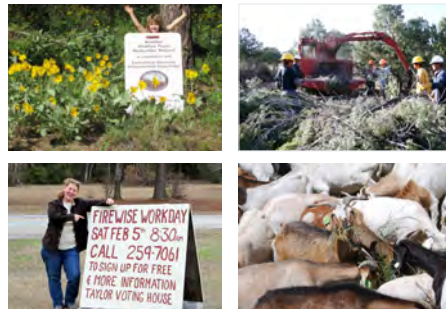


## The Fire Adapted Communities Learning Network

Modeled after the FLN, the FAC Learning Network was launched in April 2013 with stakeholders from eight communities; in March 2014, ten more communities were brought into the network. Most of these groups are still active in the network; with the addition of several state-level networks in late 2015, 19 local and regional efforts now form the network's core. Collaborative teams from these communities 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. Communities are working on projects as diverse as evolving CWPPs and county-wide integrated fire plans, securing funding for mitigation projects, and gathering and sharing the lessons learned from their experiences with wildfires. The network communicates regularly through an online workspace (Podio), and a public

website (<http://facnetwork.org/>), and holds quarterly peer-learning webinars and an annual workshop.

The FAC Net works 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 impact on the development of fire adapted communities nationwide.



Novel means of assisting and enabling communities to complete fuel treatments are among the strategies used by FAC network members.

Photos (clockwise): Andrew Holm; Forest Guild; Jerry McAdams/Boise FD; Florida Division of Forestry

## Prescribed Fire Training Exchanges

Training events combining experiential learning and principles of integrated fire management are now being held in numerous locations each spring and fall. The integration of professional wildland firefighters and less-traditional training partners at these events expands both the capacity of the fire community and its breadth of knowledge. It builds the ability to conduct controlled burning effectively and with full social license, and develops connections that are helping wildfires be managed with



Participants in the Spanish Language TRES practice fire shelter deployment. All TRES participants must meet NWCG standards for safety and basic firefighter training. Photo: Elyssa Duran

growth point, almost simultaneously moving toward larger crew sizes, spreading into new geographic areas (and habitats), becoming more closely tied to fire adapted communities efforts, and becoming more locally based. Numerous participants have attended multiple events, and are becoming sources of leadership and support. Staff support is now shifting from running the events to mentoring others. With this shift, the TRES model—and its integrated way of viewing fire management and doing prescribed fire—is becoming adaptable, self-sustaining, and ever more widespread.



The fall 2015 Klamath River TRES combined capacity building, community protection and opportunities for education about cultural burning. Photo: Stormy Staats

sensitivity to local plans and concerns. TRES also actively engage national, regional and local media, and help participants develop and communicate key messages with skill.

Since 2008, 44 events have served more than 1,500 practitioners and treated more than 78,000 acres. The earliest exchanges were in FLN grasslands, but they are now offered in forested landscapes and in wildland-urban interface (WUI) areas, in support of fire adapted community efforts and landscape-scale ecological restoration while building local fire management capacity. TRES efforts recently reached an important

## Scaling-up to Promote Ecosystem Resiliency

Modest amounts of implementation funding are targeted to either fill gaps in a landscape, or provide a catalyst to accelerate work. Prescribed fire, other fuels treatments, and invasive species management treatments are conducted under SPER, mainly on relatively small, strategically-placed parcels that leverage and connect existing or planned treatments on federal lands.

In the first phase, six projects proposed 19,767 acres of treatments to restore ecosystem resiliency and help protect communities and their watersheds. In



spite of drought, flooding, a state-wide ban on prescribed fire, the banning of fire on proposed lands to protect sage grouse and a variety of other obstacles, relying on adaptive planning and long-standing partnerships, the six projects together completed 20,625 acres of treatments, about 5 percent more than proposed. In several cases, this funding also spurred the completion of other nearby projects with other funding sources. In the smaller second phase of SPER, five landscape-based projects, similar to the first six, completed about 3,000 acres of treatments in support of fire adapted communities and several prescribed fire training events built local capacity while conducting treatments near at-risk communities.

Projects in the third phase of SPER are aimed at enabling fire use in northern California, the upper Rio Grande watershed of New Mexico, and the landscape around Ashland, Oregon.



Top: Eastern redcedar was removed from this site as part of a program of glade restoration across Arkansas landscapes. Photo: McRee Anderson/TNC  
Bottom: A multi-agency crew briefs before the Blue Suck Burn, conducted to improve forest health on Virginia State Parks land. Photo: Marek Smith/TNC

## Integrated Outreach

Communication efforts are woven through much of the work conducted by the FLN and related programs. This serves to disseminate lessons learned and success stories that can help other projects, and to offer a more nuanced—and empowering—view of wildfire and fire management than is often seen in news accounts. Highlighting fire adapted communities efforts and other successes also opens a larger space for the important work that can be done.

The town of Angel Fire, New Mexico is a good example of success: Just before a fall 2013 TREX, a headline in the local paper read “Residents Brace for Sept. 30 Burn Near Angel Fire.” But by the end of the event, the headline “Prescribed Burn Near Angel Fire Wraps up at 105 Acres” ran over a story that included an excellent video describing the precautions taken and the community and forest benefits of the burning. Following that, one of the people expressing misgivings in the first 2013 article led community-outreach efforts during the 2014 burning.

## More Online

### Fire Learning Network

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

### Prescribed fire training exchanges

<http://nature.ly/trainingexchanges>

### Fire Adapted Communities

<http://facnetwork.org/>

### FLN Networker (biweekly newsletter)

<http://www.conservationgateway.org/ConservationPractices/FireLandscapes/FireLearningNetwork/FLNNetworker/Pages/fln-networker.aspx>

## Working Together

In June 2015, about 100 participants in the FLN and FAC Learning Network met, along with staff and national-level partners, at a workshop in Santa Fe, New Mexico. The gathering provided numerous opportunities for sharing information within and between the networks, as well as cementing the relationships that are central to both networks’ success.

At the workshop participants also began the building of formal communities of practice that span the networks, and will eventually reach beyond them. Seven topics—community wildfire protection planning, working with landowners and homeowners, treatment economics, watershed management, using fire as a tool, engagement and communication, and the Network Builders Club (best practices for state and regional learning networks)—were identified for initial efforts, and teams have since been working on both the topic areas, and on ways of building these communities using various technologies that can connect far-flung colleagues and partners.



Top: The 2015 workshop was co-hosted by local members of the FLN and FAC Net. It kicked off with a field tour that included areas treated to protect the municipal watershed of the City of Santa Fe.  
Center: Ice-breaker exercises encouraged the mingling of networks and geographies.  
Bottom: A world cafe session helped flesh out some of the details of proposed communities of practice. Photos: Jim Beck/USFS; Liz Rank/TNC



The Fire Learning Network 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 (ldecker@tnc.org).



# Where We Work

## Fire Learning Network

- 01 California Klamath-Siskiyou FLN
- 02 Centennial FLN
- 03 Central Appalachians FLN
- 04 FireScope Mendocino
- 05 FireScope Monterey
- 06 Great Plains FLN
- 07 New Mexico FLN
- 08 Oregon FLN
- 09 Pikes Peak FLN
- 10 South Central FLN
- 11 Southern Blue Ridge FLN
- 12 Washington Dry Forests FLN
- 13 Western Klamath Mountains FLN

## Fire Adapted Communities Learning Network

- 01 Arizona: Coconino County (Flagstaff)
- 02 California: Klamath Mountains
- 03 Colorado: Archuleta, La Plata & Montezuma Counties
- 04 Colorado: Douglas, El Paso, Jefferson, Park & Teller Counties
- 05 Florida: Baker County
- 06 Georgia: Towns & White Counties
- 07 Idaho/Montana: Island Park & West Yellowstone
- 08 Idaho: Ada County (Boise)
- 09 Minnesota: Ely
- 10 Nevada/California: Tahoe Basin
- 11 New Jersey: Pinelands
- 12 New Mexico: Western and North-Central NM
- 13 Oregon: Deschutes County
- 14 Oregon: Jackson & Josephine Counties
- 15 Texas: Travis County (Austin)
- 16 Washington: Leavenworth & Plain

## State-wide FAC Networks:

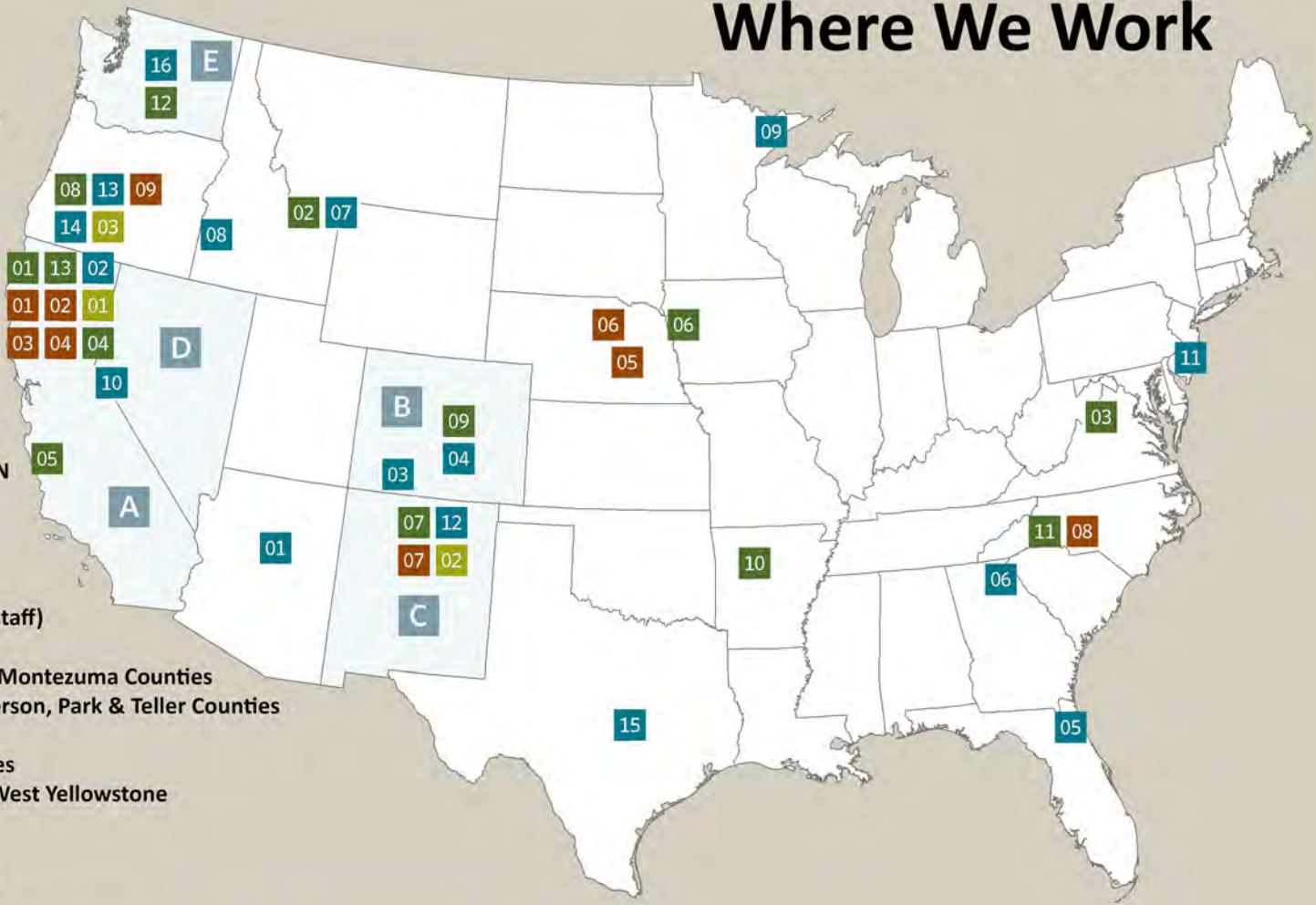
- A California Fire Safe Council
- B Fire Adapted Colorado
- C Fire Adapted New Mexico
- D Nevada Network of Fire Adapted Communities
- E Washington Fire Adapted Communities Network

## Prescribed Fire Training Exchanges (2015)

- 01 California: Klamath River TREX (September)
- 02 California: Nor Cal TREX
- 03 California: Yurok TREX (February)
- 04 California: Yurok TREX (October)
- 05 Nebraska: Loup River TREX (March)
- 06 Nebraska: Niobrara Valley (Spring Break TREX)
- 07 New Mexico: Spanish Language TREX (September)
- 08 North Carolina: NC TREX (February)
- 09 Oregon: Central Oregon TREX (May)

## Scaling-up to Promote Ecosystem Resiliency

- 01 California: Trinity Integrated Fire Management Partnership
- 02 New Mexico: San Juan-Chama Headwaters, Rio Grande Water Fund
- 03 Oregon: Ashland Forest All-lands Restoration



# Fire Learning Network

---



# California Klamath-Siskiyou Fire Learning Network

**Nick Goulette**  
**Michelle Medley-Daniel**  
**Lenya Quinn-Davidson**

nickg@hayfork.net (530) 628-4206  
michelle@thewatershedcenter.com  
lquinndavidson@ucanr.edu

**Partners in the Trinity Mountains** are focusing on the synergy created between the Fire learning Network and the Trinity Integrated Fire Management Partnership's (TIFMP) implementation work. In addition to having local prescribed burning to ground our learning, we have a formal collaborative group that acts in an advisory capacity to the county board of supervisors and federal land management agencies. With this forum, and the Trinity County Fire Safe Council, we are able to link learning about fire to planning, implementation and monitoring processes. Being able to tie together all of the parts of the adaptive management cycle is critical if we want to impact systems and achieve necessary shifts in our management approach.

**Regional partnerships** that we've invested in over the years continue to be a focus of the CKS FLN. Through support of the Northern California Prescribed Fire Council, the network directly reaches over 200 people every year, bringing together practitioners and scientists and facilitating important movement in the policies and practice of prescribed fire in the region.

**Another regional effort**, co-hosting events with the California Fire Science Consortium, allows us to bring a science-based approach to regional



In the course of the fall 2015 Northern California Prescribed Fire Training Exchange (Nor Cal TREX), participants burned 160 acres in the Hayfork area. These burns reduced fuels, consuming small trees and shrubs; they will increase community safety and improve range and forage.

*Photos: Lenya Quinn-Davidson/NCPFC*

management and the dialogue at the events helps inform our landscape level work, as well as bringing a management perspective to the scientists involved.

**Prescribed fire training exchanges (TREX)** bring together many aspects of work in this landscape. They enable participants to experience fire interacting with a variety of communities and ecosystem types, and help build local capacity to manage fire. And the treatments conducted during a TREX help make both the forests and human communities more resilient to wildfire.



The TREX burn boss and other participants monitor smoke from a prescribed burn in the Hayfork area in late October 2015

*Photo: Lenya Quinn-Davidson/NCPFC*

## Landscape Partners

- Bureau of Land Management—Redding Field Office
- CAL FIRE
- Humboldt State University
- Hyampom Volunteer Fire Department and Fire Safe Council
- Northern California Prescribed Fire Council
- Trinity County Collaborative
- Trinity County Fire Chiefs Association
- Trinity County Fire Safe Council
- Trinity County RCD
- University of California Extension
- USDA Forest Service—Pacific Southwest Research Station; Province Ecologist
- USDA Forest Service—Shasta-Trinity National Forest (Forest Supervisor's Office, Hayfork and Weaverville RDs)
- USDA Forest Service—Six Rivers National Forest
- USDA Natural Resources Conservation Service
- Watershed Research and Training Center
- Weaverville Volunteer Fire Department
- and local landowners and residents



The Fire Learning Network 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 (ldecker@tnc.org).



# Centennial Fire Learning Network

Nathan Korb

nkorb@tnc.org

(406) 925-1144

**A key goal** of the Centennial FLN is to prepare the landscape—both natural and human—so that fire can once again roam and fill its ecological role. To this end, the Lakeview Community Protection Project has completed thinning in nearly all the private forests in the area, and the BLM and U.S. Fish & Wildlife Service are developing complementary projects on lands around the town. This will allow managers to let natural fires in the nearby wilderness burn safely, and will lower the risk to fire workers if extreme fire conditions warrant fire suppression. The FLN is also working with the Fire Adapted Communities Learning Network hub on the other side of the Centennial Mountains, in Island Park, Idaho. The groups have a mutual interest in developing coordinated plans to manage fire safely, cost-effectively, efficiently, wisely, and for the greatest benefit.

**Protecting threatened species:** To improve critical sage-grouse habitat, a half dozen FLN partners are implementing a coordinated multi-year grazing plan across over 45,000 acres; the plan will improve the health of the rangeland for livestock as well as wildlife, so partners hope to spark the interest of other landowners in the Sage Grouse Initiative. With researchers from Montana State University, the effects of management and grazing on

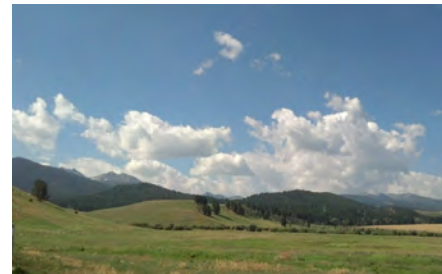
## Landscapes

Centennial Valley  
Gravelly Landscape  
Henry's Lake / Island Park  
High Divide Headwaters

sage-grouse are also being measured, and this study will help to guide land management decisions for sage-grouse habitat. In the sandhills, open sand blowouts are being conserved for rare plants and tiger beetles, and monitoring of vegetation and bird communities, as well as the effects of a 2008 prescribed burn, is ongoing. Managers are also experimenting with using hand tools and volunteer labor to remove sagebrush and grasses to restore sagebrush habitat with fewer negative consequences than burning.

**Planning for climate change:** Through monitoring and adaptive management, partners are preparing for unexpected consequences of a changing climate. A novel water vulnerability assessment conducted by Conservancy scientists and a University of New Mexico graduate student is illuminating the effects of climate change on headwater streams in the Centennial and other valleys in southwest Montana. Preliminary results indicate that flows from north-aspect basins are more resilient to climate changes, which has important ramifications for where limited restoration and land protection resources should be invested; the results are being incorporated into state and federal fisheries planning.

**Building connectivity:** FLN partners are working to restore wetland connectivity and riparian areas by changing grazing, replacing culverts and planting willows. These changes create habitat for beaver, and recent studies have shown that beavers improve late-season flows and thus will likely protect watersheds under predicted climate change scenarios.



**Providing leadership:** The FLN provides leadership and expertise on area forest management priorities, for example, as part of the forest-wide Beaverhead-Deerlodge Working Group that is developing collaborative solutions across that 2.5 million acre national forest. And, looking to the future, for the last several years, high school student volunteers have assisted with restoration projects, putting in hundreds of hours each summer, and Conservancy interns from urban high schools have worked on stream monitoring and other projects. These programs engage a new generation of scientists and citizen naturalists in on-the-ground conservation work, and provide them with experience to embark on science careers of their own.



## Network Partners

Bureau of Land Management—Dillon Field Office  
Future West  
Greater Yellowstone Coalition  
Montana Department of Natural Resources and Conservation—Dillon Resource Area  
Montana Fish, Wildlife and Parks—Region 3  
U.S. Fish & Wildlife Service—Red Rock Lakes NWR  
University of Montana Western  
USDA Forest Service—Beaverhead-Deerlodge NF (Madison RD)  
USDA Natural Resources Conservation Service—Dillon Office  
Wildlife Conservation Society and private ranch operations



The Fire Learning Network 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 (ldecker@tnc.org).

# Central Appalachians Fire Learning Network



**The Central Appalachians FLN** engages federal, state and private land managers, academic institutions and non-profit organizations in a collaborative effort to enhance capacity to implement ecological fire management in the Central Appalachian Forest, Western Allegheny Plateau, and Cumberlands and Southern Ridge and Valley ecoregions. These landscapes include rolling and mountainous terrain, Appalachian pine-oak forests and woodlands, pine-oak-heath shrublands and barrens, small-patch grasslands including high elevation balds, wet prairies and cedar glades, and have high levels of species endemism.

**Over its eight year history**, increased partnership diversity, communication and coordination have been key to restoring the role of fire at an ecologically meaningful scale. Central Appalachians FLN partners have conducted controlled burns on more than 61,000 acres of federal, state and private lands since 2014.

**Key accomplishments** in this network include:

- Development of robust fire effects monitoring programs, including for avian community, forest structure and composition, and burn severity;



Estimating canopy cover using a densitometer in the Warm Springs Mountain Restoration Project.  
*Photo: Nikole Swaney/TNC*

- Mapping of ecological zones across 10.2 million acres in Kentucky, Virginia and West Virginia;
- Development of spatial analysis tools for prioritizing fire restoration and assessing fire effects;
- Facilitation of dendrochronology, soil charcoal and other fire history research throughout the region;
- Implementation of memoranda of understanding and cooperating agreements to facilitate a cross-agency, all-lands approach to restoration;
- Development of interpretive signs, brochures and other education materials on prescribed fire;
- Facilitation of interagency training and capacity-building opportunities;
- Posters and oral presentations at national conferences that share network success stories and products; and
- Use of funding from Scaling-up to Promote Ecosystem Resiliency to fully integrate non-native invasive species control with prescribed fire management activities.

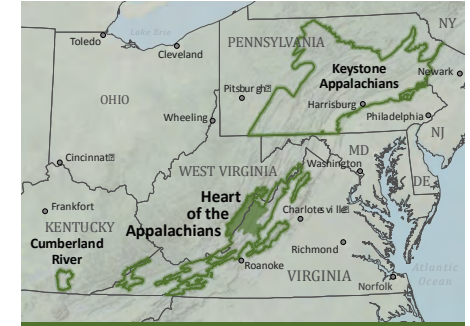
**Sam Lindblom**  
**Marek Smith**

slindblom@tnc.org  
marek\_smith@tnc.org

(434) 987-0712  
(540) 839-3599

## Network Partners

Appalachian Mountains Joint Venture  
Arcadia University  
Consortium of Appalachian Fire Managers and Scientists  
Kentucky Department of Fish & Wildlife Resources  
Kentucky Division of Forestry  
Maryland Department of Natural Resources  
National Park Service—New River Gorge National Recreation Area, Shenandoah National Park  
National Weather Service  
National Wild Turkey Federation  
New River-Highlands RC&D  
Pennsylvania Department of Military and Veterans Affairs at Fort Indiantown Gap  
Pennsylvania Game Commission  
Radford University  
The Nature Conservancy—Kentucky, Maryland, Pennsylvania, Virginia, West Virginia  
University of Kentucky—Forestry  
University of Maryland



University of Tennessee  
U.S. Geological Survey—Virginia Cooperative Fish and Wildlife Research Unit  
USDA Forest Service—Daniel Boone, George Washington and Jefferson and Monongahela NFs; Northern Research Station, Southern Research Station  
USDA Natural Resources Conservation Service  
Virginia Department of Conservation and Recreation—Natural Heritage, State Parks  
Virginia Department of Forestry  
Virginia Department of Game and Inland Fisheries  
Virginia Tech  
West Virginia Department of Forestry  
West Virginia Department of Natural Resources  
West Virginia University



The Fire Learning Network 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 (ldecker@tnc.org).



A briefing at the 2014 Prescribed Fire Training Exchange in Virginia, where 36 practitioners (22 from Virginia, 14 from eight other states) worked together to treat about 1,000 acres with prescribed fire while sharing knowledge across agencies and geographies.  
*Photo: Robert B. Clontz/TNC*



# FireScape Mendocino

## Fire Learning Network



**FireScape Mendocino began** its collaborative work in late 2013. The group has held community workshops about quarterly since then, continuing to work toward realizing its vision of a resilient landscape that provides sustainable habitats for people and animals while supporting the social and economic needs of communities in and around the Mendocino National Forest.

**Using the Open Standards** for the Practice of Conservation for foundational planning, the group has identified its geographic scope, landscape vision, a suite of enduring shared values—ecological, cultural and economic—and a robust set of strategies designed to improve the health and viability of these values.

**FireScape Mendocino has matured** into a functioning multi-stakeholder collaborative with four active work groups:

- Fire Ready Communities
- Landscape-Scale Vegetation Management
- Fire and Recreation Infrastructure
- Air Quality

**The work groups are tasked** with discovering what it means to apply their strategies to the group's primary geographical focal areas, Paskenta,

Covelo/Eel River, Lake Pillsbury, Upper Lake and Stonyford.

**Thus far**, the Landscape-Scale Vegetation Management Group has conducted two field trips to explore the implications of climate change on forest health and vegetation distribution across the landscape. The Fire Ready Communities Group discussed the effectiveness of various fuels treatments for limiting wildfire spread into residential areas, and they've been actively assisting local communities work to achieve Firewise recognition. The Fire and Recreation Infrastructure Group has been considering potential recreation recommendations for the newly designated Berryessa Snow Mountain National Monument. And the Air Quality Group is gearing up for the opportunity to comment on the latest proposed EPA rule change, which has serious implications for the use of prescribed fire.

**Going forward**, FireScape Mendocino will be engaging in large-scale fire management planning, which includes GIS-based analysis of fire risks and benefits across the mapped landscape. This will incorporate stakeholder input into the model calculations, and the product will feed into Forest Plan Revision.

<b>Rick Mowery</b>	rmowery@fs.fed.us	(530) 934-1175
<b>Kimberly Baker</b>	kimberly@wildcalifornia.org	(707) 822-7711
<b>Don Amador</b>	damador@cwo.com	(925) 625-6287



*Top of page:* A commercial forester, local resident and Forest Service ecosystem management staff officer used Google Earth to explore possible treatment approaches at a 2014 workshop.

*Above:* Landscape-Scale Vegetation Management working group members reviewed the results chains developed to test the logic of several potential strategies. *Photos: Mary Huffman/TNC*

### Landscape Partners

- Blue Ribbon Coalition
- Bureau of Land Management
- CAL FIRE
- California State Parks—Off-Highway Motor Vehicle Recreation Division
- California Wilderness Coalition
- Central Valley Regional Water Quality Control Board
- Crane Mills
- Environmental Protection Information Center
- Lake County Fire Safe Council
- Lake Pillsbury Homesite Association
- Mendocino Redwood Company and Humboldt Redwood Company
- Office of Congressman Doug LaMalfa
- Office of Congressman Jared Huffman
- Round Valley Indian Tribes
- Sierra Pacific Industries
- Sunflower Coordinated Resource Management Program



- Tehama County Resource Conservation District
- Tuleyome
- Upper Little Stony Inholders Alliance
- USDA Forest Service—Mendocino NF
- USDA Natural Resources Conservation Service
- Yolo Audubon Society



The Fire Learning Network 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 (ldecker@tnc.org).



# FireScape Monterey

## Fire Learning Network



Work in this landscape also includes research on sudden oak death, a microbial disease that leads to extensive tree death and subsequent fuel accumulation. Above, removal of understory bay trees is helping protect these oaks in Pfeiffer Big Sur State Park. *Photo: Kerri Frangioso/UC Davis*

Like many FLN landscapes, FireScape Monterey has no shortage of wildland fires. Fire history mapping shows that wildfires continue across the landscape within the natural range of variation, producing both “good” and “bad” fires. Large areas of chaparral blanket steep slopes near the coast where fog provides moisture for rapid fuel build-up. The local fire challenge also includes the configuration of political boundaries, with the beloved Ventana Wilderness immediately adjacent to several local communities. Each part of this landscape delivers unplanned fires to the other, and working across boundaries needs to be seamless because fires spread so rapidly.

**This group is now working** on the design of a landscape-scale pre-attack plan that will knit together advance plans for firefighting across this landscape. The communities and land managers involved in planning are diverse, encompassing the oceanside community of Big Sur, the remote upland community of Cachagua, ranchland owned by members of the Esselen Tribe, vineyards, the Tassajara Zen Center, land leased by the Forest Service for recovery of the California condor, and the Monterey Institute of Research and Astronomy’s observatory.

**A related project** is the Forest Service Strategic Community Fuelbreak Improvement Project, designed to enhance community protection from wildfire in the wildland-urban interface. The project will improve and maintain strategic historically-used firelines to function as fuelbreaks. The project proposes work on 24 miles of fuelbreaks and a key 64-acre unit, for a total of 544 acres. A variety of treatments are proposed, including machine and hand thinning, piling and burning or chipping, and mastication. NEPA documents for this project are currently being refreshed.

**Volunteer fire departments**—the Mid Coast Fire Brigade and Cachagua Fire Prevention District—are working to increase local fire suppression capacity to meet community protection needs. Both have received Forest Service grants for work on fuelbreaks and road improvement to facilitate suppression crew access. Local fire brigades and multiple Fire Safe Councils are also working to make communities better adapted to fire.

Jeff Kwasny

[jkwasny@fs.fed.us](mailto:jkwasny@fs.fed.us)

(831) 667-1126

Gordon Johnson

[gjohnson@ridgeline.net](mailto:gjohnson@ridgeline.net)

(530) 347-1627

Mary Trotter

[quailmeadows@gmail.com](mailto:quailmeadows@gmail.com)

(831) 667-2521

### Landscape Partners

Big Sur Land Trust  
Bishop Grading and Forestry Services  
Bureau of Land Management  
Cachagua Fire Prevention District  
CAL FIRE  
California Native Plant Society  
California State Parks  
California State University, Monterey Bay  
California Wilderness Project  
Carmel Highland Fire Protection District  
Coast Property Owners Association  
El Sur Ranch  
Esselen Tribe of Monterey County  
Fire Safe Council for Monterey County  
Galante Vineyards  
Jamesburg-Cachagua Neighbors United  
Los Padres Forest Watch  
Mal Paso Creek Property Association  
Mid-Coast Fire Brigade  
Monterey Bay National Marine Sanctuary  
Monterey County Water Resources Agency  
Monterey FireSafe Council  
Monterey Institute of Research & Astronomy  
Monterey San Benito Range Improvement Association  
USDA Forest Service—Los Padres NF  
USDA Natural Resources Conservation Service



Resource Conservation District of Monterey County  
Santa Lucia Conservancy  
Sierra Club—Ventana Chapter  
Tassajara Zen Mountain Center  
University of California, Davis—Plant Pathology  
University of California, Santa Cruz—Big Creek Preserve  
U.S. Fish & Wildlife Service  
U.S. House of Representatives—Office of Sam Farr (Congressional District 20)  
Ventana Wilderness Alliance

View from the Prewitt Ridge fire break.



© Mike Splain/Ventana Wilderness Society



The Fire Learning Network 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 ([ldecker@tnc.org](mailto:ldecker@tnc.org)).

# Great Plains Fire Learning Network

The interest and desire to burn is widespread throughout the Great Plains, but capacity issues plague the region. Lack of capacity is a key factor limiting the extent to which fire can be applied at the scale needed to reduce fuel loading concerns and sustain ecosystems.

The Great Plains FLN has focused for many years on working with partners at a local and regional level to increase capacity through collaborative Prescribed Fire Training Exchanges (TREX) and cooperative burning. This cooperation has been in the spirit of “neighbors helping neighbors”—an approach that has its roots in the sparsely populated rural areas of the region. Not surprisingly, the prescribed burn association model is embedded in this region, with 59 local associations and a regional organization on the horizon.

With partners that include private landowners, county and state agencies, non-governmental organizations, private entities, volunteer fire departments, universities and federal agencies, the spirit of cooperation is alive and well here. Much of the Great Plains offers amazing opportunities for fire practitioners from far and wide to experience hands-on fire operations. This network’s plan for the next several years is to continue to enhance



Participants engage in a sand table exercise in the field at the 2014 Spring Break TREX in the Niobrara Valley. *Photo: Jose Luis Duce*



During the 2014 Lower Loup TREX, a crew lights a 730-acre unit to reduce invasion by eastern red-cedar. *Photo: Jeremy Bailey/TNC*

the network of training exchanges and cooperative burning in the region. A solid history of TREX and cooperative burning, with consistent successes, has been the key to keeping partners, creating new partnerships and making training and burning opportunities available to private landowners in these landscapes. Partners here believe that neighbors helping neighbors can be a path to building the capacity needed to use fire at an effective scale.

Emily Hohman  
Rich Walters

ehohman@tnc.org  
rwalters@tnc.org

(712) 568-2596  
(308) 390-2511



## Network Landscapes

Loess Hills  
Lower Loup Rivers  
Middle Niobrara River Valley



Hills of fine silt, or loess, are found in western Iowa and eastern Nebraska. Because the hills are unsuitable for most agriculture, these areas still hold valuable natural diversity. However, steep terrain—and fragmented ownership—make the necessary burning challenging. The partnerships and extra capacity of TREX make landscape treatments, like those during the 2015 Loup River TREX (above) possible. *Photo: Stéfano Arellano*

## Network Partners

Great Plains Fire Science Exchange  
Iowa Department of Natural Resources  
—State Forests (Loess Hills State Forest)  
Iowa Department of Natural Resources  
—Wildlife  
National Park Service  
Nebraska Forest Service  
Pottawattamie County Conservation Board  
The Nature Conservancy—Iowa, Nebraska  
U.S. Fish & Wildlife Service  
University of Nebraska—Lincoln



The Fire Learning Network 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 (ldecker@tnc.org).



# New Mexico Fire Learning Network



Top: Wetlands at the Valles Caldera National Preserve in the heart of the Water Fund landscape.  
Bottom: A properly-thinned stand of ponderosa pine is more resilient to wildfire.  
© 2013 Alan W. Eckert for The Nature Conservancy

**Improving the health** of headwater forests is a critical climate change adaptation strategy in a warming Southwest, where fire seasons have become longer and more severe, and water security is a primary concern for all communities.

**In New Mexico**, the FLN is now a key part of a wildfire and water source protection fund program, the Rio Grande Water Fund (RGWF). The RGWF vision is to secure clean water and healthy forests for New Mexicans for generations to come. Its goal is to scale up forest thinning and prescribed fire treatments from about 6,000 acres per year to 30,000 acres per year in northern New Mexico. We will do this by developing a sustainable source of funding from water users, government, donors and investors, and facilitating payments to upstream land managers to help them reduce wildfire and debris flow risk in high priority areas and to maintain those areas for the long-term. In 2015, the RGWF distributed over \$1 million to accelerate ongoing landscape planning and restoration treatment projects on national forests and private lands.

**The seven-million acre** Rio Grande landscape includes 1.7 million acres of forest, of which 600,000 acres are treatable. FLN supported activities include engaging with the Fire Adapted Communities Learning Network and

working with on-the-ground federal, state, tribal and private land managers to accelerate fire and thinning treatments that build forest resilience.

**While forest restoration** moves forward, we also face a legacy of large and severely burned areas that continue to create flooding and debris hazards for downstream communities. To meet this challenge, the FLN is also developing a new collaborative Burned Area Learning Network, made up of scientists and other partners who are addressing the restoration of these burns.

## Read More

Rio Grande Water Fund:  
[www.nature.org/riogrande](http://www.nature.org/riogrande)

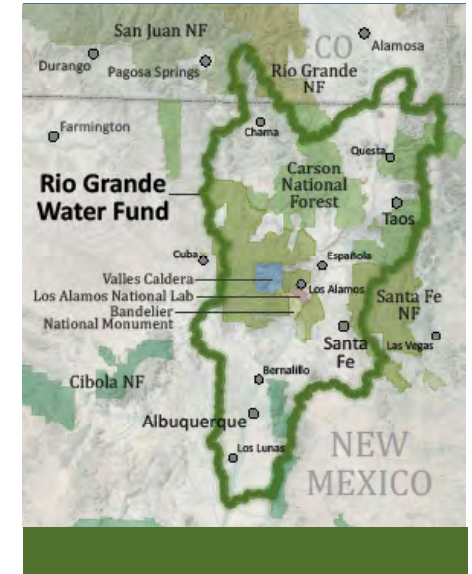
Fire Adapted Communities:  
[www.fireadaptednewmexico.org](http://www.fireadaptednewmexico.org)

<b>Anne Bradley</b>	<a href="mailto:abradley@tnc.org">abradley@tnc.org</a>	(505) 946-2038
<b>Laura McCarthy</b>	<a href="mailto:lmccarthy@tnc.org">lmccarthy@tnc.org</a>	(505) 946-2024
<b>Ernie Atencio</b>	<a href="mailto:ernest.atencio@tnc.org">ernest.atencio@tnc.org</a>	(575) 770-4565
<b>Eytan Krasilovsky</b>	<a href="mailto:eytan@forestguild.org">eytan@forestguild.org</a>	(505) 983-8992 x 16

## Charter Signatories:

### Rio Grande Water Fund

Albuquerque Bernalillo County Water Utility Authority  
Albuquerque Metropolitan Arroyo Flood Control Authority  
Bernalillo County  
Bosque Ecosystem Monitoring Program  
Bureau of Land Management  
Chama Peak Land Alliance  
City of Santa Fe  
Ciudad Soil and Water Conservation District  
Claunch-Pinto Soil and Water Conservation District  
Coronado Soil and Water Conservation District  
Dekker/Petrich/Sabatini Edgewood Soil and Water Conservation District  
Forest Stewards Guild  
LOR Foundation  
Los Alamos County  
Middle Rio Grande Conservancy District  
New Mexico Association of Conservation Districts  
New Mexico Forest Industry Association  
New Mexico Acequia Association  
New Mexico Department of Game & Fish  
New Mexico Environment Department  
New Mexico Forest and Watershed Restoration Institute  
New Mexico Interstate Stream Commission  
New Mexico Land Grant Consejo  
New Mexico Land Grant Council  
New Mexico Museum of Natural History and Science  
New Mexico Water Business Task Force  
New Mexico Watershed and Dam Owners Coalition



Rocky Mountain Youth Corps  
Sierra Club  
Taos County  
The Nature Conservancy in New Mexico  
Trout Unlimited  
University of New Mexico  
U.S. Army Corps of Engineers  
U.S. Fish & Wildlife Service  
USDA Forest Service  
USDA Natural Resources Conservation Service  
Valles Caldera National Preserve



The Fire Learning Network 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](mailto:Lynn.Decker@tnc.org) ([ldecker@tnc.org](mailto:Lynn.Decker@tnc.org)).



# Oregon

## Fire Learning Network



A morning briefing before burning in the Sisters Area Fuels Reduction project in the Deschutes National Forest during the May 2015 TREX.

About eight million acres of fire-adapted forest across central, eastern and southwest Oregon are in need of restoration. We know this thanks to a recently published analysis led by The Nature Conservancy in Oregon and Washington and Forest Service Region 6. The analysis showed that more than a third of fire-adapted forests in the eastern Cascades—and more than half of such forests in southwest Oregon—are in need of active restoration. The needs include thinning, prescribed fire, time to grow, or combinations of these. Without restorative treatments, the risk of uncharacteristic fire increases annually and with each fire season we lose critical dry forest habitats and the myriad ecological and community values they provide.

**Addressing this challenge** at ecologically relevant scales is only possible by engaging with the communities and diverse partners that live in and depend on the forests for economic and social well-being. We continue to use our unique position as a trusted partner to diverse—and sometimes competing—people and organizations to bridge interests and values, explore common ground, and use innovative strategies, tools and partnerships to advance ecologically-based restoration.

**A recent example** of this work is the Central Oregon Prescribed Fire Training Exchange, the first TREX in Oregon and

a unique integration of the social, ecological and operational dimensions of prescribed fire. The TREX gave fire professionals holistic training focused on the challenges, opportunities and skillsets needed to plan and implement fire in and around human-dominated, fire-adapted landscapes.

**We are also working** with Forest Service partners and local operators to develop and integrate new technologies to increase the efficiency and effectiveness of dry forest restoration treatments while ensuring that ecological resilience goals are met. And we are developing cutting edge landscape analysis and prioritization tools that integrate ecological, social and economic factors to help stakeholders and agency staff collaboratively identify areas on the landscape where restoration investments will provide the greatest return.

**Under the banner of the FLN** we are reaching out and engaging an expanding audience of stakeholders, bringing them into the conversation to better understand their values, needs, concerns and interests. In doing so, we develop trust, shared understanding, and agreement around a mutually beneficial path toward healthier and resilient forests and forest-dependent communities. As social scientific, social, economic and operational barriers emerge and are

**Pete Caligiuri**  
**Mark Stern**

pcaligiuri@tnc.org  
mstern@tnc.org

(541) 388-3020 x 304  
(503) 802-8133

### Network Landscapes

Rogue Basin  
Upper Deschutes Basin  
Lakeview Stewardship Unit / Fremont-Winema NF

clarified through dialogue, we fill gaps in the ecological, social, institutional and operational understanding of restoration challenges and bring our diverse partners to the table to work towards common ground.

### Network & Landscape Partners

American Forest Resource Council  
Applegate Partnership  
Black Oak Forest Restoration  
Blue Mountains Forest Partners  
Bureau of Land Management—Medford  
Central Oregon Intergovernmental Council  
Central Oregon Fire Management Service  
Cities of Ashland, Bend and Sisters  
Deschutes County  
Federal Forest Working Group  
Harney County Restoration Collaborative  
Josephine County Stewardship Group  
Klamath Tribes  
Klamath-Siskiyou Wildlands Center  
Lake County Resource Initiative  
Lomakatsi Restoration Project  
Northern Arizona University—  
Ecological Restoration Institute  
Ochoco Forest Collaborative Group  
Oregon Department of Fish & Wildlife  
Oregon Department of Forestry  
Oregon State University Extension  
Oregon Wild  
Project Wildlife  
Sierra Club  
Southern Oregon Forest Restoration  
Collaborative  
Southern Oregon University



The Nature Conservancy—Oregon  
The Wilderness Society  
Umatilla Forest Collaborative Group  
U.S. Fish & Wildlife Service  
Upper Deschutes River Coalition  
USDA Forest Service—Forest Health  
Protection; Pacific Southwest Research  
Station; Region 6; Deschutes, Fremont-  
Winema and Rogue River-Siskiyou NFs;  
USDA Natural Resources Conservation  
Service  
Warm Springs Confederated Tribes



The Fire Learning Network 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 (ldecker@tnc.org).

# Pikes Peak Fire Learning Network



The Pikes Peak Regional FLN is a relatively new collaborative initiative focused on increasing public understanding of and support for the use of fire in forest management, expanding local fire management capacity and demonstrating the safe and effective use of fire in high priority landscapes.

In the coming year, we expect to build on the great work already being implemented by local organizations, including Fire Adapted Communities Learning Network efforts in Woodland Park. We are doing this by building an effective stakeholder network, hosting public workshops on fire ecology and the use of fire for management, facilitating training opportunities for fire practitioners, and implementing prescribed fire.

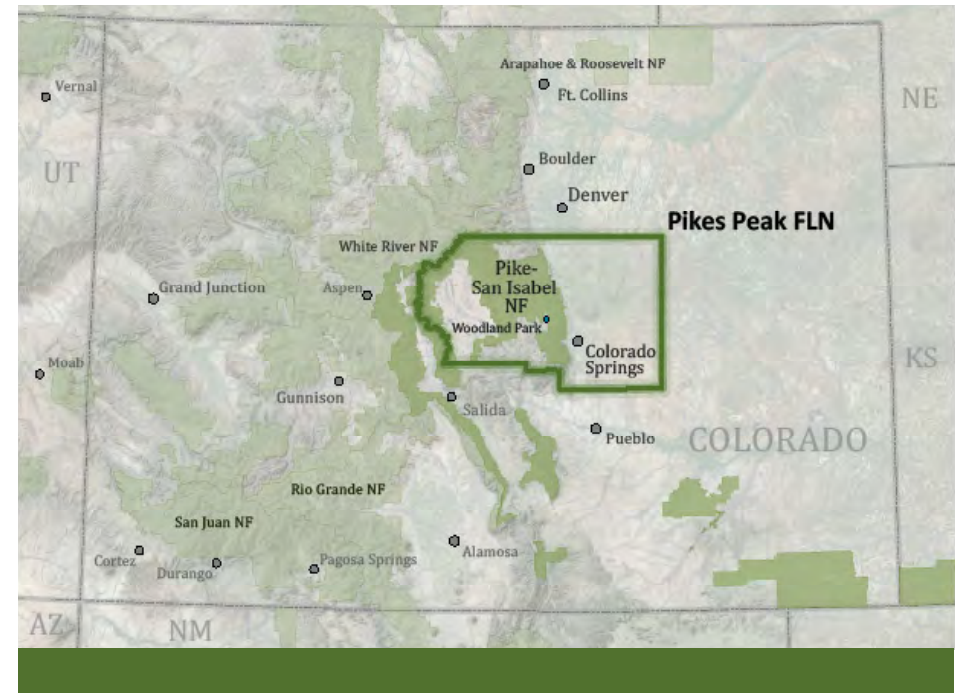
This work will build on the accomplishments of the Upper Fountain Creek Watershed Restoration Initiative (supported by Scaling-up to Promote Ecosystem Resiliency), and will contribute to the goals of the Front Range Roundtable project, Colorado Prescribed Fire Council and Southern Rockies Fire Science Network.

Top photos: Two views of the Conservancy's Southern Rockies Wildland Fire Module at work on the Little Sand Fire in southwest Colorado in July 2012. Photos: Jeff Crandall/TNC  
Bottom photos: Webster Park in the Upper Monument Creek project area, and a field tour to the project area. The Conservancy's Colorado chapter delivered a report to the U.S. Forest Service with a set of collaboratively-developed, science-based management recommendations for the 67,000-acre Upper Monument Creek landscape, which is in the FLN core area. Photos: Peter M. Brown; Rob Addington/TNC

Paige Lewis  
Jason Lawhon

paige\_lewis@tnc.org  
jlawhon@tnc.org

(303) 817-8648  
(303) 541-0331



## Landscape Partners

- Cheyenne Mountain Fire Department
- Coalition for the Upper South Platte
- Colorado Division of Fire Prevention and Control
- Colorado Parks and Wildlife
- Colorado Springs Fire Department
- Colorado Springs Utilities
- Colorado State Forest Service
- Colorado State University
- El Paso County
- Larkspur Fire Protection District
- Northeast Teller County Fire Protection District
- Pike's Peak Wildfire Prevention Partners
- Rocky Mountain Tree-Ring Research
- The Nature Conservancy, Colorado
- U.S. Air Force Academy

- U.S. Geological Survey
- USDA Forest Service—Pike and San Isabel National Forest (Pike's Peak RD)
- USDA Forest Service—Region 2
- USDA Natural Resources Conservation Service
- Wescott Fire Protection District



The Fire Learning Network 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 (ldecker@tnc.org).



# South Central Fire Learning Network



The South Central Regional Fire Learning Network has long been a catalyst for restoration, supporting scientific knowledge exchanges and developing monitoring protocols and definitions of current and desired ecological conditions across the region. This network is a long-term, diverse coalition functioning as a robust community of practice of restoration practitioners, scientists, policy makers and on-the-ground managers. Together they are restoring and managing lands with prescribed fire and timber management techniques for the long-term health of the lands for wildlife and water quality benefits. The FLN has secured implementation funding from state wildlife grants, non-profits, private foundations, and state and federal institutions for restoration and management on a portfolio of multi-ownership (federal, state and private) lands throughout the region.

Since 2001, over \$8.5 million in federal funding has been awarded to this collaborative partnership for ecosystem management across the Interior Highlands, starting with the 60,000-acre Woodland Ecosystem Project, which continues to be a model for landscape-scale restoration. Both funding and the scale of work have grown since then, with partners now working on two CFLRP projects (over 1 million acres) and the 80,000-acre

## Current Projects

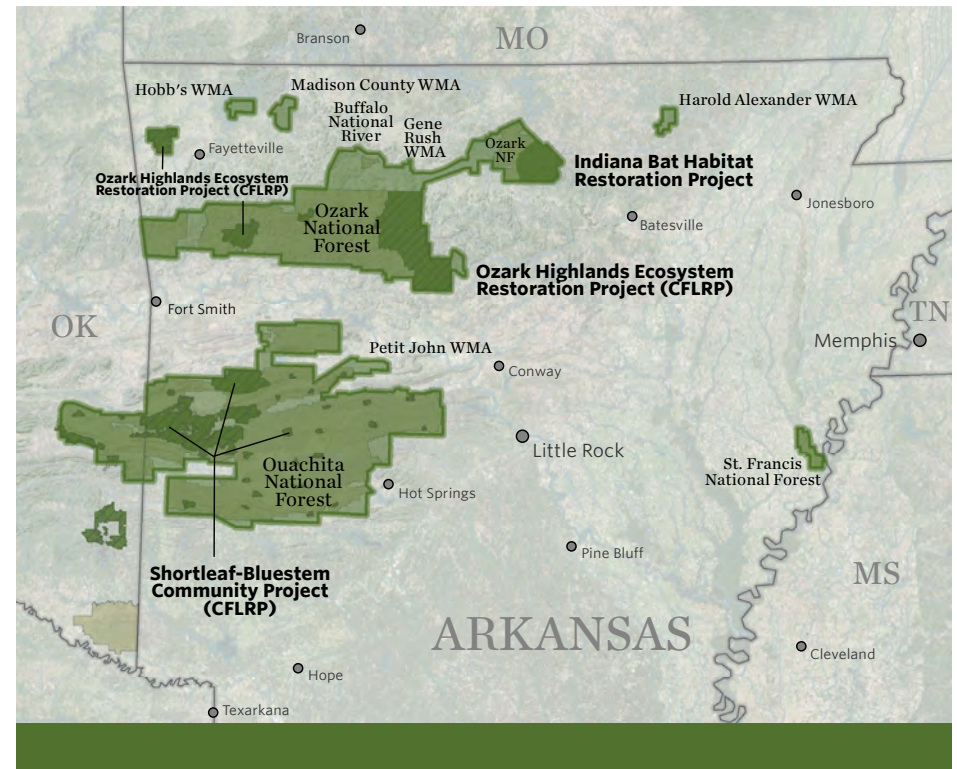
- Indiana Bat Habitat Restoration Project
- Ozark Highlands Ecosystem Project (CFLRP)
- Shortleaf-Bluestem Community Project (CFLRP)

Happy Bat Project on the Sylamore Ranger District of the Ozark-St. Francis National Forest.

In addition to this work on the ground, the region is the epicenter of the shortleaf pine (*Pinus echinata*) range, and the FLN has been chosen to lead a new Shortleaf Pine Initiative to address the steep decline of this species and its associated fire-adapted communities. This initiative is developing a range-wide conservation plan covering the 23 three states where shortleaf pine is found.

The South Central FLN also continues to bring partners together for field trips, workshops and project proposal development for large, collaboratively-based woodland and glade restoration projects, such as those done under the Scaling-up to Promote Ecosystem Resiliency initiative. Finally, the FLN assists partners with institutionalizing restoration programs and developing public demonstration areas throughout the region.

McRee Anderson	wanderson@tnc.org	(870) 861-5131
Martin Blaney	mblaney@agfc.state.ar.us	(877) 967-7577
William Carromero	wcarromero@fs.fed.us	(479) 964-7207
Mitzi Cole	mgcole@fs.fed.us	(870) 867-2101 x 114



## Network Partners

- Arkansas Audubon Society
- Arkansas Forestry Commission
- Arkansas Game and Fish Commission
- Wildlife Management Areas
- Arkansas Natural Heritage Commission
- Arkansas Wildlife Federation
- Central Hardwoods Joint Venture
- National Forest Foundation
- National Park Service—Buffalo National River
- National Wild Turkey Federation
- The Nature Conservancy—Arkansas
- U.S. Fish & Wildlife Service

- University of Missouri, Columbia
- USDA Forest Service—Ouachita National Forest, Ozark-St. Francis National Forest (Big Piney Ranger District)



The Fire Learning Network 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 (ldecker@tnc.org).



# Southern Blue Ridge Fire Learning Network



February 2015 TREX. Photo: Nancy Lee Adamson

## Network Landscapes

Central Blue Ridge Escarpment  
Georgia Blue Ridge Mountains  
Great Smoky & Unaka Mountains  
Nantahala & Balsam Mountains  
New River Headwaters  
Northern Escarpment  
South Mountains  
Southern Blue Ridge Escarpment

**The network continues** to work closely with the Consortium of Appalachian Fire Managers and Scientists (CAFMS) to accelerate transfer of knowledge and feedback. The Southern Research Station and CAFMS contribute significant resources to monitoring and outreach, and bring researchers to engage with FLN managers.

## Recent Growth

**Central Escarpment** landscape partners work together not just through the FLN, but also through a Collaborative Forest Landscape Restoration Program (CFLRP) project on the Grandfather Ranger District. In 2015, the first landscape-scale growing season burn on the Nantahala-Pisgah took place through this project in 2015, as did increased burning across agency boundaries and the first two-unit burn day.

**The newest landscape**, Georgia Blue Ridge Mountains, continues to expand in breadth and scope. FLN partners are working with Towns County, a

**Partners in the eight landscapes** of the Southern Blue Ridge FLN (SBR FLN) collaborate to develop, share and apply the best available science for the restoration of fire-adapted ecosystems across a vast and diverse region.

**The SBR FLN has expanded** common vegetation maps, models and tools. For example, landscapes continue to improve on a treatment prioritization tool developed several years ago, customizing it for each subset of partners. Vegetation modeling has been expanded; these data also help shape where partners burn on their lands. Enthusiasm about the “wall to wall” vegetation maps has grown into discussion of a planned two-state, three-agency cooperative burn.

**A network of monitoring** plots across landscapes to track the effectiveness of management actions is becoming more valuable as time goes on. Consistent, long-term monitoring over years—and multiple treatments—is needed to assess the full impact of fire in hardwoods.

**The SBR FLN is also collaborating** with the Central Appalachians FLN to map fire severity. The networks are using the same tools and are working to calibrate their maps. They also hope to connect fire effects seen at the plot level with landscape-level effects identified with satellite imagery.

**Margit Bucher**  
**Beth Buchanan**

mbucher@tnc.org  
bbuchanan@fs.fed.us

(919) 794-4368  
(540) 265-5129

Fire Adapted Communities Learning Network pilot community within the landscape boundaries. Other counties and other grassroots organizations are joining FLN work here as well.

**The May 2015 workshop** set new attendance records, with participants from 26 agencies and organizations representing local, regional and national positions and administrative units. This reflects the many strong working partnerships built and maintained through productive annual workshops, numerous smaller collaborative projects, and regular sharing of tools.

## Network Partners

Atlanta Botanical Garden  
Benton MacKaye Trail Association  
Chestatee-Chattahoochee RC&D  
Clemson University  
Consortium of Appalachian Fire Managers and Scientists  
Firewise  
Foothills Conservancy of North Carolina  
Forest Stewards  
Georgia Department of Natural Resources—Tallulah Gorge State Park  
Georgia Department of Natural Resources—Wildlife Resources Division (Game, Nongame)  
Georgia Forest Watch  
Gilmer County, Georgia  
Land Trust for the Little Tennessee Mountain True  
National Park Service—Blue Ridge Parkway; Great Smoky Mountains NP; Southeast Regional Office



North Carolina Division of Parks and Recreation—Gorges, Lake James, South Mountains, Stone Mountain State Parks  
North Carolina Forest Service  
North Carolina Wildlife Resources Commission  
South Carolina State Parks—Devils Fork, Keowee-Toxaway, Table Rock State Parks  
The Nature Conservancy—Georgia, North Carolina, South Carolina, Tennessee  
The Orianne Society  
Towns County (Fire Adapted Communities Learning Network)  
U.S. Fish & Wildlife Service  
USDA Forest Service—Chattahoochee-Oconee, Cherokee, Nantahala, Pisgah NFs; Region 8 Regional Office; Southern Research Station  
Western Carolina University



The Fire Learning Network 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 (ldecker@tnc.org).

# Washington Dry Forests Fire Learning Network



More than three million acres of dry forests in central and eastern Washington need active restoration. Intensifying wildfires threaten wildlife habitat, clean water, recreation and local livelihoods. The fires also cost taxpayers increasingly large sums to suppress. Our network provides leadership in the North Central Washington Forest Collaborative, the Tapash Sustainable Forest Collaborative and the Washington Prescribed Fire Council, all of which work to identify and employ strategies that increase the pace and scale of active restoration and increase community resiliency.

Two complementary tools can be used to restore forests and reduce the social, ecological and economic costs of wildfires: mechanical thinning and controlled burning. The key barrier to using fire to meet economic, social and ecological restoration goals is cultural. There is a historically strong cultural bias against fire in the Evergreen State—birthplace of the “Big Burn” of 1910. Many see fire as being too risky or as

## Network Landscapes

Tapash Sustainable Forest Collaborative & fire adapted community  
North Central Washington Restoration Demonstration Landscape

bad for people, wildlife, air and water; others view fire as wasteful, using up resources that could otherwise be harvested. And since the 1970s, increasing concerns about air quality have led to regulations that originally restricted the burning of logging slash in western Washington to be applied statewide.

## Prescribed Fire Council

To initiate a shift in this culture, in 2010 this network took a lead role in expanding the North Central Prescribed Fire Council to a statewide organization, developing its capacity to “protect, conserve, and expand the safe and responsible use of prescribed fire on the Washington landscape to meet both public and private management objectives.” The Council now brings together a diverse set of people from federal and state agencies, industry, and NGOs, representing clean air, homeowner, industry, policy and land management perspectives. The Council is working to identify policy barriers and recommend changes to expand the safe use of controlled burning.

## Fire Adapted Communities

The FLN is also using a new approach, integrating social and ecological aspects of wildland fire by engaging a broader network of fire professionals and community members through a framework

Reese Lolley  
Kara Karboski

rlolley@tnc.org  
kara@scwr.cd.org

(509) 248-6697  
(509) 454-5736 x 129



of fire adapted communities (FAC)—working with those living with, and those responsible for management of, fire in the wildland-urban interface. We are working closely with the FAC Learning Network pilot community of Leavenworth, just north of the Tapash landscape, as they test approaches for mobilizing community members in their various roles. The network is also helping to start a FAC pilot community in the Tapash landscape, where it has long worked on cross-ownership controlled burning and the Tapash Collaborative Forest Landscape Restoration Project. Two FAC workshops in early 2014 brought community members together to learn about FAC concepts and share ideas for taking action. This network sees FAC as a fruitful new approach to engaging community members, which provides a means to discuss land management options and

## Landscape Partners

Bureau of Land Management  
Center for Natural Lands Management  
Chumstick Wildfire Stewardship Coalition  
Department of Defense—Joint Base Lewis  
McChord Fish and Wildlife Program  
Kittitas County Conservation District  
Okanogan Conservation District  
South Central Washington Resource  
Conservation & Development Council  
Tapash Sustainable Forest Collaborative  
The Nature Conservancy  
U.S. Fish & Wildlife Service—Turnbull  
National Wildlife Refuge  
USDA Forest Service—Okanogan-  
Wenatchee National Forest  
USDA Forest Service—Region 6  
Washington Department of Fish and  
Wildlife—North Central Region;  
Prescribed Fire Crew; several wildlife  
management areas  
Washington State Department of Natural  
Resources—Southeast Region  
Yakima Nation—Fisheries, Forestry  
Yakima County Fire

make proactive choices that benefit the landscape and people living there.



The Fire Learning Network 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 (ldecker@tnc.org).



# Western Klamath Mountains Fire Learning Network



## The Western Klamath Mountains

FLN is focused on scaling up the use of prescribed fire through creation of a community-based Type III Incident Management Team to bring good fire to all corners of the 1.2-million-acre planning area. Through the Western Klamath Restoration Partnership, we are also conducting landscape-level fire planning, and have begun an ambitious pilot project on the Ukonom Ranger District. That project is demonstrating a collaboratively agreed upon strategy of creating strategic fuel breaks with manual and mechanical treatments, then implementing large-scale prescribed burns in the wildland-urban interface as initial treatments to bring fire back to forests that have not seen it in over a century.

**Extensive outreach** to the community and stakeholders has created a grassroots movement to re-shape how we manage fire in the Klamath Mountains, while at the same time saving taxpayer funds and creating resilient forests and communities. Examples of innovative programs and products from our FLN include the Community Liaison Program that has greatly improved relations between fire management teams and local communities through the sharing of key information, and the firelines geodatabase, a collaboratively developed GIS product that allows fire



managers to characterize fuelbreaks across the landscape based on factors that determine when and how each fuelbreak should be used.

**Prescribed Fire Training Exchanges** bring together a diverse array of tribal, local, state and federal partners to implement prescribed burns for community protection and resource benefits. FLN leads are also on the steering committee for the California Fire Science Consortium, work with the Intertribal Timber Council, were involved in the development of the Western Region Strategy Committee's Phase II Report and Action Plan, and work closely with the Northern California Prescribed Fire Council.



Will Harling  
Bill Tripp

will@mkwc.org  
btripp@karuk.us

(530) 627-3202  
(530) 627-3446 x 3023



## Landscape Partners

CAL FIRE  
Deer Creek GIS  
Firestorm Wildland Fire Suppression Inc.  
Happy Camp Fire Safe Council  
Karuk Tribe  
Mid Klamath Watershed Council  
National Oceanic and Atmospheric Administration—Fisheries  
Northern California Prescribed Fire Council  
Salmon River Fire Safe Council  
Salmon River Restoration Council  
University of California, Berkeley  
U.S. Fish & Wildlife Service  
USDA Forest Service—Klamath National Forest; Six Rivers National Forest  
USDA Forest Service—Pacific Southwest Research Station  
USDA Natural Resources Conservation Service—Fortuna Service Center; Yreka Service Center

## SEE MORE

“Catching Fire: Prescribed Burning in Northern California,” highlights work by the prescribed fire council, the Karuk Tribe and the Orleans/Somes Bar Fire Safe Council.  
<http://www.youtube.com/watch?v=LWriDpfZnXQ>

### From the fall 2015 Klamath River TREX:

- In an informal interview, a second-time participant talks about her **first TREX experience**, and why she's back for more: <https://www.youtube.com/watch?v=ChNwGuqJjQc>
- Eureka TV station KIEM ran a special report “**Degrees of Damage: Managing the Burn**” that talked about the why and how of prescribed burning.  
<http://kiem-tv.com/video/special-report-degrees-damage-managing-burn-part-two>

Top: A temporary sign alerted drivers to prescribed burning during the fall 2015 Klamath River TREX.

Photo: Jeremy Bailey/TNC

Left: A landowner celebrates a burn on his property during the Fall 2013 Northern California Prescribed Fire Training Exchange. Burns like this are helping communities become better adapted to fire in this landscape.

Photo: Mary Huffman/TNC



The Fire Learning Network 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 (ldecker@tnc.org).



# Fire Adapted Communities Learning Network

## Networking to Build Community Resilience to Wildfires

**Launched in 2013**, the Fire Adapted Communities Learning Network is stewarded by the Watershed Research and Training Center and The Nature Conservancy. Together with the U.S. Forest Service and the Department of the Interior, we share a vision of accelerating the adoption of fire adapted community (FAC) concepts across the nation using a tested learning network approach.

**The FAC Learning Network** is modeled after—and integrated with—the Fire Learning Network, which has been focusing on restoring fire-adapted landscapes since 2002. Learning networks are ideal vehicles for addressing complex issues such as wildland fire adaptation. The FAC Learning Network connects people and projects to avoid “reinventing the wheel,” and encourages the development and sharing of innovations.

**In just a few years** we have created a community of FAC practitioners that includes non-profit groups, Fire Safe Councils, Resource Conservation and Development Councils, Firewise Communities boards, fire departments, community collaboratives and others. Everyone in the network knows that they can call on their peers for advice, feedback and resources. Participants

routinely take tactics that others are using to help communities live with fire and adapt them for their own circumstances. Across the country, interest in the network is high.

**Although creating fire adapted communities** is itself one of the three broad goals of the National Cohesive Wildland Fire Management Strategy, in reality helping communities live with fire involves all three goals:

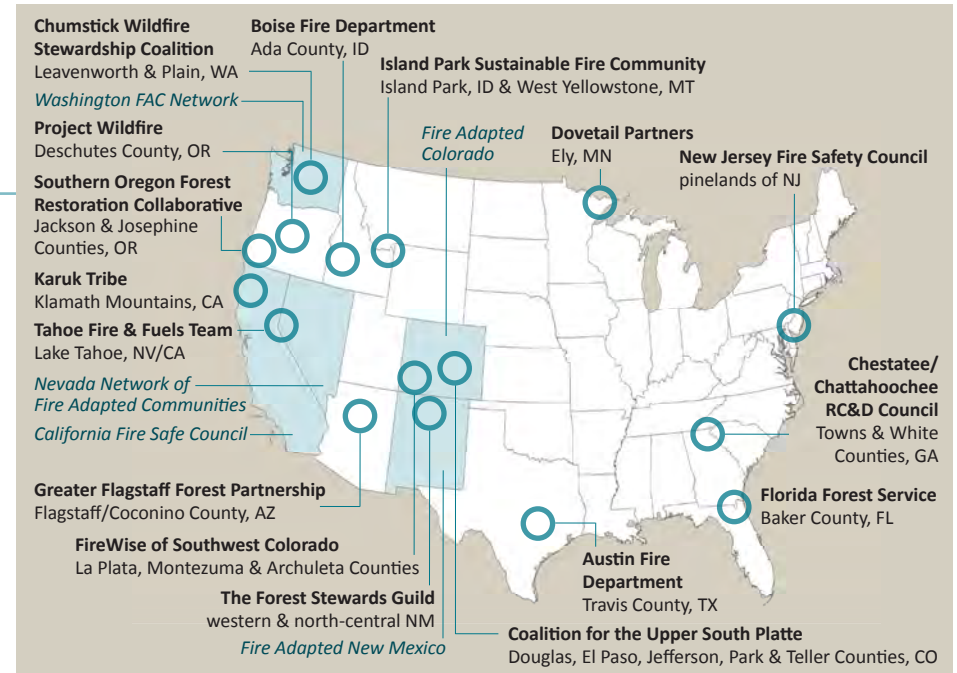
- Restore and maintain resilient landscapes in all jurisdictions;
- Prepare communities so they can live with and withstand a wildfire without loss of life and property; and
- Safely, efficiently and effectively respond to wildfires when they happen.

## Fire Adapted Communities Learning Network Collective Value Proposition

We help society live safely with wildfire.

This is accomplished by network members as we:

- 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.



**Sixteen pilot communities** and five emerging state-wide networks are active in the FAC Learning Network, with plans to continue expansion. Each of these efforts is building capacity and raising awareness about wildfire resilience through a host of preparedness, mitigation and recovery activities.



Working together: Community work days, like this one near Woodland Park, CO (top), let “many hands make light work” while strengthening community ties. At the 2014 national workshop, the Austin and Boise fire departments discovered their very different places had much in common, leading to a series of learning exchanges (bottom) in 2015.

Photos: Coalition for the Upper South Platte; TNC

## A Sampling of Projects Undertaken by FAC Learning Network Members

Network members help their communities become more resilient by taking action before, during and after wildfires. Recent examples include:

- Partnering with a statewide community sustainability NGO to add wildfire resilience to the mix (NJ)
- Leading outreach efforts for a Prescribed Fire Training Exchange (OR)
- Evacuating an entire town in a wildfire preparedness drill (NV)
- Taking part in a team deployed in a pilot effort to support FAC strategies in an area currently experiencing large wildfires (CA, CO, WA)
- Hosting local Wildfire Community Preparedness Day activities (AZ, CO, MN & others)
- Maintaining websites to provide FAC information tailored to local or state needs (CA, NM, WA & others)
- Taking part in state, regional and national conferences to share FAC expertise (CA, GA, NV, TX & others)
- Sharing their FAC stories with media ranging from small local papers to NPR's *Morning Edition* (CO, GA, NJ, WA & others)



## How Does the Fire Adapted Communities Learning Network Work?

**Most of the 19 organizations** leading local or state efforts in the FAC Learning Network receive modest funding from the program to support local FAC work and promote the expansion of FAC to new communities. A core team of “netweavers” and coordinators works directly with the network participants to foster connections among them. Network participants also meet in person annually, and quarterly through webinars. On a day-to-day basis, members use an invitation-only online workspace to share successes and resources, and to pose questions and engage in conversations.

**In addition to netweaving**, core team members support the deployment of a variety of local FAC tactics and strategies, and harvest learning from them. Capturing the network’s



In 2015, the FAC Learning Network and Fire Learning Network met together in Santa Fe for several days of presentations, discussions—and plenty of one-on-one networking. *Photo: Liz Rank/TNC*

learning, they produce quick guides, communications tools, and other resources.

**We reach out** to a broader audience through our website and blog, where we share important resources and post regularly about key FAC issues and best practices, pilot community successes, resources and other topics of interest. Core team members and

other network participants also attend conferences and give presentations about FAC and the FAC Learning Network.

**We are connected** to the larger FAC community through the Fire Adapted Communities Coalition, which includes the Forest Service, U.S. Department of the Interior, Insurance Institute for Business and Home Safety, International Association of Fire Chiefs, National Association of State Foresters, National Fire Protection Association, National Volunteer Fire Council, U.S. Fire Administration, NWCG WUI Mitigation Committee, the Watershed Research and Training Center, and The Nature Conservancy. Together we are helping homeowners, communities and land managers in fire-prone areas to prepare for and recover from inevitable fires—to “live with fire” safely.

[www.FACNetwork.org](http://www.FACNetwork.org)

*Top row:* Communities from coast to coast are threatened by wildfires. *From left:* one of the many 2008 fires, as seen from Hayfork (CA) High School; 2011 Los Conchas Fire in Santa Fe National Forest, NM; 2007 Warren Grove Fire near Barnegat Township, NJ. *Photos: WRTC; International Space Station; NJ Forest Fire Service.*

*Bottom row:* Communities in the FAC Learning Network work at many different scales to mitigate wildfire risk, from promoting individual and neighborhood action to addressing landscape resilience and fire-related policies. At the very local scale, we have learned that demonstration sites can be a powerful tool for convincing homeowners to take action. *From left:* pilot community demonstration sites in Barnegat Township, NJ, Leavenworth, WA and Island Park, ID. *Photos: Wendy Fulks/TNC; Andrew Holm; Guy Duffner/TNC*



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette ([nickg@hayfork.net](mailto:nickg@hayfork.net)).



# Fire Adapted Communities

## LEARNING NETWORK

In September 2013, before joining the FAC Learning Network, the City of Austin hosted the state's first Fire Adapted Communities Symposium in an effort to build buy-in and consensus around the FAC concept. The workshop provided a common operating picture of how cooperators could leverage the concept into action.

The most critical action identified was the completion of the Community Wildfire Protection Plan (CWPP) for an area that only recently realized that wildfire was a part of their new reality. The plan development and review process lasted almost two years as the Austin Travis County Wildfire Coalition—a multijurisdictional taskforce—worked to find common ground in a novel environment. The plan was unanimously approved by the Austin City Council and Travis County Commissioners Court along with the Texas A&M Forest Service in November 2014.



The recently-adopted Austin Travis County Community Wildfire Protection Plan was celebrated by stakeholders and the public during a signing ceremony on November 14, 2014.

Photo: Austin Fire Department

On adoption of the plan, a CWPP taskforce member from the city Watershed Protection Department said that they are “passionate about serving the community and are excited that, together, we can accomplish collaboration in a way that has never been done before.” Her comment also reflected how fire and water interests have aligned for a common purpose, with transparency and commitment to find areas of agreement. In the end, there was much more agreement than had been imagined possible—the 940-page plan reflects a cultural shift that started with apprehension and ended with cohesion. The CWPP will be leveraged to implement a local cohesive strategy that connects to the FAC Learning Network by sharing lessons learned and embracing innovations.

Building on this monumental effort, the City of Austin's Fire Department has several other key FAC goals:

- Leverage the CWPP taskforce into a permanent standing wildfire cooperative, whose focus will be implementing the cohesive strategy at the local level using the newly adopted CWPP as the springboard.
- Engage the public by effecting a cultural shift from feeling at risk to becoming empowered to act. During the CWPP recognition ceremony and subsequent workshop, the overarching theme was an interest from communities at risk across Travis county to recognize their role in wildfire preparedness. Austin Fire

# Austin Travis County Wildfire Cooperative



Working in the CITY OF AUSTIN and 21 communities at risk in TRAVIS COUNTY, Texas

Department hopes to accomplish a cultural shift by sharing with others what we have learned: that wildfire is everyone's fight—and that fight starts with understanding your role.

Future FAC efforts will include the integration of WUI considerations into land management planning, development of a local prescribed fire network that includes organizations with prescribed burning responsibilities to ensure coordination across the county, pre-incident planning for both communities and natural areas, and the development of a functional evacuation model.

Being a part of the FAC Learning Network is facilitating benchmarking with other communities at risk, increasing exposure to novel research and subject matter experts, and providing a better

FAC Contact: Justice Jones  
justice.jones@austintexas.gov  
(512) 974-0199

### KEY PARTNERS

Travis County—  
Office of Emergency Management  
Transportation and Natural Resources

City of Austin—  
Austin Water Utility  
Fire Department  
Office of Homeland Security and  
Emergency Management  
Planning and Development Review  
Department  
Watershed Protection

Capital Area Fire Chiefs Association  
Small Cities Alliance of Travis County  
Texas A&M Forest Service

Wildfire is everyone's fight—  
and that fight starts with  
understanding your role.

understanding of the power of collaboration. The Austin Fire Department hopes to learn from the successes and challenges that other communities have experienced, and to develop a model for wildfire preparedness that other large municipalities and counties can use to rapidly implement a local cohesive strategy.



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette (nickg@hayfork.net).

# Fire Adapted Communities

## LEARNING NETWORK

The Boise Fire Department is engaged in many FAC activities. These are supported by a variety of grants and, since 2015, through its participation in the FAC Learning Network. Beginning in 2011, the City of Boise has been busy with many wildfire mitigation projects, including managing many supported by our partner, the Southwest Idaho RC&D. These include creating fuel breaks using selective sagebrush thinning, grazing goats, herbicide application and re-seeding. City of Boise Neighborhood Reinvestment Grant funding has also supported chipping of hazardous fuels for homeowners in targeted neighborhoods in the Boise wildland-urban interface.

**Another RC&D-supported project** is the acquisition and installation of an FTS Remote Automatic Weather Station (RAWS) in the Boise Front; this includes a VHF radio that can alert firefighters in real time to changing weather conditions during wildland firefighting operations. With a Western States Fire Grant and matching partnership funding from Ada County Emergency Management the Boise Fire Department is using remote sensing (LiDAR) data, to create a county-wide wildfire risk map and associated software that will improve assessment, planning and public outreach.

**Sharing what has been learned** is also important to the department and



Boise and Austin Fire Department personnel tour the Idaho Botanical Gardens Firewise Garden in May 2015, as part of an Austin/Boise Fire Department Learning Exchange.

*Photo: J. McAdams/Boise Fire Department*

its partners. For example, a tour for the Public Lands Foundation examined an area where a fatal wildland fire burned, and where several years of phased wildfire mitigation work have taken place to reduce future risks. More in-depth versions of this tour were part of the April 2015 IAWF International Wildland Fire Safety Summit and Human Dimensions of Wildland Fire Conference and the Austin (Texas)-Boise learning exchange sponsored by the FAC Net. The Boise Fire Department also shares its expertise in classes at the National Interagency Fire Center and at Boise Fire Headquarters, teaching segments on FAC concepts; Ready, Set, Go!; Firewise and local wildfire mitigation activities to professional firefighters.

**Through participation** in FAC Net workshops, we have made new contacts and learned a great deal about wildfire mitigation initiatives around the country. The department has found that using FAC concepts and messaging helps streamline and tailor mitigation and public outreach

# Boise Fire Department



Working in  
ADA COUNTY  
Idaho



**City of Boise communities**

Boise Heights NA / Collister NA / Columbia Village / Cove East / East End NA / Harris Ranch NA / Highland NA / Homestead Rim / Hulls Grove / Oregon Trail Heights / Quail Ridge NA / Surprise Valley

**Firewise Communities**

Central Foothills / Columbia Village / Morningside Heights / Quail Ridge / Warm Springs Mesa



In the Oregon Trail area, a late fall herbicide application on a 100-acre hillside strip followed spring goat grazing; reseeded is scheduled for fall 2016. A fatal wildfire took place in this area in 2008.

*Photo: K. McCormick/Boise Fire Department*

activities, and provides opportunities to share experiences with others. The Boise Fire Department's long-term FAC goal is to bring in additional

**FAC Contact:** Capt. Jerry McAdams  
jmcadams@cityofboise.org  
(208) 570-6576

**COMMUNITY PARTNERS** Ada County Emergency Management / Ada County Juvenile Court Services / Ada County Parks & Waterways / Ada Soil & Water Conservation District / Boise High School / Boise Parks Department / Boise Planning & Development Services / Boise Public Works Department / City of Eagle / Eagle Fire Protection District / Harris Ranch Wildlife Mitigation Association / Healthy Hills Initiative / Hidden Springs Town Association / Kuna Rural Fire District / Meridian Fire Department / North Ada County Fire & Rescue District / Star Joint Fire District / Stone Creek Fire LLC / Whitney Fire Protection District / and numerous homeowner and neighborhood associations

**REGIONAL PARTNERS** Boise State University—Department of Geosciences; Public Policy Center / Bureau of Land Management / Idaho Bureau of Homeland Security / Idaho Department of Fish & Game / Idaho Fire Chiefs Association / Idaho Firewise / Idaho Power / Idaho Transportation Department / International Association of Fire Chiefs / International Association of Wildland Fire / National Interagency Coordination Center / NextDoor / Southwest Idaho RC&D / University of Idaho—Dept. of Agricultural Economics & Rural Sociology / USDA Agricultural Research Service

partners and provide consistent, effective countywide public outreach, in addition to ongoing boots-on-the-ground wildfire mitigation activities.



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette (nickg@hayfork.net).



# Fire Adapted Communities

## LEARNING NETWORK

During our first year in the FAC Learning Network, the number of Firewise communities in Towns County grew from three to ten. Since then the number has grown to nineteen, with another six communities in the process of completing plans, holding work days and submitting the paperwork needed for Firewise community recognition.

**Wildfire calls in Towns County** have dropped 75 percent since starting the FAC/Firewise program. At a time when two neighboring counties had 57 and 33 wildfires, Towns County had 7. This is attributed in large part to the steady flow of messages from the FAC group about wildfire safety and risk reduction around homes.

**Our success is due largely** to the formation of a FAC Citizens Coalition, made up of six local citizens and representatives from three fire agencies (U.S. Forest Service, Georgia Forestry Commission and Towns County Fire). The coalition gives local ownership to citizens—and FAC leaders have begun spreading the concept to other counties in the area. As a result, new FAC programs have recently been started in White, Lumpkin and Union Counties in northeast Georgia, and more counties are inquiring about starting their own FAC programs.

**The current focus** for this FAC group is to develop more Firewise



Volunteers at Leisure Woods Retirement Park—Towns County's second designated Firewise Community—marking the first neighborhood chipper day. Photos: Frank Riley

communities in the area—and maintain the ones we have—to further reduce wildfire calls. We continue to focus on homeowner education by all methods available, and will work on private lands hazard mitigation where possible. Most of our wildland-urban interface is connected to national forest land, which has limited opportunities for fuel reduction. However, the Forest Service is planning more prescribed burns in the future, which will help achieve the risk reduction that communities would like to see.

**Our long-term goal** as part of the network is to continue to spread FAC concepts among all of the 13 counties in northeast Georgia served by the Chestatee-Chattahoochee RC&D, and to help facilitate their spread across the Southeast through the learning network process. The team's ultimate goal is to help citizens make their homes and property safer from wildfire and to minimize losses. This will boost the economies and quality of life of communities across the region, up the Appalachians from Georgia to Virginia with RC&D Councils facilitating efforts.

# Chestatee-Chattahoochee RC&D Council



## Working in TOWNS COUNTY, Georgia

including the communities and subdivisions of Asheland Cove / Autumn Ridge on the Creek / Bell Creek Estates / Brasstown Creek Estates / Cedar Cliff / Frog Pond Community / Hi River Country / Hiawassee Overlook / Lake Forest Estates / Leisure Woods Park / Pine Crest / Plantation Villas / River Ridge / Riverstone Heights / Scarlets Way / Soapstone Community / Woodlake / Young Harris College / Young Harris Mountain

## and expanding into WHITE COUNTY and LUMPKIN COUNTY

The May 2015 Wildfire Community Preparedness Day featured a live exercise simulating a wildfire/house fire situation with multiple events unfolding. Sixty-three volunteers took part in this training for first responders from Towns County Emergency Services; U.S. Forest Service; Georgia Forestry Commission; Towns County Commissioners, Sheriff and 911 and Chestatee-Chattahoochee RC&D. The exercise, in a Firewise community, met with very positive results from first responders and the citizens involved.

**FAC Contact:** Frank M. Riley, Jr.  
frank.ccrd@gmail.com  
(706) 897-1676

**REGIONAL PARTNERS** Blue Ridge Mountain Soil & Water Conservation District / Broad River Soil & Water Conservation District / Georgia Dept. of Agriculture / Georgia Dept. of Natural Resources / Georgia Forestry Commission / Georgia Mountain Regional Commission / Hall County Soil & Water Conservation District / Stephens County Soil & Water Conservation District / The Nature Conservancy / Upper Chattahoochee River Soil & Water Conservation District / USDA Forest Service—Chattahoochee/Oconee National Forest / USDA Natural Resources Conservation Service

**COMMUNITY PARTNERS** Blue Ridge Mountain Electric Membership Corporation / City of Hiawassee / City of Young Harris / Towns County 911 Mapping / Towns County Chamber of Commerce / Towns County Commissioner / Towns County Emergency Management Services / Towns County Citizens Coalition / Towns County Fire Corps / Towns County Fire Rescue / Towns County HOA & individual community HOAs / Towns County Schools / Young Harris College

**NEW COUNTY PARTNERS** Lumpkin County CERT / Lumpkin County Commissioners / Lumpkin County Emergency Management / Lumpkin County Fire Department / Union County Commissioner / Union County Fire Rescue / White County CERT / White County Commissioners / White County Emergency Management / White County Fire Rescue / White County HOA



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette (nickg@hayfork.net).

# Fire Adapted Communities

## LEARNING NETWORK

The fires of 2014 and 2015 in north-central Washington illustrated both learning opportunities and the challenges of building a resilient community. Over the last year, CWSC endeavored to learn firsthand from our neighbors who withstood loss and braved recovery during and after these catastrophic events. CWSC's efforts and regional exchanges of knowledge, in combination with the fire season, led to an increase in requests for services and collaborative partnerships. The volume of requests demonstrates the significant need for enhanced economic resiliency, business continuity planning and long-term recovery planning to prepare our community for future wildfire incidents. CWSC is working with local partners, including the Fire Learning Network, to develop these plans.

In 2015, CWSC convened a group of business owners and civic leaders from Leavenworth and areas heavily impacted by the 2014 wildfires to explore what it means to be a resilient business community. Several themes emerged—the importance of communication, the need for adequate and comprehensive insurance, and the toll of a disaster on a business community. Valuable connections were made through this process: Leavenworth offered to assist Methow with news releases during



Treatment demonstration projects to prepare for wildfires and a toolkit of resources to mitigate wildfire after-effects are among the projects helping make north-central Washington more resilient to wildfire. Photo: Andrew Holm

fires; CWSC was invited to present business continuity planning in the Methow (according to the Methow Chamber of Commerce, businesses were better prepared as a result of this); the North Central Washington Economic Development District joined CWSC as a partner at a collective impact workshop; and a community of practice was formed by the CWSC, Okanogan Conservation District, and the Yakima Fire Adapted Communities Coalition to continue the learning. The connections are leading to collaborative efforts and building community connectedness throughout the region.

By engaging with the FAC Learning Network, our communities and organizations have the ability to join forces, link resources and learn from the experiences of our network partners—all invaluable opportunities. We believe that mutual learning is critical to healthy collaboration and we strive to incorporate a strong learning component into all of our activities. As communities begin to adapt and respond to fire—and change the way we view fire—we

# Chumstick Wildfire Stewardship Coalition



## Working in LEAVENWORTH and PLAIN, Washington

have a chance to share lessons learned with communities across the nation. Lessons learned by others across the country benefit our programs, organizational capacity and constituency; our own lessons shared broaden the impact of the CWSC beyond the Chumstick.

### WILDFIRE VISION

The Chumstick Coalition envisions progress toward a resilient community living with wildfire. Fire is a natural part of north-central Washington, but the 2014 wildfires changed the environmental, economic and social contexts in which we view fire. These changes present both tremendous challenges and tremendous opportunities. We are working to leverage these opportunities to create resilient governments, businesses and residents, all connected and collaborating to change the way we live and work in fire country.

FAC Contact: Hilary Lundgren  
hilary@chumstickcoalition.org  
(509) 630-2836

### KEY PARTNERS

American Red Cross—Apple Valley Chapter  
Bavarian Village Business Association  
Cascadia Conservation District  
Chelan County Fire District 3  
Chelan County—Department of Emergency Management, Public Utility District, Public Works, Sheriff  
City of Leavenworth  
Leavenworth Chamber of Commerce  
National Weather Service  
North Central Washington Economic Development District  
Okanogan Conservation District  
South Central Washington Resource Conservation & Development Council  
USDA Forest Service—Okanogan-Wenatchee National Forest  
Washington Fire Adapted Communities Learning Network  
Washington State Department of Natural Resources  
Washington State University—Cooperative Extension  
Wenatchee Valley Humane Society and local residents & landowners



The Fire Adapted Communities Learning Network is supported by Promoting Ecosystem Resilience and Fire Adapted Communities Together, a cooperative agreement between

The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette (nickg@hayfork.net).



# Fire Adapted Communities

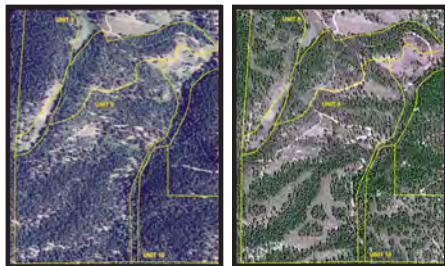
## LEARNING NETWORK

To successfully implement the Front Range Fire Adapted Communities Program, the Coalition for the Upper South Platte (CUSP) focuses on areas of high to extreme fire risk and critical infrastructure, with an emphasis to our communities' values.

CUSP works to tie together completed and planned forest management in the watershed to increase the overall impact on ecosystem resilience and wildfire risk reduction. This program of work includes:

- implementing Community Wildfire Protection Plans and landscape-scale activities that reduce hazardous fuels;
- increasing forest resiliency;
- raising community awareness, preparedness and ownership; and
- building local capacity for project management and implementation.

CUSP works in areas adjacent to projects that are planned, already underway, or have been recently



Before and after forest restoration work completed in the Woodland Park area. *Photos: CUSP*



Logs from a thinning project are stacked for sale. Whenever possible, CUSP sells logs to local businesses to offset treatment costs. *Photo: CUSP*

completed on federal, state and local agency lands, utilities lands and private properties. This coordinated work increases the overall impact on ecosystem resilience, wildfire risk reduction and watershed protection.

Also a priority are projects in at-risk wildland-urban interface (WUI) zones along the Colorado Front Range. Having completed over 1,000 acres of treatments in 2015, CUSP has begun to expand its area of influence, and has begun mentoring several other non-profit organizations facing the same challenges.

With a skilled staff of 25 and new pieces of equipment, CUSP is well



Knowing that the only way to protect our communities is by working together, CUSP volunteers lend a hand. *Photo: CUSP*

# Coalition for the Upper South Platte



## Working in WOODLAND PARK and along the Colorado Front Range

positioned to even more effectively implement forest management projects. Participation in the FAC Learning Network affords staff opportunities to discuss with others in the fire and land management field both challenges and new approaches to creating more resilient communities. The FAC Learning Network has also raised the organization's national visibility, further extending its impact.

Looking ahead, CUSP will be focusing on risk reduction in the home ignition zone, and in creating cross-boundary understanding of the needs of both the community and of the ecosystems on the Front Range of Colorado. It is our belief that both landscapes and communities' values must be understood for effective forest management projects to succeed.

Contact: **Jonathan Bruno**  
 jonathan@uppersouthplatte.org  
 (719) 748-0033  
 www.cusp.ws

### KEY PARTNERS

Colorado Parks and Wildlife  
 Colorado Springs Utilities  
 Colorado State Forest Service  
 Denver Water  
 Florissant Fire Protection District  
 Front Range Fuels Treatment Partnership  
 Help the Needy  
 Jefferson County  
 Mile High Youth Corps  
 Northeast Teller County Fire Protection District  
 Park County  
 Pikes Peak Wildfire Prevention Partners  
 Pikes Peak Fire Learning Network  
 Teller County  
 The Nature Conservancy  
 U.S. Air Force Academy  
 USDA Forest Service  
 and local homeowners associations



A CUSP crew burns piled slash in the snow, to remove excess fuels from the forest when the risk of wildfire is at its lowest. *Photo: CUSP*



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette (nickg@hayfork.net).

# Fire Adapted Communities

## LEARNING NETWORK

**Ely, Minnesota** is a community within hiking distance of the Canadian border and about a four-hour drive north of the Twin Cities. With a population of about 3,400, Ely is in the middle of a complex landscape. Forests in this region have regrown from the heyday of railroad logging and Paul Bunyan more than 100 years ago. Ely also provides a gateway to the Boundary Waters Canoe Area Wilderness, drawing residents and visitors from all over the world.

**Ely is on the frontlines** of wildfire risk for many reasons. The area has beautiful forests, but the forests are thick with balsam fir which burns like paper when green and is almost as bad as a box of matches when it is dead and dry. The balsam fir and other understory growth in the forests around Ely can act as ladder fuel and



A FAC and Firewise presentation held at the Morse/Fall Lake Fire Department was aimed at raising awareness about the need for homeowners in the Ely region to create defensible space.

*Photo: Gloria Erickson*



The owners of this lake resort have worked with the Firewise program in Lake County and the Forest Service to mitigate wildfire risk on their property.

*Photo: Lake County*

increases the risk of destructive crown fires, including the May 2012 Highway 1 wildfire.

**In the summer of 2014**, local Ely FAC partners came together to implement a “chipper day” fuels reduction project. This event sparked the interest of more neighborhoods, residents and lake associations. Additional chipper days have been held since then, and local leadership and capacity are developing.

**Partners are also developing** an Ely Area Fire Safe Council. The goal of the Council is to engage and encourage community partnerships to establish a wildfire resilient landscape for Ely and the surrounding wildland-urban interface. Our main objectives are to provide education and demonstrations of Fire-wise best practices, and to continue to identify and implement

## Dovetail Partners



### Working in ELY, Minnesota

#### FIRE SAFE COUNCIL VISION

To engage and encourage community partnerships to establish a wildfire resilient landscape for Ely and the surrounding wildland-urban interface.

fuels reduction projects using our CWPPs as a baseline.

**We will also continue** to work with the Ely Emergency Preparedness Committee to establish evacuation strategies for Ely residents. And we hope to work with County Emergency managers on much-needed evacuation plans/routes in the surrounding wildland-urban interface.

**For Ely, being fire adapted** requires balancing recreation needs, resource utilization and public safety. That’s not always an easy balance to strike, but we are making progress.



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette ([nickg@hayfork.net](mailto:nickg@hayfork.net)).

FAC Contact:

**Kathryn Fernholz**  
[katie@dovetailinc.org](mailto:katie@dovetailinc.org)  
(612) 333-0430

#### KEY PARTNERS

Ely Emergency Preparedness Committee  
Firewise—Northeast Regional Specialist Lake County  
Minnesota Department of Natural Resources  
Morse/Fall Lake Township  
USDA Forest Service  
Vermilion Community College



Ely’s first annual Chipper Day was sponsored by local FAC partners in the summer of 2014.

*Photos: Gloria Erickson*



# Fire Adapted Communities

## LEARNING NETWORK

Since joining the FAC Net in 2014, FireWise of Southwest Colorado has hosted and participated in numerous stakeholder events to discuss, plan and implement activities across its three-county area. These have included taking part in public meetings hosted by La Plata County to support new driveway standards, hosting a wildfire forum in Montezuma County where 30 people discussed opportunities for increasing wildfire preparedness, and a workshop on FAC and wildfire preparedness for realtors, insurance agents and residents.

**FireWise convenes two working groups**—a Regional Council and Biomass Utilization group. These arose from a wildfire collaboration conference we hosted in 2014, and now host twice yearly for partners to share information and discuss issues. The biomass working group is addressing opportunities for developing a biomass industry in the region. FireWise has contracted with the Colorado State Forest Service and Colorado State University for a biomass utilization study. In the meantime, FireWise continues to address the need for slash disposal through operation of several slash depots and a chipper rental rebate program, and by providing funding for homeowner association use of an air curtain burner.

**FireWise also champions** many FAC-related projects that support wildfire risk reduction. These have included:



- development of a *Best Practices for Homeowners* directory,
- a low-income pilot project in Montezuma County that included fuels reduction and hardening of homes on four individual properties and creation of a fuel break to protect a 96-unit mobile home park,
- a new partnership with the La Plata County GIS Department to map fuels-reduction efforts across the region,
- a collaborative effort conducting fuels mitigation work on conservation easements near communities with FireWise Ambassadors or CWPPs, and
- working with the San Juan National Forest to highlight a 1,200-acre prescribed burn conducted adjacent to a Firewise Community.

**FireWise continues to support** the Firewise Communities USA program, adding three new communities in 2015, for a regional total of 11. We also support National Wildfire Preparedness Day with events in all three counties.

**In 2015**, our Montezuma County coordinator hosted several meetings with the Forest Service, local water conservation districts, Bureau of Reclamation and others to determine interest in starting a collaborative group to protect the McPhee Reservoir water supply, which is primarily the Upper Dolores Watershed. Interest is strong and we plan to continue convening the group.

# FireWise of Southwest Colorado



**FAC Contact:** Pam Wilson  
swcoloradofirewise@gmail.com  
(970) 385-8909

## Working in Montezuma, La Plata, and Archuleta Counties in southwest Colorado

**REGIONAL PARTNERS** BLM—Southwest District Field Office / Colorado Division of Fire Prevention and Control / Colorado State Forest Service / Mountain Studies Institute / NRG Consulting / San Juan Citizens Alliance / San Juan Mountains Association / Short Forestry / Southern Rockies Fire Science Network / Southwest Conservation Corps / University of Colorado, Boulder—Institute of Behavioral Sciences / USDA Forest Service—Rocky Mountain Research Station, San Juan NF

**ARCHULETA COUNTY PARTNERS** Archuleta County— Administrator, Board of County Commissioners, County Landfill, OEM / BIA—Southern Ute Agency / Colorado State University—Archuleta County Extension Office / Los Pinos FPD / Pagosa Area Water and Sanitation District / Pagosa FPD / Pagosa Springs High School / San Juan Headwaters Forest Health Partnership / Stollsteimer Watershed Group / USDA Forest Service—San Juan NF (Pagosa RD) / USDA Natural Resources Conservation Service

**LA PLATA COUNTY PARTNERS** BIA—Southern Ute Agency / City of Durango / Durango & Silverton Narrow Gauge Railroad / Durango FPD / Fort Lewis Mesa FPD / La Plata Conservation District / La Plata County— Board of County Commissioners, OEM, Planning and GIS Departments / La Plata Open Space Conservancy / Los Pinos FPD / Upper Pine River FPD / USDA Forest Service—San Juan NF (Columbine RD)

**MONTEZUMA COUNTY PARTNERS** BIA—Ute Mountain Ute Agency / Colorado Division of Parks and Wildlife / Cortez FPD / Cortez Open Learning High School / Dolores County OEM / Empire Electric Association / Four Corners Bar Association / Four Corners Home Builders Association / K&N Fuels Management / Lewis-Arriola FPD / Mancos FPD / Montelores Habitat Partnership Program / Montezuma County— Administrator, Board of County Commissioners, County Landfill, OEM / Montezuma Land Conservancy / National Park Service—Mesa Verde National Park (Fire Management) / Pleasant View FPD / Tri-State Generation and Transmission Cooperative / USDA Forest Service—Dolores Public Lands Office / Ute Mountain Ute Fire and Rescue / Western Area Power Administration

*Top of page:* The 2014 FireWise chipper rebate program provided almost \$20K in rebates to 91 residents and HOAs, who matched with \$107K and 4,065 hours of work. *Photo: Pam Wilson*

*Right:* A 2014 tour of the 2012 Weber Fire. Due to education, mitigation and evacuation planning laid out in their CWPP, no homes were damaged in the 10,000-acre fire and all residents were evacuated safely.

*Photo: Cortez Journal/Jim Mimiaga*



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette (nickg@hayfork.net).

# Fire Adapted Communities

## LEARNING NETWORK

As part of our FAC Learning Network activity, FFS works with new and existing partners in Baker County to undertake fire adapted communities activities that address mitigation challenges and opportunities. A kickoff event in 2014 brought community leaders, stakeholders and key partners together to learn about the idea of fire adapted communities—and about the importance of the concepts to Baker County and surrounding communities. Work since then has continued this important conversation.

In 2015, for example, the Baker County Community Wildfire Protection Plan (CWPP) was updated to incorporate FAC concepts. The completed plan was added to the Local Mitigation Strategy as an appendix, where it enhances the Wildfire Protection Element of the strategy by providing a wildfire risk assessment and a ready list of mitigation projects that address defensible space for wildfires, ignition-resistant construction and hazardous fuels reduction.

Community events in Baker County, have brought together a diverse range of experts and stakeholders including the Baker County Agricultural Extension Agent and staff members, Baker County Board of County Commissioners, Baker County Fair Association, Baker County Veterans



A core working group leads the FAC efforts of the Florida Forest Service. Photo: FFS

Council, Longleaf Initiative, North Florida Prescribed Fire Council and members of the public. The Taylor Firewise Community USA held its annual Community of Taylor Firewise Day for residents and volunteers as well. These events highlighted pilot community FAC initiatives, the Baker County CWPP, Firewise and the IAFC Ready, Set, Go! program. Handouts, displays and presentations showcased the Firewise principles of defensible space and landscaping for wildfires, and the application of ignition-resistant construction and hazardous fuel reduction.

Looking forward, a FAC/Firewise coordinator will be guiding efforts. Continuing outreach will engage residents and assess hazards, host tours of successful defensible space and mitigation projects and otherwise promote fire adapted communities actions in the county. A core working group will be training members of the Baker County Veterans Council to assist in and conduct Firewise assessments for county residents and help prepare them to take action.

# Florida Forest Service



Working in  
BAKER COUNTY, Florida



Outreach to the community through many venues forms a key part of the FAC work in the county. Photo: FFS

Through FAC Learning Network activities and CWPP objectives, actions are expected in three new Firewise Communities (Community Protection Zones) by the end of 2016. The county fire department also recently adopted the RSG! program, and the core working group will be providing support to help the department implement it.

FAC Contact: **Ronda Sutphen**  
ronda.sutphen@freshfromflorida.com  
(850) 681-5929

### KEY PARTNERS

Baker County Board of County Commissioners  
Baker County Fire Department  
Baker County Sheriff's Office—  
Emergency Management Division  
Baker County Veterans Council  
City of Macclenny  
Flatwoods Management LLC  
Florida Division of Emergency Management  
Florida Division of State Parks  
Florida Fish and Wildlife Commission  
Florida Forest Service  
Greater Okefenokee Association of Landowners  
North Florida Prescribed Fire Council  
Plum Creek Timber Company  
Rayonier Inc.  
Taylor Firewise USA Community  
The Longleaf Alliance  
U.S. Fish & Wildlife Service—  
Okefenokee National Wildlife Refuge  
USDA Forest Service—Osceola National Forest



The Fire Adapted Communities Learning Network is supported by Promoting Ecosystem Resilience and Fire Adapted Communities Together, a cooperative agreement between

The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette (nickg@hayfork.net).



# Fire Adapted Communities

## LEARNING NETWORK

Public and stakeholder engagement is a high priority for this partnership, as is building capacity to implement FAC projects in northern New Mexico. We continue to make tremendous strides on both fronts.

The Forest Stewards Guild joined the New Mexico Wildland Urban Interface Summit planning team in the spring of 2014 and helped plan a three-day event around the theme of fire adapted communities. This relationship has continued in 2015 and 2016. We also continue to work with the City of Santa Fe FAC Coalition and with the budding Wildfire Network, which has recently been incorporated as a nonprofit organization to provide a one-stop shop for mitigation information. The Nature Conservancy has invested in local FAC efforts to expand impact by convening peer learning workshops in the Rio Grande Water Fund region.



Kids gather around a matchstick "forest fire" demonstration at an Earth Day outreach event in Santa Fe. Photo: Forest Stewards Guild



A prescribed fire training exchange (Trex) in October helped build local capacity while treating fuels on 255 acres near Black Lake

Photo: Mark Meyers/NMSLO

Other key efforts have included:

- overhauling and maintaining [www.fireadaptednewmexico.org](http://www.fireadaptednewmexico.org) based on feedback from partners;
- discussing FAC issues on local radio and in newspapers;
- leveraging existing relationships with landowners and The Nature Conservancy to collaboratively broadcast burn 101 acres on private land across two ranches in a high priority WUI area in McKinley County in late 2015;
- working with New Mexico State Forestry and other partners to incorporate lessons learned and ideas from the national FAC Net into the formal guidance for all new and updated CWPPs in the state.

Combining implementation and outreach, the Guild continues to integrate FAC outreach and education into our youth conservation crew program. Every summer over 45 rural youth work for nine weeks across six Forest Service ranger districts on three national forests. These crews work on FAC and conservation projects like fuels reduction and prescribed fire line construction.

# Forest Stewards Guild



Working in SANTA FE COUNTY and MCKINLEY COUNTY, New Mexico

and the communities of Angel Fire / Black Lake / Bluewater Acres / Dixon / La Cueva / Penasco / Santa Fe / Timber Lake Ranches

The Guild continues to expand and leverage FAC Net investments with companion projects and funding. For example:

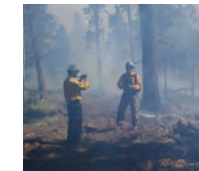
- We are midway through a three-year project supported by the Forest Service's Collaborative Forest Restoration Program to restore forests and improve watershed conditions in a high priority area adjacent to values at risk identified in the local CWPP.
- In 2015 the Guild completed a project in McKinley County, reducing fuels in the home ignition zone for 30 homes.
- Fire Service Support is working on a project for the New Mexico

FAC Contact:

Eytan Krasilovsky  
eytan@forestguild.org  
(505) 983-8992 x 16

## KEY PARTNERS

Angel Fire—Fire Department  
Chris's Tree Service  
City of Santa Fe—Fire Department  
Fire Services Support, LLC  
La Cueva Road  
McKinley County  
New Mexico Association of Counties  
New Mexico State Forestry  
New Mexico State Land Office  
Santa Fe County  
The Nature Conservancy—New Mexico  
USDA Forest Service—Cibola National Forest, Santa Fe National Forest  
Wildfire Network



The fall Trex combined training, treatments and outreach: a local reporter conducted a video interview with the NM State Lands Forester during ignitions.

Photo: Mary Stuever/NMSF

Association of Counties that will expand the tablet-based home-site risk assessment program into Socorro County.

- In 2016 the Guild is working on two CWPP updates, and the Wildfire Network will be writing another, that will incorporate FAC ideas and approaches.



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette ([nickg@hayfork.net](mailto:nickg@hayfork.net)).

# Fire Adapted Communities

## LEARNING NETWORK

**The Greater Flagstaff Forests Partnership** (GFFP) is a long-standing collaborative of academic, environmental and private organizations and municipal, county, state and federal agencies. Since 1996, we have worked to increase community protection through research and demonstration of approaches to restore the natural ecosystem structure, function and composition in the ponderosa pine forests surrounding Flagstaff. GFFP has helped lead a shift in public understanding and support for proactive forest management—increasing awareness of threats our forested communities face and the solutions underway to reduce our risk.

**GFFP contributes** to two important initiatives in the state: the Flagstaff Watershed Protection Project (FWPP) and Four Forest Restoration Initiative (4FRI). On the 4FRI project, we lead monitoring of contractors' economic contributions. In the FWPP, we worked with the City of Flagstaff and Arizona State Forestry Division to plan, fund and oversee a 475-acre restoration project on Observatory Mesa, city-owned land within the FWPP boundary. We also continue cost-share assistance to private landowners, with several hundred acres of treatments planned in the coming year.

**GFFP hosted numerous events** in 2015 that promote common goals



During the 2015 Flagstaff Festival of Science, community members helped mark trees for thinning by the Flagstaff Watershed Protection Project.

*Photo: Mark Brehl*

of the FAC Net and our partners. Our Firewise landscaping contest in May generated incredible excitement, with cash prizes for the five homeowners who best showed that a fire adapted landscape can be both practical and beautiful. This event generated ongoing interest, with buzz for the 2016 contest starting months ahead of time. GFFP also hosted events at the week-long Flagstaff Festival of Science, including a hike on Observatory Mesa, and an exercise that allowed people of all ages to experience hands-on marking of trees in an area harvested just days later in a FWPP thinning project. With fun and fresh approaches, we continue to foster community awareness that transforms the public into active partners in our effort to reduce wildfire risk and restore forest health.

**GFFP looks forward** to another active year. We will continue to facilitate

# Greater Flagstaff Forests Partnership



## Working in the GREATER FLAGSTAFF AREA COMMUNITY of northern Arizona

forest treatments and recognize property owners with publicly visible signs acknowledging their contribution to a more fire adapted community. We are planning treatments at Ft. Tuthill County Park, which sees more than 100,000 visitors a year, and will build a kiosk to explaining fire and forest management efforts and the responsibilities of people living in a fire adapted community. To raise support for the increasing pace and scale of treatments in our forests, GFFP will hold a harvesting methods workshop to help people understand novel harvesting approaches like cable and helicopter logging. As we work to create resilient forests and safe and sustainable communities, we look forward to another successful year.

FAC Contacts:

**Mark Brehl**  
markbrehl@azsf.gov  
(928) 637-0547

**Anne Mottek Lucas**  
mottekconsulting@infomagic.net  
(928) 213-0413

<http://www.gffp.org/>

## KEY PARTNERS

Arizona Game and Fish Department  
Arizona Prescribed Fire Council  
Arizona State Forestry Division  
Centennial Forest  
City of Flagstaff  
Coconino County  
Coconino County Conservation District  
Flagstaff Fire Department  
Friends of Northern Arizona Forests  
Northern Arizona University—  
Ecological Restoration Institute  
Northern Arizona University—School  
of Forestry  
Ponderosa Fire Advisory Council  
Southwest Fire Science Consortium  
The Nature Conservancy



Fire smart *and* beautiful describes the landscaping of the winners of GFFP's 2015 Fire Adapted Landscaping Contest.

*Photo: Mark Brehl*



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette ([nickg@hayfork.net](mailto:nickg@hayfork.net)).



# Fire Adapted Communities

## LEARNING NETWORK

### The Island Park Sustainable Fire Community (IPSFC) is a collaborative group of concerned citizens along with representatives from the private sector, non-profit organizations and local, state and federal agencies. The IPSFC is working diligently to help balance the scales of the wildland urban interface and fire adapted communities. We are committed to developing a strong social, ecological and sustainable forest community.

**Recent actions** have included doing risk evaluations for homeowners, conducting fuels reduction demonstration projects and hosting tours of them, giving presentations at homeowners' association meetings and other venues, launching a website and Facebook page. Slash pickup days have also been scheduled throughout the Island Park area, and 5,000 postcards for home evaluations were sent to owners of homes and other property in the area. A full-time project coordinator, two outreach representatives and two fuels specialists provide a core to coordinate and carry out this work.

**Wildfire Awareness Week** reached about 400 people in 2015. Discussion topics included wildfire risk to homes, disaster preparedness, insurance coverage for homes and property, and firefighting responsibilities of the various agencies in the area. There were also games and prizes for kids,

opportunities to meet Smokey Bear, and demonstrations by the Island Park Volunteer Fire Department, U.S. Forest Service and the Community Emergency Response Team.

**Outreach representatives** also contacted 300 people during the 2015 summer season, handing out brochures and talking with property owners about IPSFC and its offerings, including the risk evaluations, Wildfire Awareness Week, and slash pickup days. As a result of the postcard mailings and face-to-face contacts, IPSFC received 156 requests from property owners to complete risk evaluations on their properties. The first 121 evaluations were completed by the end of 2015, with the remainder set as a top priority for the spring of 2016.

**To conclude** the summer's activities, the second annual slash pickup days took place in September. Homeowners in subdivisions as far south as Pinehaven and as far north as Henry's Lake put slash by the side of the road for IPSFC to haul. During a three-week period, 960 cubic yards of slash—



Smokey Bear was a popular visitor at Island Park's first Wildfire Awareness Week.

enough woody fuels to fill about 80 10-wheeled dump trucks—were hauled away and disposed of.

**The bar is set high** for 2016. IPSFC and its partners plan to improve on these programs and activities, including completing six more demonstration properties to show what properly mitigated homes and lots look like. The summer may bring wildfire challenges, but Island Park is committed to developing strong social and ecological communities to meet them.

Website: [www.islandparksustainablefirecommunity.com](http://www.islandparksustainablefirecommunity.com)  
Facebook: <https://www.facebook.com/IslandParkSustainableFireCommunity>

*Right: Fuels cut and ready for removal at one of the first four defensible space demonstration projects of the collaborative. Photos: Jessica Simpson*

# Island Park Sustainable Fire Community



### Working in ISLAND PARK, Idaho and WEST YELLOWSTONE, Montana

#### OUR VISION

Human and ecological communities of Island Park and West Yellowstone are resilient to fire, insect and disease through awareness, outreach and action.

enough woody fuels to fill about 80 10-wheeled dump trucks—were hauled away and disposed of.

**The bar is set high** for 2016. IPSFC and its partners plan to improve on these programs and activities, including completing six more demonstration properties to show what properly mitigated homes and lots look like. The summer may bring wildfire challenges, but Island Park is committed to developing strong social and ecological communities to meet them.

Website: [www.islandparksustainablefirecommunity.com](http://www.islandparksustainablefirecommunity.com)  
Facebook: <https://www.facebook.com/IslandParkSustainableFireCommunity>

*Right: Fuels cut and ready for removal at one of the first four defensible space demonstration projects of the collaborative. Photos: Jessica Simpson*

**FAC Contact:** Les Fadness  
[ipsustainablefire@gmail.com](mailto:ipsustainablefire@gmail.com)  
(208) 680-6852

#### KEY PARTNERS

Farm Bureau Insurance  
Fire Safe Landscaping, LLC  
Fremont County  
High Country RC&D  
Idaho Bureau of Homeland Security  
Idaho Department of Lands  
Idaho State Fire Marshall—  
Department of Insurance  
Island Park volunteer Fire District  
The Nature Conservancy—Idaho (Flat Ranch)  
USDA Forest Service—Caribou-Targhee National Forest (Ashton and Dubois Ranger Districts)  
and above all, homeowners and property owners of the Island Park Caldera



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between

The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette ([nickg@hayfork.net](mailto:nickg@hayfork.net)).

# Fire Adapted Communities

## LEARNING NETWORK

**The Western Klamath Restoration Partnership (WKRP)** is a multi-stakeholder collaborative working to improve forest resiliency and community safety. Both the Fire Adapted Communities Learning Network and Fire Learning Network play important roles in the partnership.

**WKRP has successfully leveraged** funds from multiple sources to support its work. BIA Reserved Treaty Rights Lands program funds have enabled the hiring of an Assistant Fire Management Officer, a Wildland Fire Operations Specialist and a Prescribed Fire and Fuels Technician. The tribe is administering the Incident Qualifications and Certification System (IQCS) and has developed an MOU with the Mid-Klamath Watershed Council and Salmon River Restoration Council, to facilitate qualification development under National Incident Management System. The new positions and IQCS are critical to building the local capacity needed to increase our Cohesive Strategy implementation efforts.

**Among these efforts** are Prescribed Fire Training Exchanges (TRES); in 2015 a Tribal Representative, Incident Commander, Wildland Fire Operation Specialist and several others took part in TRES. Our handcrew also prepared fireline for the TRES and for Forest Service controlled burns. On wildfires, we engaged a Tribal Representative

on the Nickowitz Fire and Gasquet Complex, and responded to incidents throughout northern California.

**WKRP has developed** a new approach to cultural resource surveys that includes Cultural Vegetation Characteristics as indicators for site-specific management. These efforts are being led by three staff. We are also building on existing skillsets of partner organizations in the fields of wildlife, forestry and botanical data collection and LiDAR validation. Eighty food-grove assessments have been completed, providing valuable information on stand dynamics and cultural food and fiber resource considerations.

**Our current focus** includes further expansion of WKRP activities to achieve our vision of establishing and maintaining resilient ecosystems, communities and economies guided by cultural and contemporary knowledge through a truly collaborative process that effectuates the revitalization of human relationships with our dynamic landscape.

**With a multi-organizational,** integrated networking approach, the partnership has begun planning and implementation in and near the Western Klamath Mountains FLN landscape. The Somes Bar Integrated Wildland Fire Management and Capacity Development Project will demonstrate the use of linear treatments to confine larger prescribed burn units and safely scale up fire management activities. As we work

## Karuk Tribe



**Working in CECILVILLE, FORKS OF SALMON, HAPPY CAMP, ORLEANS, SAWYERS BAR, SEIAD and SOMES BAR, and with INDIGENOUS COMMUNITIES in northern California**

through this process, lessons learned will help formulate the next pilot projects, in the Happy Camp and Salmon River communities.

### KEY PARTNERS

Bureau of Indian Affairs  
CAL FIRE  
Deer Creek GIS  
Firestorm Wildland Fire Suppression Inc.  
Happy Camp Fire Safe Council  
Inter-Tribal Agriculture Council  
Inter-Tribal Timber Council  
Klamath Forest Alliance  
Klamath Salmon Media Collaborative  
Mid Klamath Watershed Council  
National Oceanic and Atmospheric Administration—Fisheries



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette ([nickg@hayfork.net](mailto:nickg@hayfork.net)).

**FAC Contact:**

**Bill Tripp**  
[btripp@karuk.us](mailto:btripp@karuk.us)  
(530) 627-3446 x 3023



Participants in the fall 2015 Klamath River TRES practiced the use of fire for environmental education, community protection, cultural resource enhancement and eco-cultural revitalization.

*Photos: Stormy Staats/KSMC*

Northern California Prescribed Fire Council  
Northwest California Fire Science Consortium  
Orleans Volunteer Fire Department  
Orleans-Somes Bar Fire Safe Council  
Salmon River Restoration Council  
Salmon River Volunteer Fire and Rescue  
Stanford University  
U.S. Environmental Protection Agency  
U.S. Fish & Wildlife Service  
University of California, Berkeley  
University of California, Davis  
University of Oregon  
USDA Forest Service—Klamath NF, Shasta-Trinity NF, Six Rivers NF; Pacific Southwest Research Station; Region 5 State and Private Forestry  
USDA Natural Resources Conservation Service—Fortuna Service Center, Yreka Service Center  
Watershed Research and Training Center  
Western Region Strategy Committee



# Fire Adapted Communities

## LEARNING NETWORK

The New Jersey Pinelands are “ground zero” for wildland-urban interface (WUI) in the state. These pine barrens are an extremely flammable ecosystem. The area, in south-central New Jersey, has become popular with retirees, who are mainly new arrivals with little or no understanding of their fire risk.

Our fire adapted communities work has been at two scales. At the local level, the Barnegat Fire Company conducts workshops with Barnegat Township communities to keep them informed of the risk reduction efforts being made. Two Firewise Communities—Horizons and Mirage—have talented, motivated liaisons who keep their communities informed and productive in reducing risk through mechanical fuel reduction projects. They have also begun spreading the FAC word to other WUI communities in the township and beyond. Our top priorities in Barnegat Township are to continue to promote Firewise and Ready, Set, Go! in the most vulnerable neighborhoods, and to create additional evacuation routes for one of our largest WUI communities.

At the state level, we work with the environmental community to promote wildland fire resiliency through the existing Sustainable Jersey Program. This has involved developing a suite of emergency preparedness actions tied to that program. To reduce their risk and be certified as “resilient”



Above: The 2007 Warren Grove Wildfire burns behind businesses on County Route 72 in Barnegat Township. Photo: Kevin Burke/NJ Forest Fire Service

Below: That fire burned right to the brink of the mobile home Community of Brighton at Barnegat. The FAC Learning Network has resulted in new relationships with residents and the owner of the community, with an emphasis on the Firewise and Ready, Set, Go! programs and on wildfire resiliency. Photo: NJ Forest Fire Service



under the program, communities must implement wildfire preparedness programs and other actions. These may include the Firewise and Ready, Set, Go! programs, developing Community Wildfire Protection Plans (CWPPs) and Community Forestry Management Plans, and instituting a Fire Safe Council to coordinate efforts at the municipal level. We have worked with Sustainable Jersey to define this suite of emergency preparedness actions, and have drafted a model municipal ordinance that municipalities can adapt to develop their own Fire Safe Councils.

# New Jersey Fire Safety Council



## Working in Pinelands in south-central New Jersey

Being part of the FAC Learning Network has been very beneficial for New Jersey. We have learned about the value and potential of Fire Safe Councils at both the local and statewide levels, and as a result have formed a statewide council, and plan to support as many local councils as are needed to benefit New Jersey’s WUI residents.

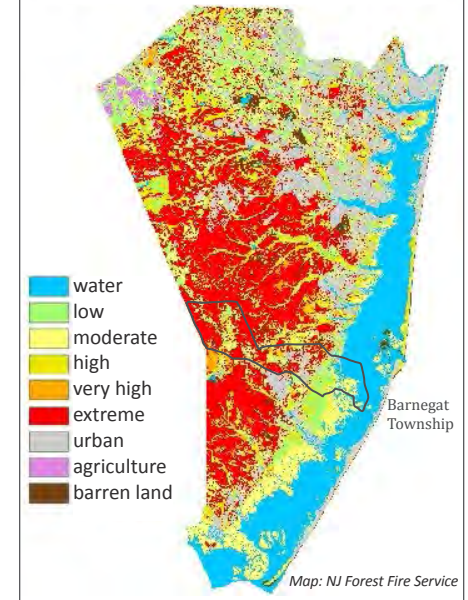
Our long-term goals are to create a network of fire resilient municipalities using existing fire prevention and preparedness programs, and to coordinate those efforts through a statewide Fire Safe Council that trains local members and targets funding to motivated councils where preparedness efforts will provide the best return on investment. In this way we hope to bring additional state and federal resources to New Jersey’s FAC efforts.

FAC Contact: William F. Brash, Jr.  
forester82@aol.com  
(732) 890-0725

### KEY PARTNERS

- Barnegat Fire Company
- Barnegat Township
- Horizons at Barnegat
- Mirage at Barnegat
- New Jersey Forest Fire Service
- New Jersey Forest Service
- Sustainable Jersey
- USDA Forest Service

### Wildfire Fuel Hazard for Ocean County



There are 56 retirement communities with 125,000 residents in Ocean County, including 5 communities (7,400 people) in Barnegat Township.



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette (nickg@hayfork.net).

# Fire Adapted Communities

## LEARNING NETWORK

Project Wildfire's flagship program, FireFree, had a burst of growth in 2015, with the spring event breaking the record set in 2014 with a 27 percent increase in participation. This spring surge suggests that more residents are preparing for fire season before smoke is on the horizon. All the agencies involved in wildfire prevention and preparedness were able to coordinate messages well ahead of fire season—and local residents not only prepared for fire season, but offered aid to parts of the state affected by large wildfires.

Central Oregon also hosted its first Prescribed Fire Training Exchange in May 2015. With input from partners, Project Wildfire produced a range of outreach tools about prescribed fire. The 10-day media campaign reached



FireFree activities led by Project Wildfire—such as slash disposal opportunities—support residents' efforts to make their properties better prepared for wildfire. *Photo: Alison Green*



The first Prescribed Fire Training Exchange (Trex) in Oregon took place in May 2015. Project Wildfire led the media outreach efforts, which included a TV commercial, radio PSAs and a printed handout explaining the benefits of prescribed fire. *Photo: Alison Green*

more than 80,000 residents, about half the population of Deschutes County.

Another opportunity for shared learning was made when a local fire district hosted five firefighters from the United Kingdom for two weeks. The firefighters—from Hampshire Fire and Rescue Fire Department—visited the National Interagency Fire Center, Central Oregon Dispatch and Project Wildfire, and fought a fire at Canyon Creek. The Hampshire personnel learned more about how wildfires are managed in the United States using central Oregon as a model. While there are wildland fires in the U.K., they are not as common—or as large—as in the U.S. West. For the hosts, sharing information and experiences with other fire professionals was an opportunity to better acknowledge our fire risk and take action on the appropriate levels to make central Oregon more fire adapted.

The knowledge brought to Deschutes County from being part of the FAC Learning Network has been more valuable than Project Wildfire had even hoped for when joining the

# Project Wildfire



## Working in DESCHUTES COUNTY, Oregon

### including 7 CWPP areas

Bend / East & West Deschutes County / La Pine / Redmond / Sisters / Sunriver / Upper Deschutes River Coalition

### and 19 Firewise Communities

Aspen Lakes / Awbrey Glen / Caldera Springs / Cascade Meadows Ranch / Crosswater / Deschutes River Woods / Fall River Estates / North Rim / Ponderosa Pines / Rimrock West / River Meadows / Spring River / Star Ranch / Sunriver / Sunset View Estates / The Ridge at Eagle Crest / Tollgate / Wild River / Woodside Ranch

network. Ideas for CWPP revisions, how to document home assessments, a successful networking day agenda, and other guides developed by FAC partners and shared through the network have given Project Wildfire motivation to implement similar ideas in Deschutes County. Looking forward, Project Wildfire plans to capitalize on relationships built within the network to implement a successful training exchange in the Pacific Northwest.

FAC Contact: **Alison Green**  
projectwildfire.pw@gmail.com  
(541) 322-7129

## KEY PARTNERS

Bend Fire Department / Brooks Resources / Brown & Brown Insurance / Bureau of Land Management / Deschutes Collaborative Forest Project / Deschutes County—Board of Commissioners, Community Development, Emergency Manager, County Forester / Deschutes River Woods / Deschutes Rural Fire Protection District #2 / International Association of Fire Chiefs / National Fire Protection Association / North Rim HOA / Oregon Department of Forestry / Oregon State University—Extension / Ponderosa Pines Property Owners Association / Rimrock West HOA / River Meadows HOA / Shevlin Commons / Singletree Enterprises LLC / Sisters Fire Department / Sunriver HOA / Sunset View Estates HOA / The Highlands at Broken Top / The Nature Conservancy / Tollgate HOA / Upper Deschutes River Coalition / USDA Forest Service / Western Region Cohesive Strategy—Chair, Committee Coordinator



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between

The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette (nickg@hayfork.net).



# Fire Adapted Communities LEARNING NETWORK

**The Southern Oregon Forest Restoration Collaborative (SOFRC)** works to build support and strategies for cohesive forest restoration across the dry forests of southwest Oregon. Our goal is to create resilient forests and communities, support coordinated forest planning, and maintain a vibrant forest management and utilization infrastructure. While our focus is on federal lands, the checkerboard landscape of the region encourages an all-lands approach to achieve integrated forest restoration goals.

**Our recent Illinois Valley Timber Sustainability Assessment** identified an available, cost-effective, restoration-based federal timber supply that helped leverage state and national investments to enable the retooling and reopening of a local mill, which provides 70 jobs to the rural community. The assessment was key to developing the cohesive forest restoration strategy, working within current federal forest management guidelines and land allocations, and receiving support from the U.S. Fish & Wildlife Service in its effort to conserve northern spotted owl habitat.

**The Cohesive Forest Restoration Strategy** for the Rogue Basin covers 4.6 million acres. It identifies and prioritizes 50,000 acres for treatment over the next 20 years. Projects will promote resilient landscapes in a



Students in grades 6 and 7 clear brush near their school. SOFRC received one of the 65 Firewise grants for community projects awarded by the National Fire Protection Association in 2015. SOFRC, the Applegate Fire District, Ruch School, and the BLM partnered to make Ruch school—and their community—better prepared for fire.

Photo: SOFRC

changing climate, and support diverse habitats, fire-adapted communities, economic sustainability and ecosystem services valued by the community. Integrated risk assessments are key to the strategy, and will help determine priority needs and opportunities across the basin.

**This strategy meets the goals** of the Western Action Plan of the National Wildfire Cohesive Strategy, and is informing the update of the fire plans of Jackson and Josephine Counties. This process encourages coordination in local efforts to integrate the three Cohesive Strategy goals—resilient forests, fire adapted communities and coordinated wildfire planning and suppression activity.

**SOFRC has also completed** a climate adaptation action plan for the Rogue Basin. The plan guides forest restoration planning and implementation in a changing climate. Steps are being made to meet goals outlined in the plan, including the Cohesive Forest Restoration Strategy.

# Southern Oregon Forest Restoration Collaborative



Working in JACKSON and JOSEPHINE COUNTIES, Oregon

FAC Contact: **George McKinley**  
collaborative@jeffnet.org  
www.sofrc.org

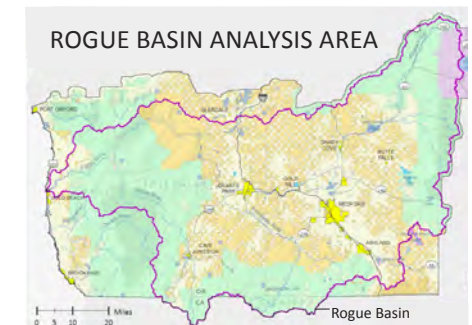
## KEY PARTNERS

Applegate Fire Plan  
Bureau of Land Management—  
Medford District  
City of Ashland  
City of Grants Pass  
Jackson County  
Jackson County Fire District 3  
Josephine County  
Lomakatsi Restoration Project  
Oregon Department of Forestry  
Oregon State University—Extension  
Service  
The Nature Conservancy  
U.S. Fish & Wildlife Service  
USDA Forest Service—Rogue River-  
Siskiyou National Forest



## KEY RESTORATION PRINCIPLES

- Management recommendations based on historic fire return intervals, site productivity and future climatic conditions
- Reliance on a fine-grained approach covering a landscape scale
- Use of both fire and mechanical harvest to achieve and maintain ecological and economic goals
- Support for fire adapted community efforts
- Advocate long-term viability of critical habitats and species
- Highlight economic benefits of planning and implementation efficiencies of restoration



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette (nickg@hayfork.net).

# Fire Adapted Communities

## LEARNING NETWORK

With two states, five counties and seven fire districts, the Lake Tahoe Basin presents unique challenges for coordinating FAC activities. Since joining the FAC Learning Network, fire, land management and regulatory agencies have strengthened partnerships by formalizing the role each plays in creating a fire adapted community. The association of 19 organizations, called the Tahoe Fire and Fuels Team, facilitates information exchange, resource sharing and coordinated outreach and communication across jurisdictional boundaries. The team recently completed an updated Community Wildfire Protection Plan that contains action plans to help create communities where citizens are engaged and active in preparing for wildfire.

Until 2011, a non-profit organization provided substantial support to Lake Tahoe communities working to reduce fire risk. When the nonprofit went bankrupt, it left communities without support and financial assistance. The Tahoe Fire and Fuels Team is focused on rebuilding support functions for



South Tahoe High School students help show off the Ember House, an activity for kids to learn about how embers catch houses on fire.  
Photo: Tahoe Fire and Fuels Team

the public, and increasing public involvement in decision-making processes. The team has established a new workgroup dedicated to forming FAC leadership councils and creating a Tahoe Basin-wide Fire Adapted Community Alliance.

**Failure gains value** when participating in a learning network. Lake Tahoe organizations share their successes and challenges, and in turn learn from others throughout the nation. Methods for sharing and collaborating are being adapted from the national program for use in regional networks. Participation in the FAC Net has helped build a culture where organizations are encouraged to take calculated risks that can lead to important breakthroughs and innovations in becoming fire adapted.

**Wildfire is inevitable** in the Lake Tahoe Basin, but catastrophic fire is preventable. Through FAC programs,



Actions from community work days to information tables at block parties, and from chipper days to conducting prescribed burns, are being offered to help communities prepare to live safely in a landscape with inevitable wildfires.  
Photos: Tahoe Douglas FPD (left), North Lake Tahoe FPD (others)

# Tahoe Fire and Fuels Team



Working in  
**LAKE TAHOE BASIN communities in Washoe and Douglas Counties in Nevada and El Dorado and Placer Counties in California**

the character of the community and the landscape is gradually shifting to become more fire-adapted. To continue the transition, the team is striving for an effective partnership of agencies and the public that can be sustained without the need for outside funding.

**To provide cost-effective** maintenance of fuels reduction treatments, Basin agencies seek to increase the use of prescribed fire, especially on private and local government land. The land is often adjacent to homes and businesses, and the understory burns are technically difficult to implement. Increased burning will be facilitated by: exchanging resources, knowledge, and training to build the skill base in the Basin; increasing structure and

FAC Contact: **Forest Schafer**  
fschafer@nltpfd.net  
(775) 690-7506

### KEY PARTNERS

California Department of Forestry and Fire Protection / California State Parks / California Tahoe Conservancy / City of South Lake Tahoe Fire Department / Fallen Leaf Lake Fire Department / Fire Public Information Team / Lake Valley Fire Protection District / Meeks Bay Fire Protection District / Nevada Division of Forestry / Nevada Division of State Lands / Nevada Network of Fire Adapted Communities / Nevada Tahoe Conservation District / North Lake Tahoe Fire Protection District / Tahoe Douglas Fire Protection District / Tahoe Fire and Fuels Team / Tahoe Regional Planning Agency / University of Nevada—Cooperative Extension / USDA Forest Service—Lake Tahoe Basin Management Unit

landscaping ignition resistance to allow understory fire to be safely applied nearby; and developing agreements and processes for burns that span federal, state, local and private ownerships.

**For more information** about the Tahoe Fire and Fuels Team, visit the website <http://tahoeftf.org>.



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette ([nickg@hayfork.net](mailto:nickg@hayfork.net)).



# **FAC Learning Network State-Wide Efforts**

---

# Fire Adapted Communities

## LEARNING NETWORK

**The California Fire Safe Council** (CFSC) is a state-wide nonprofit that provides wildfire education and outreach support and capacity-building assistance to organizations in California that are engaged in fire preparedness. This wide-reaching influence and support of local community groups makes us especially well positioned to spread innovative ideas from local California Fire Safe Councils and Firewise Communities through the FAC Learning Network, and to bring innovations back to our California partners.

**For more than 20 years**, CFSC has been a leader in California's fight to reduce the impact of wildfire. CFSC is recognized by state and federal fire agencies as a vital link to communities. Private corporations, including utility and insurance companies, have shown generous support for CFSC's work.

**CFSC offers workshops** and one-day conferences on fire and disaster prevention topics several times each year in locations throughout the state. Fire Safe Councils communicate regularly with CFSC to share information about local events and successful projects and outreach programs. In turn, CFSC offers networking and training opportunities that help the local groups continue their critical work in wildfire prevention and preparedness.



Homeowners participate in home ignition zone assessment training organized by California Fire Safe Council. *Photo: Katie Martel/CFSC*

**A recent area of focus** as part of the FAC Learning Network has been to increase wildfire preparedness among residents in the wildland-urban interface (WUI) through development of an innovative mobile application. This includes expanding the Ojai Valley FSC's online home safety survey to create a mobile app assessment tool for Fire Safe Councils and Firewise Communities to use with homeowners. This tool applies current technology to make the assessment process more convenient for in-field implementation and allows for easy communication of assessment findings to the homeowner.

**We continue to advance** networking among local Fire Safe Councils and Firewise Communities in California. In addition to the workshops and conferences, the CFSC website is being

# California Fire Safe Council



Working throughout the state of California



Attendees visit exhibitors at the 2014 Fire Summit, which was hosted by the Southern California Regional Area Taskforce and sponsored by California Fire Safe Council. *Photos: CFSC*

expanded. New website content highlights successes of local FSCs and Firewise Communities, and an online forum allows FSCs, Firewise Communities, grantee organizations and community groups to share tips, lessons learned and best practices.

**Contact:** info@cafiresafecouncil.org  
(626) 335-7426

### KEY PARTNERS

CAL FIRE  
National Fire Protection Association—  
Firewise  
Ojai Valley Fire Safe Council  
USDA Forest Service

The California Fire Safe Council manages a grants clearinghouse for the state, and works with applicants to ensure their success and help them meet their responsibilities as grantees.

CFSC is also the state liaison for the Firewise Communities program.



### CALIFORNIA FIRE SAFE COUNCIL MISSION

Mobilizing Californians to protect their homes, communities and environment from wildfires



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette (nickg@hayfork.net).

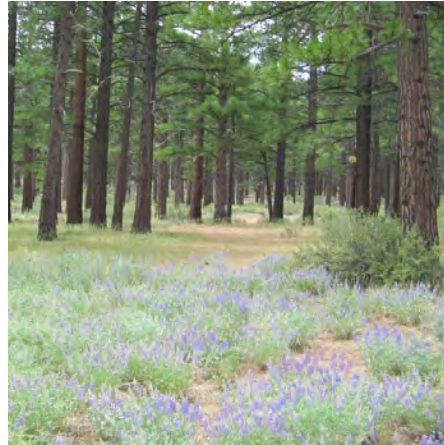


# Fire Adapted Communities

## LEARNING NETWORK

**Nevada Land Trust has firsthand experience** with fire in the wildland-urban interface: We had two major, devastating fires literally in our own back yard, in November 2011 and January 2012. And we worked with residents and local agencies on restoration projects following both. It is our vision that we be able to be active partners in helping other communities across the state be better prepared in the face of the inevitable next occurrence of wildfire.

**The latter part of 2015** was an important fact-finding phase for our organization as we worked to build the Nevada Network of Fire Adapted Communities. We have discovered that we can rely on peers in the FAC Learning Network to help us speed the process. We have been able to contact network members regularly, asking lots of questions and increasing our knowledge base daily. In addition to valuable connections online and by phone, we attended a useful grant workshop hosted by FAC Net leaders in northern California. We also took part in the second annual Nevada State FAC Network summit and the Cohesive Strategy Summit hosted by the Nevada Division of Forestry (NDF). In addition, we met with the NDF, Bureau of Land Management (BLM) and the U.S. Forest



Galena Forest is one of the potential sites for the first pilot projects of the Nevada Network of Fire Adapted Communities. *Photo: NLT*

Service about our potential role as a fiscal agent and community partner to assist them in achieving their Cohesive Strategy objectives.

**Moving forward**, in early 2016 we are working with the BLM, NDF, the U.S. Forest Service, Living with Fire and our local fire officials to refine our network's structure and mission. These important investments of time and partnership-building at the beginning will help ensure that we can meet the needs of all stakeholders as we move onward. As we work through this process, we continue to reach out to our FAC Learning Network partners to better understand all of the models we may be able to use elements of, enabling their lessons to help us build a robust network for Nevada.

# Nevada Network of Fire Adapted Communities

**Contact:** Tracy Visser  
t.visser@nevadalandtrust.org  
(775) 851-5180

## KEY PARTNERS

Bureau of Land Management  
Living with Fire  
Nevada Division of Forestry  
USDA Forest Service



**Working throughout the state of Nevada**

## NETWORK VISION

We will be active partners in helping communities across the state be better prepared in the face of our inevitable wildfires.



*Above:* Steamboat Creek habitat destroyed by the Washoe Drive Fire in January 2012.

*Right:* Hydroseeding following the November 2011 Caughlin Fire, which introduced the Nevada Land Trust to fire in its back yard. *Photos: NLT*



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette (nickg@hayfork.net).

# Fire Adapted Communities

## LEARNING NETWORK

Washington state experienced its two largest wildfire seasons in 2014 and 2015. As a result, wildfire is on many peoples' minds and is a high priority discussion topic in the state. We're hearing the phrase "adapting to wildfire," and the call for more fire adapted communities is increasing in the state as well.

**The Washington Fire Adapted Communities Learning Network** is helping to accelerate this by promoting and facilitating in-person discussions and webinars, getting FAC issues onto meeting agendas and websites, and by giving presentations. This FAC outreach is coming not only from the central staff team, but from the steering committee and community members as well.

**During the 2015 wildfire season,** the network interacted with incident management teams and Pacific Northwest Prevention Team #4, took part in various recovery workshops, met with agency leaders and government officials, and gave presentations at the Wildfires and Us Summit in Wenatchee. Through numerous less formal conversations we have also led introduced FAC concepts onto the discussion list of state agencies, local governments and non-governmental entities.



# Washington Fire Adapted Communities Learning Network



**Contact:** Ryan Anderson  
ryan@scwrcd.org

**Initial Member Communities:**  
Chumstick Wildfire Stewardship Coalition  
Flowery Trails Community Association  
Hidden Valley/Swauk  
Lincoln County Conservation District  
Okanogan Conservation District  
San Juan Island  
Seattle City Light-Skagit Hydroelectric Project  
Yakima Valley Fire Adapted Communities Coalition

### STEERING COMMITTEE

Bureau of Land Management  
Department of Defense—Joint Base Lewis McChord  
Federal Emergency Management Agency  
Kittitas County Conservation District  
Kittitas County Fire & Rescue  
Pacific Northwest Wildfire Coordinating Group  
The Nature Conservancy  
USDA Forest Service  
Washington Department of Emergency Management  
Washington State Department of Natural Resources

The Washington Fire Adapted Communities Learning Network (WAFAC), with support from the Bureau of Land Management, facilitates learning and provides a means to invest resources in member communities around the state that are working to create fire adapted communities. We provide participating communities and others with resources to engage with others in the network, thereby increasing local capacity and elevating our collective ability to adapt communities' relationships to the complex fire issues we face.

Initial members were selected to represent Washington's geographic and ecological diversity. They also represent a cross-section of community size and organizational structure. This diversity is designed to promote sharing and learning across Washington.



*Top:* Surviving ponderosa pines, about a year after the 2014 Chiwaukum Fire near Leavenworth.

*Left:* The Yakima Valley Fire Districts and the Yakima Valley Fire Adapted Community coalition drew people with games to their booth where they shared information of interest to WUI residents.

*Photos:* Ryan Anderson/SCWRC



The Fire Adapted Communities Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior through a subaward to the Watershed Research and Training Center. For more information, contact Nick Goulette (nickg@hayfork.net).



# Prescribed Fire Training Exchanges (TRES)

**Begun in 2008** as a way of easing bottlenecks in training the prescribed fire workforce, these training events have since been adapted to meet a number of essential needs. They continue to serve seasoned wildland fire professionals in need of specific experience, as well as students and new firefighters who are beginning to shape their careers. Training exchanges also provide opportunities for agencies to work together and learn efficient ways to coordinate their resources and burn windows; give local fire departments training that helps them better respond to wildland fires; support tribes working to renew traditional burning practices; and help 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 built help fire management service providers find qualified crews, and TRES 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.

## **Help Communities Become More Fire Adapted**

**There is probably no better way** for a community to prepare for the inevitable approach of unwanted wildfire 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, TRES events spread this message by integrating visits from local media into their agendas.

## **Bring Together Diverse Crews to Foster Learning**

**Diversity matters.** Having a wide variety of participants, mixed together and integrated into burn teams, allows great cross-learning among various fire professionals— federal, state and tribal crews, as well as contract fire crews and municipal firefighters. Bringing students, scientists, researchers, private landowners and regulators into the mix further enriches the learning. It 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. Participants new to wildland and prescribed fire will say, “Wow, I had no idea how organized a prescribed fire is,” after participating in their first briefing, burn and after action review. And wildland firefighters learn that people from municipal firefighters and air quality regulators to private citizens and students bring strong ecological and practical experience, while other participants bring knowledge and experience in policy and management issues.

## **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 monitoring plots, 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 other practitioners. In partnership with the Student Association for Fire Ecology, TRES have provided hands-on experience to 150 university students, helping build the next generation of forest workers and managers. Through these training exchanges, scores of students have



Key partners from the Yurok Cultural Fire Management Council and a nonprofit fire management organization enjoy a moment of levity during a series of controlled burns on tribal lands at the fall Yurok TRES. Partnerships between government, tribal and non-governmental organizations are a hallmark of our success—TRES helps meet the challenge of reinstating fire as a land management tool by bringing together diverse and experienced teams of fire practitioners. *Photo: Margo Robbins*

a newfound respect for prescribed burning, and an understanding that accomplishing prescribed burns is a reasonable expectation—and a worthwhile goal. 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.

**Support Interagency Cooperation**  
**By forming ad hoc Type 3 Incident Management Teams** to organize and host these trainings, individuals, organizations and agencies are learning that we can manage the potential liabilities of working together and on each other's lands. We do this by using tested avenues like MOUs, cooperative

agreements, shared standards and collaborative planning. Federal, state and private fire teams are thus learning that they can depend on one another to support prescribed fire projects, just as they depend on each other during wildfires.

### **Integrate Traditional Burning**

**Tribes that are still practicing** fire use for traditional purposes—such as for food security, regalia and basket making materials—are providing additional learning opportunities for participants. Learning from people who have a longer and often more complex view of the role of fire in an ecosystem is a great addition to the hands-on experience the training exchanges offer. Participants may see that fire and people are inseparable, and that a full exclusion approach to fire may not only be impossible, it may be inappropriate.

### **Work through Barriers to Burning**

**By having a diverse body** of participants, and by including ecological, cultural, regulatory and tactical components into TRES burning, training, field trips and classroom presentations, participants are finding that the barriers to implementing prescribed burns can be managed. Participants are learning that by collaborating with partners they can build a team of experts that have the capacity to successfully navigate the process of achieving good fire at scale.

#### **Central Oregon TRES** May 14-21

The first TRES offered in Oregon gathered 42 participants from agencies and organizations across the state. Working after other prescribed fire crews had disbanded for the season, they treated 191 acres while developing their skills and strengthening partnerships.

#### **Yurok TRES** February 15-23

In the spring, 36 people took part in a TRES that completed 150 acres of burning, including 120 acres in support of culturally-important resources. Led by local contractor Terra Fuego, 14 new FFT2s received training, and another 14 FFT2s were re-certified.

In the fall, three TRES ran back-to-back in northern California:

#### **Klamath River TRES**

September 29-October 11

In a bold extension of their 2014 success, this year leaders divided their 90 participants into three burn teams. They burned in Happy Camp, Orleans and Salmon River, completing over 400 acres of treatments around homes and on priority tribal projects

#### **Yurok TRES** October 12-18

Led by the Yurok Tribe's Cultural Fire Management Council, 17 participants burned 45 acres to improve access to acorns and basketry materials for the tribal members engaged in traditional practices.

#### **Northern California TRES**

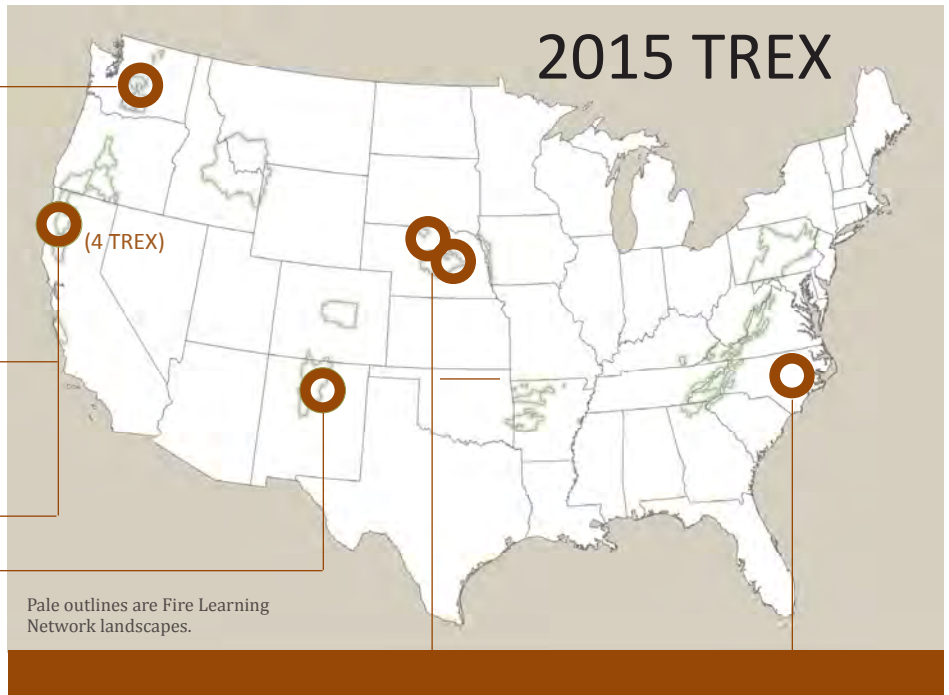
October 20-November 1

Burning from the wet side to the dry side of the Klamath Mountains, 42 professional firefighters, students, scientists and managers completed 246 acres treatments in four communities and numerous habitat types.

#### **Spanish Language TRES**

September 15-October 5

The fifth offering of the Spanish Language TRES drew 25 practitioners from four U.S. states and six other countries for an international exchange of learning. In the process, they treated 987 acres of forest, including almost 800 acres in a high-priority part of the Santa Fe municipal watershed.



#### **Niobrara River Valley TRES**

March 14-29

The “Spring Break TRES” has become an important part of the education of students in numerous university fire and forestry programs. This year, 23 students from five schools came to the Niobrara—some for their first experience with live fire, others to hone and broaden their skills. Working with a range of other practitioners, they learned about the ecology and culture of fire on the Great Plains; together, the 67 participants treated 3,691 acres of grassland with fire. Also part of this TRES this year was a week-end course on ignitions operations for local volunteer fire departments.

#### **Loup River Valley TRES**

March 16-27

Pheasants Forever hosted this TRES, which focused on private lands used for livestock production. As in previous years, municipal fire departments from the Colorado Front Range took advantage of the opportunity to build their wildland fire skills. The 37 participants in the TRES burned 730 acres to manage woody encroachment in grasslands.

#### **North Carolina TRES**

February 15-28

With support from the Southern Blue Ridge FLN, Southeast Regional Partnership for Planning and Sustainability (SERPPAS) Prescribed Fire Working Group, North Carolina State University, The Nature Conservancy, North Carolina Prescribed Fire Council and others, 63 participants in the first TRES in North Carolina braved unseasonably cold weather—and ice storms—to complete 525 acres of burning in longleaf pine. This TRES had a good diversity of participants, coming from 15 states and 30 agencies and organizations.



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 (ldecker@tnc.org).



# Scaling-up to Promote Ecosystem Resiliency (SPER)

**Beginning in 2011**, modest amounts of SPER implementation funding have been strategically targeted to yield larger-scale impacts: some SPER projects have filled gaps or otherwise extended work in progress to a landscape scale; other SPER projects have been catalysts to accelerate work in key places. In the first phase, six SPER I projects completed more than 20,000 in support of ecosystem resiliency, community safety and watershed protection. Under SPER II, five projects completed another 3,000 acres of treatments, and local fire management capacity was increased through several training opportunities.

**SPER III, begun in 2014**, is using a slightly different strategy—focusing on fewer places, more intensively. The goal is to accelerate the development of the social and operational capacity for using fire, for both resource benefit and community protection. We think of this as getting to “right fire”—fire at the right time, right place and of the right size to move us toward our goal of living better with fire.

**SPER III was also designed** to address water security issues. Resources are focused on landscapes where fire management actions will affect critical water sources for local communities or downstream water users. SPER III projects are in places where water security issues had been identified and

## Ashland Forest All-Lands Restoration Project

**Darren Borgias** (541) 821-3723  
dborgias@tnc.org

SPER III is supporting the expansion of an existing project in the Ashland municipal watershed, helping to integrate ongoing and new work and partnerships. It is also taking on important community engagement and capacity-building, developing the social infrastructure needed for the project’s success.

## Trinity Integrated Fire Management Partnership

**Nick Goulette** (530) 628-4206  
nickg@hayfork.net  
**David Jaramillo** (530) 628-4206  
david@thewatershedcenter.com

Narrow burn windows, complex land ownership patterns, and local workforce capacity are among the barriers to the effective use of fire in this landscape. Such use of fire—both prescribed and by managing unplanned ignitions—is essential for protecting communities and their water supplies and supporting forest health. Work under SPER III is building the relationships and workforce needed to organize multi-owner projects and take full advantage of brief burn windows.

where strategic and collaboratively-developed activities were already planned or underway, but would benefit from the additional input of funds, partnerships and expertise that SPER and the Fire Learning Network could provide.



**SPER projects continue to provide** opportunities to test, extend and accelerate innovative methods of forest and watershed management to help restore more naturally functioning ecosystems and reduce wildfire risk to resources and communities. They model the integration of all three elements of the Cohesive Strategy—promoting fire-adapted communities, resilient landscapes and response to wildland fire. Ultimately this is the most effective approach to reduce risk, reduce damage, reduce the cost of suppression, and build capacity for a different future.

## Integrating Fire Adapted Communities, Resilient Landscapes and Response to Wildland Fire in the San Juan-Chama Headwaters of the Rio Grande Water Fund

**Laura McCarthy** (505) 231-9740  
lmccarthy@tnc.org  
**Anne Bradley** (505) 946-2038  
abradley@tnc.org

The San-Juan Chama area is one of four landscapes identified by the Nature Conservancy and the Rio Grande Water Fund as key to the protection of the water supply for a million New Mexicans. SPER III is supporting planning and treatments on private lands in this priority landscape.

# Indexes

---



# Areas of Focus & Expertise

	CA Klamath-Siskiyou	Centennial	Central Appalachians	FireScope Mendocino	FireScope Monterey	Great Plains	New Mexico	Oregon	Pikes Peak	South Central	Southern Blue Ridge	WA Dry Forests	Western Klamath Mts
<b>HABITAT TYPES</b>													
grasslands		■	■			■							■
native prairie			■			■				■			■
forests, eastern deciduous			■			■				■	■		
forests, eastern mixed			■			■				■	■		
oak woodlands / savannas	■		■	■		■				■	■		■
oak barrens			■										
shortleaf pine			■							■	■		
longleaf pine													
ponderosa pine				■		■	■	■	■			■	
forests, other western conifer	■	■		■	■		■	■	■			■	■
forests, other western		■		■			■	■	■			■	■
pinyon-juniper							■		■				
sagebrush		■										■	
wetlands, riparian zones	■	■		■	■			■			■	■	■
arid lands												■	
sandhills		■				■							
old growth	■	■	■	■				■					■
<b>COMMUNITY CONTEXT</b>													
WUI (wildland-urban interface)	■	■	■	■	■			■	■	■	■	■	■
near major population center(s)			■			■	■	■	■		■	■	
FAC Learning Network ties	■	■					■	■	■		■	■	■
FireWise communities nearby	■		■					■	■	■	■	■	■
CWPPs nearby	■		■	■	■			■	■		■	■	■
smoke issues	■		■	■	■			■	■	■	■	■	■

# Focus & Expertise

	CA Klamath-Siskiyou	Centennial	Central Appalachians	FireScape Mendocino	FireScape Monterey	Great Plains	New Mexico	Oregon	Pikes Peak	South Central	Southern Blue Ridge	WA Dry Forests	Western Klamath Mts
<b>OTHER LANDSCAPE CONTEXT</b>													
recent wildfires nearby	■	■	■	■	■	■	■	■	■		■	■	■
prescribed fire used in landscape	■	■	■	■		■	■	■	■	■	■	■	■
high ownership fragmentation			■			■		■	■			■	
high % federal ownership	■	■	■	■			■	■	■		■		■
wilderness	■	■	■	■	■			■	■	■	■		■
natural resource-based economy	■	■	■					■		■			■
timber	■	■	■	■		■		■		■	■	■	■
grazing	■	■				■		■					
OHV recreation	■	■		■				■	■			■	
<b>POLICY, PROCESSES, SKILLS</b>													
facilitating collaboration	■	■	■	■	■		■	■	■	■	■	■	■
cross-boundary implementation	■	■	■	■		■	■	■	■	■	■	■	■
multi-agency implementation	■	■	■			■		■	■	■	■	■	■
MOUs	■	■	■			■	■	■	■	■	■	■	■
forest planning	■	■	■	■						■	■		■
NEPA	■	■	■	■				■		■	■	■	■
stewardship contracting	■			■				■		■		■	■
monitoring protocols		■	■	■			■	■	■	■	■		■
using volunteers	■	■			■	■				■			■
media experience	■		■			■	■	■	■	■	■	■	■
public opinion information		■					■	■					■
ties to JFSP consortia	■		■			■	■	■	■		■		
ties to prescribed fire council	■		■	■	■			■	■	■	■	■	■
modeling		■	■	■				■			■		■
indigenous fire management practices		■		■									■



# Partner Types

Organization and agency types of the key partners listed by the FLNs. Groups typically work with many other partners as well, so this table is by no means exhaustive.

	CA Klamath-Siskiyou	Centennial	Central Appalachians	FireScope Mendocino	FireScope Monterey	Great Plains	New Mexico	Oregon	Pikes Peak	South Central	Southern Blue Ridge	WA Dry Forests	Western Klamath Mts
<b>FEDERAL AGENCIES</b>													
USDA Forest Service	■	■	■	■	■		■	■	■	■	■	■	■
Bureau of Land Management	■	■		■	■		■	■				■	
National Park Service			■							■	■		
U.S. Fish & Wildlife Service		■			■	■	■	■		■	■	■	■
USDA Natural Resources Conservation Service	■	■	■	■			■		■				■
Department of Defense									■			■	
other federal			■	■	■		■		■			■	■
<b>OTHER GOVERNMENTS</b>													
state agencies & departments	■	■	■	■	■	■	■	■	■	■	■	■	■
local government agencies & departments	■			■	■	■	■	■	■		■	■	
volunteer fire departments	■				■								
resource conservation districts	■		■	■	■							■	
tribal agencies & departments				■	■			■				■	■
<b>NON-PROFIT ORGANIZATIONS</b>													
The Nature Conservancy		■	■			■	■	■	■	■	■	■	
other conservation NGOs	■	■	■	■	■		■	■	■	■	■	■	■
other NGOs				■			■					■	
FireSafe Councils	■			■	■								■
prescribed fire councils	■		■								■	■	■
JFSP science consortia	■		■			■	■	■			■		
university extension services	■							■					
university researchers, faculty, students	■	■	■		■	■	■	■	■	■	■		■
<b>PRIVATE &amp; COMMERCIAL PARTNERS</b>													
private landowners & homeowners	■												
homeowner associations / neighborhood groups				■	■								
contractors					■			■					■
timber, ranching or agriculture		■		■	■		■						
professional associations					■		■	■		■			

# Managing in Landscapes with Threatened & Endangered Species

Many FLNs work in landscapes where species of conservation concern occur. In some cases the FLNs work directly in the management of such species—for example, as part of the Indiana Bat Project in the South Central FLN. In other cases, the work is less direct, or the presence of listed species affects the kinds of actions that are possible.



The Indiana bat, northern spotted owl, Jemez Mountains salamander and fisher are among the species and subspecies of conservation concern that FLNs manage for in their landscapes.

Photos: Ann Froschauer/USFWS, Rick McEwan, Anne Bradley/TNC, Dave Clayton/USFS

	CA Klamath-Siskiyou	Centennial	Central Appalachians	FireScope Mendocino	FireScope Monterey	Great Plains	New Mexico	Oregon	Pikes Peak	South Central	Southern Blue Ridge	WA Dry Forests	Western Klamath Mts
<b>birds</b>													
condor, California ( <i>Gymnogyps californianus</i> )					■								
falcon, peregrine ( <i>Falco peregrinus</i> )											■		
owl, Mexican spotted ( <i>Strix occidentalis caurina</i> )									■				
owl, northern spotted ( <i>Strix occidentalis caurina</i> )	■			■				■				■	■
sage-grouse ( <i>Centrocercus urophasianus</i> )		■											
woodpecker, red-cockaded ( <i>Picoides borealis</i> )										■			
<b>mammals</b>													
bat, big-eared ( <i>Corynorhinus townsendii</i> , var. ssp.)										■	■		
bat, gray ( <i>Myotis grisescens</i> )										■	■		
bat, Indiana ( <i>Myotis sodalis</i> )			■							■	■		
bat, northern long-eared ( <i>Myotis septentrionalis</i> )			■										
bear, grizzly ( <i>Ursus arctos</i> )		■											
fisher ( <i>Martes pennanti</i> )				■				■					
mouse, Preble's meadow jumping ( <i>Zapus hudsonius preblei</i> )									■				
wolf ( <i>Canis lupus</i> )												■	■



# Threatened & Endangered Species

	CA Klamath-Siskiyou	Centennial	Central Appalachians	FireScape Mendocino	FireScape Monterey	Great Plains	New Mexico	Oregon	Pikes Peak	South Central	Southern Blue Ridge	WA Dry Forests	Western Klamath Mts
<b>fish</b>													
arctic grayling ( <i>Thymallus arcticus</i> )		■											
salmon, chinook ( <i>Oncorhynchus tshawytscha</i> )				■				■					
salmon, coho ( <i>Oncorhynchus kisutch</i> )	■												■
salmon, steelhead ( <i>Oncorhynchus mykiss</i> )				■	■			■				■	
trout, bull ( <i>Salvelinus confluentus</i> )								■					
trout, cutthroat ( <i>Oncorhynchus clarki</i> , var. ssp.)		■							■				
<b>reptiles &amp; amphibians</b>													
frog, Oregon spotted ( <i>Rana pretiosa</i> )								■					
frog, red legged ( <i>Rana draytonii</i> )					■								
rattlesnake, timber ( <i>Crotalus horridus</i> )			■								■		
salamander, Jemez Mts. ( <i>Plethodon neomexicanus</i> )							■						
<b>insects</b>													
beetle, American burying ( <i>Nicrophorus americanus</i> )										■			
beetle, valley elderberry longhorn ( <i>Desmocerus californicus dimorphus</i> )				■									?
skipper, Pawnee montane ( <i>Hesperia leonardus montana</i> )									■				
<b>molluscs</b>													
Magazine Mountain shagreen (snail) ( <i>Mesodon magazinensis</i> )										■			
rock pocketbook, Ouachita ( <i>Arkansia wheeleri</i> )										■			

# Threatened & Endangered Species

	CA Klamath-Siskiyou	Centennial	Central Appalachians	FireScape Mendocino	FireScape Monterey	Great Plains	New Mexico	Oregon	Pikes Peak	South Central	Southern Blue Ridge	WA Dry Forests	Western Klamath Mts
<b>plants</b>													
bladderpod, Missouri ( <i>Physaria filiformis</i> )										■			
blazing star, Heller's ( <i>Liatris helleri</i> )											■		
checker-mallow, Keck's ( <i>Sidalcea keckii</i> )				■									
clover, running buffalo ( <i>Trifolium stoloniferum</i> )										■			
geocarpon ( <i>Geocarpon minimum</i> )										■			
golden-heather, mountain ( <i>Hudsonia montana</i> )											■		
howellia, water ( <i>Howellia aquatilis</i> )				■									
pondberry ( <i>Lindera melissifolia</i> )										■			
trillium, persistent wake-robin ( <i>Trillium persistens</i> )											■		



# Managing Invasive Species

Many FLNs manage for one or more invasive plant species. In some cases, this is independent of their fire-related work, but in many cases, fire and invasive species are intricately related, each affecting the other in complex ways.



Prescribed fire training exchanges in the Great Plains help keep eastern redcedar from encroaching on grasslands in the north-central Nebraska's Niobrara Valley (left) and in the Loess Hills of Iowa (right).

	CA Klamath-Siskiyou	Centennial	Central Appalachians	FireScape Mendocino	FireScape Monterey	Great Plains	New Mexico	Oregon	Pikes Peak	South Central	Southern Blue Ridge	WA Dry Forests	Western Klamath Mts
<b>grasses</b>													
cheatgrass ( <i>Bromus tectorum</i> )								■					
fescue, tall ( <i>Schedonorus arundinaceus</i> )										■			
Johnson grass ( <i>Sorghum halepense</i> )										■			
medusahead rye ( <i>Taeniatherum caput-medusae</i> )				■				■					
reed canarygrass ( <i>Phalaris arundinacea</i> )								■					
silvergrass, Chinese ( <i>Miscanthus sinensis</i> )											■		
non-native grasses		■											
<b>trees</b>													
eastern redcedar ( <i>Juniperus virginiana</i> )						■				■			
mimosa ( <i>Albizia julibrissin</i> )										■			
olive, autumn ( <i>Elaeagnus umbellata</i> )			■										
princess tree ( <i>Paulownia tomentosa</i> )										■	■		
tamarisk ( <i>Tamarix ramosissima</i> )				■									
tree of heaven ( <i>Ailanthus altissima</i> )	■		■	■		■				■	■		

# Invasive Species

	CA Klamath-Siskiyou	Centennial	Central Appalachians	FireScape Mendocino	FireScape Monterey	Great Plains	New Mexico	Oregon	Pikes Peak	South Central	Southern Blue Ridge	WA Dry Forests	Western Klamath Mts
<b>forbs, shrubs, etc.</b>													
barberry, Japanese ( <i>Berberis thunbergii</i> )			■										
bittersweet, Oriental ( <i>Celastrus orbiculatus</i> )			■								■		
blackberry ( <i>Rubus pascuus</i> )										■			■
broom, French ( <i>Genista monspessulana</i> )				■									■
broom, Scotch ( <i>Cytisus scoparius</i> )	■			■									■
coltsfoot ( <i>Tussilago farfara</i> )											■		
hemlock, poison ( <i>Conium maculatum</i> )										■			
hawkweed, orange ( <i>Hieracium aurantiacum</i> )								■					
knapweed, diffuse ( <i>Centaurea diffusa</i> )								■					■
knapweed, spotted ( <i>Centaurea maculosa</i> )	■	■						■					■
knotweed, Japanese ( <i>Reynoutria cuspidatum</i> )											■		
mustard, garlic ( <i>Alliaria petiolata</i> )			■								■		
rose, multiflora ( <i>Rosa multiflora</i> )										■	■		
sericea lespedeza ( <i>Lespedeza cuneata</i> )										■	■		
spurge, leafy ( <i>Euphorbia esula</i> )						■							■
St. John's wort ( <i>Hypericum perforatum</i> )								■					
thistle, Canadian ( <i>Cirsium arvense</i> )	■												
thistle, musk ( <i>Carduus nutans</i> )										■			
thistle, star ( <i>Centaurea solstitialis</i> )	■			■									■
toadflax, Dalmation ( <i>Linaria dalmatica</i> )								■					
vetch, crown ( <i>Coronilla varia</i> )						■							
whitetop ( <i>Cardaria draba</i> )													
yam, Chinese ( <i>Dioscorea polystachya</i> )											■		

# Actions Taken by FAC Learning Network Members to Address Values at Risk



	state:	Austin Fire Department TX	Boise Fire Department ID	Chestatee/Chattahoochee RC&D Council GA	Chumstick Wildfire Stewardship Coalition WA	Coalition for the Upper South Platte CO	Dovetail Partners MN	FireWise of Southwest Colorado CO	Florida Forest Service FL	Forest Stewards Guild NM	Greater Flagstaff Forest Partnership AZ	Island Park Sustainable Fire Community ID/MT	Karuk Tribe CA	New Jersey Fire Safety Council NJ	Project Wildfire OR	Southern Oregon Forest Restoration Collaborative OR	Tahoe Fire & Fuels Team NV/CA
<b>WILDFIRE HAZARD AND RESPONSE</b>	WUI training for fire depts	E	E	S	E		E	E	S		S		E	S			S
	wildfire evacuation plan	N	N	N			N		S		S	N	S	E	S	N	S
	community preplanning and utilitization of ICS	N	E	E	E	E	N		S*	S	S		E	E		N	S*
	local area incident management team	E	E	N		E	E		S		S	E	E	E			
	cross-trained local crews	N	E	E		N	E		E	E	S	E	E	E			S
	mutual aid agreements	S	E	S			E		E	S	S	S	E*	S	S		
<b>COMMUNITY VALUES AT RISK (Non-Residential)</b>	risk mapping	N	N	N		S	E	S	S	S*	S	E	E	S	E	S	
	watershed management	N		S		S		E	S	S*	N	S	E	S		S	S
	community assessments	E	N	E	E	S	N	E	E	S	S	N	E	S	E	S	E
<b>RESIDENTIAL VALUES AT RISK</b>	home ignition zone (HIZ) assessments & apps	E*	N	E	E	S	N	E	E	S*	S			S	E	S	E*
	engagement with HOAs	S	S	E	S	S	N	S*	E	S	S	E		E	E	N	S

## KEY

- S = stable
- E = expanding
- N = new
- \* = special expertise



Prescribed Fire Training Exchanges in northern NM help train local fire personnel. *Photos: M. Meyers/NMSLO; Forest Stewards Guild*



Many FAC hubs provide or assist with home assessments as well as defensible space projects. *Photos: North Lake Tahoe FPD*





# FAC Learning Network Members' Resources & Strategies



state:	TX	ID	GA	WA	CO	MN	CO	FL	NM	AZ	ID/MT	CA	NJ	OR	OR	NV/CA
	Austin Fire Department	Boise Fire Department	Chestatee/Chattahoochee RC&D Council	Chumstick Wildfire Stewardship Coalition	Coalition for the Upper South Platte	Dovetail Partners	FireWise of Southwest Colorado	Florida Forest Service	Forest Stewards Guild	Greater Flagstaff Forest Partnership	Island Park Sustainable Fire Community	Karuk Tribe	New Jersey Fire Safety Council	Project Wildfire	Southern Oregon Forest Restoration Collaborative	Tahoe Fire & Fuels Team

PLANS AND REGULATIONS	CWPPs	N	E	S	S	E	S	S*	S*	S	S	S	S	E*	S	S	E*
	hazard mitigation action plan	S	E	S		S	E	S	S		S	N	S	N	S	S	S
	CCRs, codes, ordinances	E	E	S						S*			E	E	N	S	S
	comp plans/ other plans	E	N	S					E		S	E	S		S	S	S
WILDFIRE MITIGATION RISK REDUCTION PROGRAMS	Ready, Set, Go!	E	E	E		S	N/E	E					E	E	N	N	
	Firewise	S	S	E	S*	S	E	S	E	N	S	E	S	E	E	N	
	Fire Safe Councils				S*		N				S	S	E		N	N	
	chipping program		S	E		S	E	S*		S				S	S		S
	awareness day/ week	N	N	E	N	S	N	S*	E	E	S	N	S	S	S		S
	trainings	E	E	S	N	S	E	S	S	S*	S	N	E	E	E		
	prescribed fire & smoke	E		E		E	S/E		E	S	S		E	N	E	N	S*
other fuel management	N	S	S		E	S/E		E	S	S	N	E	S*	S	N	S*	
RESOURCES	local WUI tax or fee										N*	N	S				
	vegetation disposal	E		S		E	N	E		N	S		S	S*			
	grant & funding directory			S	S*		N			S		N	S	S			
	dedicated FAC staff	S	S	E		E	E					N	E	S		S	S

## KEY

- S = stable
- E = expanding
- N = new
- \* = special expertise



Chipper days are held in communities across the country.

Photos: Pam Wilson/FireWise of SW CO, Gloria Erickson, Frank Riley/CCRCD

FAC Net works with many Firewise communities

Photos: Florida Forest Service

# FAC Learning Network Members' Public Outreach & Partnerships



state:	TX	ID	GA	WA	CO	MN	CO	FL	NM	AZ	ID/MT	CA	NJ	OR	OR	NV/CA	
	Austin Fire Department	Boise Fire Department	Chestatee/Chattahoochee RC&D Council	Chumstick Wildfire Stewardship Coalition	Coalition for the Upper South Platte	Dovetail Partners	FireWise of Southwest Colorado	Florida Forest Service	Forest Stewards Guild	Greater Flagstaff Forest Partnership	Island Park Sustainable Fire Community	Karuk Tribe	New Jersey Fire Safety Council	Project Wildfire	Southern Oregon Forest Restoration Collaborative	Tahoe Fire & Fuels Team	
PUBLIC OUTREACH AND INPUT	FAC regional workshops	E	N	S	E		E	E	E	N		N	S	S	E	N	
	community / public meetings	N	E	E	E	S	E	S	S	S		S	E	S	E	E	
	public demos / learning sites	E	E	S		S	N	S	E	S	N	E	E	S		S	
	FAC brochures	N	E	E	E		N	N	N	N	N		S	E	N	E*	
	PSAs, videos	N	N	S			N	E		N		E	E				
	FAC website / blog	N	N	E	E	E	N		N	S	N	N	N	S	E	N	
	social media	E	E	E	E	E	E	S	S	S	E	N	E	S	E	N	E
	outreach plan	N	N	N			N/E	E				E		E	S	E	
	volunteer groups, citizen coalition	N	N	E		E	N/E	S*		N		E	S	E	E*		N
PARTNERS	FAC LN self-assessment tool	N	N	N		E	N	N	N	N	N	N		N	E	N	
	FAC steering committee	E	E	E		S	N		N	N					S		
	partner learning exchanges	E	N	E	E	E	N/E	E		N	N	E	S				
	state partnerships	E	E	S	S	S	N	E	E	S	S	E	N	E	S	S	
	regional partnerships	N	E	S	E		N/E	E	E	S	S	E	E	E	S	S	
	national partnerships	N	E	S	S		N/E				E	E	E	E	S	S	

## KEY

- S = stable
- E = expanding
- N = new
- \* = special expertise



Field tours, volunteer work groups and peer-learning workshops all play a role in outreach, public engagement and partnership-building in the FAC Learning Network.  
 Photos: Boise Fire Dept., CUSP, Forest Stewards Guild





