Semi-Annual Report January – June 2016

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

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Promoting Ecosystem Resilience and Fire Adapted Communities Together (PERFACT)

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

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

- the Fire Learning Network (FLN), fostering collaboration for restoration and integrated fire management in landscapes across the country;
- the Fire Adapted Communities Learning Network (FAC Net), which is doing the same with communities adapting to wildfire;
- Prescribed Fire Training Exchanges (TREX) and cooperative burns, providing 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);
- the Indigenous Peoples Burning Network (IPBN), supporting traditional burning practices and cultural revitalization; and
- the Burned Areas Learning Network (BALN), bringing people together for prefire planning for better post-fire restoration.

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



Ignitions on the Eagle Creek SPER burn in northern California. © WRTC (Dave Jaramillo)

FLN staff, leads and partners in California were involved in working out what is being called CalTREX—a remarkable state-wide cooperative prescribed fire training and cooperative burning pilot program. The program is modeled on TREX, while also drawing on other successful training models. CalTREX will be a flagship initiative of the capacity-building workgroup under a new Region 5 Fire Partnership MOU.

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

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

Restoring Social & Operational Capacity for "Right Fire"

LIVING

WITH FIRE Urral Science, Learning & Cultural Knowledge

RECENT WORK

In the first half of 2016, PERFACT supported:

- 12 Fire Learning Networks (FLNs) encompassing 33 landscapes and 80 million acres;
- 18 community-based Fire Adapted Communities Learning Network (FAC Net) organizations in 15 states, as well as 3 state-wide efforts and mentoring 2 other state-wide and regional efforts;
- 4 Prescribed Fire Training Exchanges (TREX), a Volunteer Fire Department Training and a cooperative burn that together provided training and experience for 215 people while treating 4,876 acres with fire;
- 3 SPER III projects working to enable landscape-scale "right fire;" and
- design workshops for two new networks--the Burned Area Learning Network and the TREX Coaches Network--to expand the scope of fire issues addressed, and the potential scale of TREX, respectively.

FLN and FAC Net partnerships and TREX events also leveraged more than \$3 million in additional funds for treatments and other actions that will build forest, watershed and community resilience.

"Thanks to you all for your ongoing support, trust and mentorship. In spite of the amount of work it takes to plan and pull of a TREX of this nature, I find I am at my best, most excited and most engaged self when I'm working on advancing the goal of getting good fire on the ground and engaging the community in the process. So I sincerely appreciate the opportunity to be a part of this movement."

Expanding our Scope and Reach

This spring, PERFACT grew in ways that are expanding both the number of people we reach and breadth of fire management issues we are addressing together. The developing Indigenous Peoples Burning Network and Burn Area Learning Network each add a new facet to our work—incorporating cultural burning traditions in the first case and post-fire recovery planning in the second. The FAC Net added a new affiliate membership category that, with the support of a new website, now allows any interested individual or organization to engage with the network. And network design is underway for a new TREX Coaches Network that will help build and support a cadre of people able to lead TREX and mentor others in doing so, to increase the scale of TREX delivery.



Indigenous Peoples Burning Network

At the January IPBN workshop participants explore changes in the Yurok-Hoopa-Karuk landscape, comparing aerial photos from the 1940s and contemporary satellite imagery.

© TNC (Mary Huffman)

In a second workshop this spring the IPBN began a two-session Healthy Country Planning process patterned after similar efforts by aboriginal people in Australia. Participants set a goal of increasing the number of families involved in family-led burning, articulated characteristics of family-led burns (in contrast to agency or NGO-led burns) and identified their next steps.

Building Capacity to Do More

Building community and partnership capacity takes many forms. TREX continue to focus on various means of increasing local and regional capacity for fire management, from providing experience and taskbook evaluations for agency fire personnel to bringing new burners into the field; they also build capacity by demonstrating that multi-agency and multi-ownership burning is not only possible, but can be more effective than everyone going it alone. This spring, a variation on TREX brought partners in Iowa together for a week of cooperative burning. Aspects of TREX were adapted into a three-day burn training for volunteer fire departments in northern California. And a long-period of relationship-building with the state fire agency there, CAL FIRE, led to an agreement that will

support a three-year CalTREX training program based on the lessons of TREX.

Capacity in other areas can also limit partnership effectiveness—for example, working through challenging situations collaboratively takes skillful facilitation and leadership. PERFACT staff provide this for groups as they begin their efforts together, then use a "teach a man to fish" model. This spring a Facilitative Leadership workshop was held for members of the FireScape Mendocino core team and Mendocino NF leadership team. Last year the core team of the Western Klamath Restoration Partnership used this workshop, developed by the Interaction Institute for Social Change, and it has helped the group move toward more extensive and productive work, with FLN facilitation stepping back to a mentoring role.

"TREX have been an outstanding strategic success. But under our original delivery model, we cannot increase delivery to the scale needed to meet the goals of PERFACT. The goal of the TREX Coaches Network is to develop a national network of 50-100 TREX coaches who can organize, plan and deliver TREX across the country. A core leadership team is assimilating what we learned in the design workshop and moving forward on launching this new network in the coming year."





Building Capacity

Lighting operations at a VFD training in Trinity County, CA (*left*) and high-fives on completing a workshop on Facilitative Leadership in FireScape Mendocino (*right*).

© WRTC (Dave Jaramillo), TNC (Mary Huffman)

Prescribed fire training for volunteer fire departments and leadership training for core teams demonstrate the range of capacity-building needs—and opportunities—identified in and met by the networks.

PERFACT: Spanning the Country, Stacking Efforts for Impact

"Stacking" PERFACT Efforts in Washington

In Washington, efforts are stacked and overlapping so thoroughly that it no longer makes much sense to try to tease them apart. FLN work here began in the Tieton (later broadened and renamed Tapash) landscape near Yakima in 2007. In 2013 this FLN began incorporating FAC efforts into its work, as it became clear that a community focus was essential to the landscape work. By this spring, PERFACT support was touching numerous coordinated efforts that address the myriad aspects of living with fire—from the Washington Prescribed Fire Council to the statewide Washington Fire Adapted Communities Learning Network to the new Burned Area Learning Network.



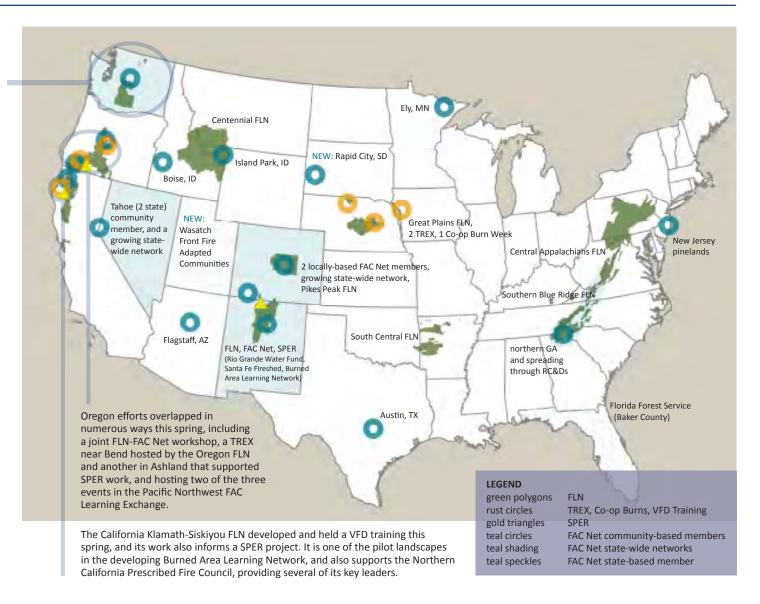




© HannahLetinich (2), CWSC (Hilary Lundaren)

Gathering to Learn and Share

Fundamental to much of what PERFACT does is getting people together. On a local scale, this can mean providing natural partners a forum for meeting—an obvious, though not always easy, step toward better work together. But, depending on circumstances PERFACT meetings and workshops bring in past (or potential) litigators, people from often-neglected departments, or stakeholders who may not fit traditional categories. This diversity not only helps prevent conflict down the road, but makes a more robust and better informed path for getting there.



"The conversations and networking fostered by the Network is really powerful. Interacting with such an inspiring group of engaged fire-focused practitioners was incredibly stimulating and helpful. I made connections with people working on issues similar to ours. What was truly remarkable was how innovative many of the solutions truly were. I didn't expect to come away from the annual workshop with new and brilliant tools/solutions to make our upcoming CWPP update relevant and integrated across multiple spectrums of fire management, but I did. Many were things that we have been thinking about and struggling to find elegant solutions to, and it is so helpful to have other innovative examples and diverse thought to work from."



Southern Blue Ridge FLN

More than 85 people took part in the SBR FLN's eleventh regional workshop this May. This workshop usually fills to capacity well before the registration deadline—an indication of its value to participants across this wide network.

We are now also increasing our efforts in bringing people together within regions, across the country and among our networks to share—and build—knowledge together. For example, this spring FAC Net members in the Pacific Northwest held a series of three learning exchanges in three of their "homes" (Deschutes County (OR), Leavenworth and Wenatchee (WA) and Jackson and Josephine Counties (OR)); in the course of this, they realized that another set of exchanges is needed, this time bringing











National Learning Networks Workshop

Hosted by FAC Net member Florida Forest Service in Jacksonville, April 25-29, 2016.



Pacific Northwest FAC Learning Exchanges
A tour of a biomass facility was part of the June exchange held in Jackson County, OR.

© WRTC (Michelle Medley-Daniel)

The process of designing and implementing these exchanges also offered many valuable lessons that are being compiled into a handbook and short video that will help other FAC Net members host successful exchanges as well.

in more of the local partners in each place. In southern Oregon, the FLN and FAC Net held a joint workshop, knitting together the landscape and community, social science and ecology, in an event that was eye-opening for all. Nationally, we moved from holding FAC Net and FLN workshops in the same place the same week to having a single integrated Learning Network workshop—that also included the IPBN, SPER leads and a partner from the BALN. In addition to being useful, this was symbolic, creating a solidarity among network members and networks that wasn't there before.

Taking it to the Larger Community

The lessons—and people—of PERFACT contribute to other state, regional and national efforts in fire management, resiliency and other aligned interests. For example, this spring, FLN leads and partners took part in the Governor's Wildland Fire Advisory Panel listening sessions, and in California, are on the Prescribed Fire Working Group of the Governor's Tree Mortality Task Force. Regionally, we have been in dialog with the Rural Voices for Conservation Coalition (RVCC) for several years. We are currently helping with network design and proposal development to support a network of forest landscape learning collaborations, to bring fire issues into their network and help us on policy issues. These efforts—and the tremendous work they doresulted in their receiving funding this vear to advance a more robust network effort. Nationally, this spring many of our members were instrumental in the success of the Working Toward Resilient Landscapes and Communities collaborative restoration workshop, held in Denver in April. FLN members were asked to serve on the planning committees for four of the six workshop tracks, and asked to present on important panels. In this way, the FLN contributed significantly to workshop

discussions in the areas of collaboration and engagement, working together effectively, the future of collaboration, restoration as science in action, collaborative restoration, the future of collaborative stewardship, and monitoring. As in the other cases, over the coming months, what these FLN members learned from the workshop will be shared with others in our networks, enriching our work in turn.

More Online

Fire Learning Network

http://www.conservationgateway.org/fln

FAC Network

http://FireAdaptedNetwork.org

Prescribed Fire Training Exchanges

http://nature.ly/trainingexchanges











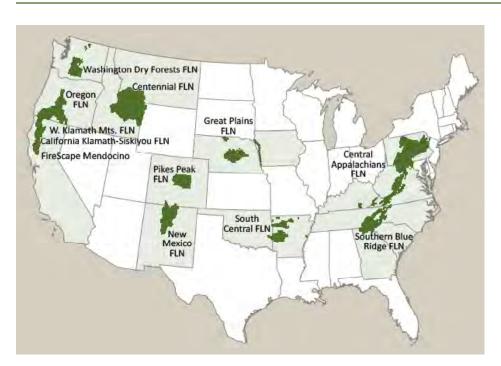
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Decker at Idecker@tnc.org or (801) 320-0524. PERFACT is an equal opportunity provider.

Fire Learning Network

A cooperative program of the Forest Service, Department of the Interior agencies and The Nature Conservancy, the FLN has a 14-year track record of helping to restore our nation's forests and grasslands and to make communities safer from fire.

Highlights from around the Network: January-June 2016



The FLN currently supports 12 partnership groups. These include multi-state regional networks with numerous landscapes in the Central Appalachians, Great Plains and Southern Blue Ridge; groups with multiple landscapes within a state, in Arkansas, Oregon and Washington; and large single-landscape projects in California, Colorado, Montana and New Mexico. Some of these partnerships have been in the FLN since its start in 2002 and are exploring new areas in which to collaborate and learn. Others have more recently begun the FLN journey, and are using the resources of the network to help them set their courses together.

At all levels, the FLN continues to assess challenges and opportunities, work with old partners and reach out to new ones, push at boundaries and try new things, learn and change as needed. What the FLN has long been working toward has now been captured nationally in the goals of the Cohesive Strategy: resilient landscapes, fire adapted communities, and safe and effective wildfire response.





Central Appalachians FLN

Five participants from four agencies and organizations in the Heart of the Appalachians landscape's Monitoring Working Group share a light-hearted moment at the annual refresher workshop.

© TNC (Nikole Simmons)

"This underscores an often overlooked, yet critical aspect of the FLN: relationship building. Workshops, field trips, trainings and small group meetings all provide opportunities for partners to get to know one another, talk about non-work issues and engage in social activities, all of which generate better communication and cohesion on burn day, wildfire incidents and other activities that greatly benefit from coordinated teamwork, and so accelerate our collective work."

FireScape Mendocino

In a field exercise focused on potential treatment prescriptions, teammates discuss options for vegetation management at the site of a WWII lookout. © TNC (Mary Huffman) In addition to planning workshops based on the Open Standards for the Practice of Conservation, FireScape Mendocino core team members and staff from the Mendocino NF leadership took part in a Facilitative Leadership workshop with a trainer from the Interaction Institute for Social Change. The skills developed in that workshop will contribute to their capacity to facilitate working groups, workshops and community meetings as they plan and implement their work.



California Klamath-Siskiyou FLN

Members of Trinity County VFDs conduct a burn during a May training developed and hosted by the FLN to increase local fire management capacity.

© WRTC (Dave Jaramillo)

"Volunteer firefighters in Trinity County generally have very limited wildland fire experience aside from initial attack and structure protection during larger fire events. By engaging with the fire chiefs and training firefighters from several departments, we built skills and started forging relationships among CAL FIRE, local VFDs, WRTC crews and contract firefighters. Since our landscape strategy involves contracting with local VFDs for personnel and equipment to help burn on private lands in our communities, this cohort of firefighters is now better able to service those needs. They will also be better prepared when they respond for initial attack on wildfires and will have better working relationships for extended wildfire events."





Great Plains FLN

Firefighters conduct a 223-acre prescribed burn on private land during the Loess Hills Cooperative Burn Week in April. © *TNC (Emily Hohman)*

"Our partners in the Loess Hills of Iowa do not follow NWCG standards, which creates challenges in engaging with them through a TREX (which are organized under those standards). While MOUs can bridge this gap, there is still a bureaucratic and sometimes a psychological barrier to engagement....By following partners' standards during cooperative burning, we are able to fully engage partner staff in planning, prepping, writing burn plans and leading burns on their own land—a level of ownership and engagement that was sometimes lacking during TREX in IowaThe Cooperative Burn Week is a TREX in intent but not name...and is a modification of the TREX model that better fits the Loess Hills landscape and partners. Recently, interest has been expressed in using this modified approach in other areas of the northern Great Plains."





New Mexico FLN

A February workshop brought together a well-chosen handful of network members and partners with expertise and experience in post-fire recovery and network design to lay out a plan for launching a new Burned Area Learning Network.

© TNC (Guy Duffner)

The need for taking aggressive action related to the growing challenge to our forests from the post-fire effects of large and severe wildfire has become increasingly clear to the New Mexico FLN over the past few years. After working locally for some time, this spring a team was brought together to build out a network that can serve other locations facing similar issues. A generative network based on the FLN model was designed by the team, and will be supported through the FLN for the first year. The network's aim will be to improve scientific understanding, policy and management practices for burned areas to enhance the long-term resilience of ecological systems and provide for human safety.



Oregon FLN

Central Oregon TREX participants hold a postburn after action review. © TNC (Pete Caligiuri)

"We are quite proud of our ability to plan and deploy two Prescribed Fire Training Exchanges* in Oregon this spring. Both were designed to provide holistic training in ecology, monitoring, operations and communications to prescribed fire professionals from around the country and world. They also complemented ongoing efforts with local partners, forest collaborative groups and the Fire Adapted Communities Learning Network to engage local communities in dialog related to fire adapted communities and forest restoration. Expanding TREX to two sites in Oregon this year also helped attract attention to the TREX model for increasing the pace and scale of prescribed fire treatments across the region in multiple National Forests and BLM Districts, as well as the Forest Service Regional Office."



Southern Blue Ridge FLN

Partners in the SBR Escarpment landscape discuss the plan for a 2,800-acre burn that will span the North Carolina-South Carolina border.

"We have continued capacity-building for prescribed fire throughout our landscapes, and have been able to scale-up burn acres. The increased capacity is due to increased partnerships between organizations that enables burning across ownership boundaries, greater sharing of newer information (such as advances in smoke modeling and expanded seasons for burning), and additional resources in the region like the TNC on-call fire crew and two Forest Service R8-supported modules; these are available for 12 weeks to assist with multiple burns."



A monitoring team of FLN partners from TNC, USGS, Rocky Mountain Tree Ring Research, Coalition for the Upper South Platte, Colorado Forest Restoration Institute and Colorado Parks & Wildlife came together to develop and implement a prescribed burn monitoring plan.

"FLN support is enabling the PPFLN to continue to grow, build trust and share lessons learned at the local and national level. We have also strengthened our relationship with the Pikes Peak Wildfire Prevention Partners and...taken part in their workshop targeting

participants such as insurance agents, realtors and mitigation contractors. Being part of this workshop allowed us to engage with new and important audiences about prescribed fire that we had not reached in the past."



South Central FLN

In February, participants in the Shortleaf Pine Initiative workshop hosted by the FLN toured Big Piney and West Frasier Lumber shortleaf restoration sites to discuss the do's and don'ts of restoration. The long-term state-wide partnerships of this FLN have provided a firm foundation that has been essential to the successful launch of this range-wide, multipartner initiative to restore shortleaf pines.

© TNC





The annual Learning Networks workshop, held in Jacksonville (FL) in April, encouraged connections not only within the FLN, but between members of the FLN and the Fire Adapted Communities Learning Network (FAC Net) and the Indigenous Peoples Burning Network (IPBN).



Washington Dry Forests FLN

Participants in a training workshop on the Individuals-Clumps-Openings method completed marking on a stand on DFW land that will be thinned this summer under the Manastash-Taneum Resilient Landscape plan. © Hannah Letinich

In addition to continuing their long-term work in the Tapash landscape, this FLN is working extensively with fire adapted communities efforts, post-fire recovery (including as part of the Burned Area Learning Network), the Washington Prescribed Fire Council and meetings with the Governor's wildland fire advisory panel. Lessons learned from this broad array of work helped support the development of the state's Forest Resiliency Burning Pilot (ESHB 2928), which established a pilot project to increase the use of prescribed burning.

Western Klamath Mountains FLN

A group of Forest Service specialists on the Interdisciplinary Team for the Somes Bar Integrated Fire Management Project review the effects of a controlled burn conducted during the fall 2015 Klamath River TREX. This burn was an initial treatment after a century of fire exclusion.

"The Somes Bar IFM Project proposes to use the same strategy employed in the West Simms unit—linear manual and mechanical perimeter treatments allowing for safe reintroduction of fire to the interior—at larger scales to restore good fire to landscapes ahead of the next wildfire. Many have been skeptical about prescribed fire without pre-treatment, so the West Simms unit is a perfect laboratory for people to see first-hand how controlled fire can restore forests while minimizing impacts to threatened and endangered species."

Somes Bar is one of three geographic subareas —along with Happy Camp and Salmon River where working groups of the Western Klamath Restoration Partnership are now collaboratively contributing to NEPA analyses as part of planning implementation projects.

"Numerous field trips, workshops and collaborative meetings have improved consensus among stakeholders—especially biologists and fire workers—about appropriate uses of prescribed fire in sagebrush ecosystems and westslope cutthroat trout watersheds Dialogue is more effective than any amount of research, planning or environmental review for develop relationships where biologists and fire workers better understand each other's constraints, goals and concerns. This has created an environment where practitioners are willing to experiment and learn together because they trust that the broader team has clear, unified goals for managing sagebrush and watersheds for sensitive fish species."

Centennial FLN



Fire Learning Network http://www.conservationgateway.org/fln











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Prescribed Fire Training Exchanges and Cooperative Burning

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



PERFACT staff and partners continue to deliver capacity-building training to diverse participants through Prescribed Fire Training Exchanges (TREX). The events strategically address barriers to safe, effective implementation of prescribed fire at the scale needed to meet restoration and community safety needs.

These experiential trainings provide opportunities for professional fire practitioners to gain experience, learn about integrating conservation and cultural issues in fire management, and receive position task book evaluations in trainee positions. They also actively engage other practitioners—including private contractors, ranchers and tribal members—into events that meet NWCG standards, helping these practitioners work more safely and effectively. In addition, some participants may have never burned before: university students, resource managers, researchers and regulators, for example, have taken part in TREX to better understand how fire affects their work so they can make more informed fire-related decisions.

Spring TREX

Four TREX were hosted by FLNs and a SPER project this spring. Three were repeat events, building on the efforts and successes of the year before (and in the case of the two Nebraska events, on the successes of many previous years). Land and program managers who use TREX events find them successful and often continue delivering TREX year after year—a testament to the importance of all hands/all lands approach, and how effective TREX is at delivering it.

The TREX model is newer in Oregon, but two were held there this spring, near Bend and Ashland. Federal partners from the BLM-Medford District, Rogue-Siskiyou NF and Central Oregon Fire Management Service filled key roles in both of these leadership teams. Literally before the smoke had cleared, people were beginning to talk of "next year."

In addition to the PERFACT TREX, the U.S. Fish & Wildlife Service Northern Plains Region hosted two back-to-back TREX in South Dakota in May. These had originally been planned, with the Great Plains FLN, for last May, but were cancelled shortly before their start date due to severe drought. It was encouraging that much of the planning was able to be put to use this year—and by local practitioners, without further support from the FLN.

Spring 2016 TREX, Cooperative Burning & Training				
			people	acres
onic	Loup River Valley TREX	NE	29	2,464
	Niobrara River Valley TREX	NE	38	119
	Central Oregon TREX	OR	43	850
	Ashland Forest Restoration TREX	OR	44	338
	Cooperative Burn Week	IA	39	1,083
	Volunteer Fire Department Training	CA	22	22
		TOTAL:	215	4,876

TREX Offspring

Cooperative burning is also an important strategy for teams that are building local capacity. Less time-intensive (in both planning and implementing) than TREX events, cooperative burning can hit a "sweet spot" for balancing available resources and burn windows. And by intentionally incorporating a variety of training opportunities and by giving participants experience with more complicated burns than they are able to conduct individually, these events build the skills, competence and confidence of the work force for lasting impact. This spring, a Cooperative Burn Week got more than 1,000 acres of fire on the ground, revitalizing not only the Iowa Loess Hills grasslands and prairie, but also a fire partnership working there. In northern California, two training efforts are growing from TREX, The

California Klamath-Siskiyou FLN developed a curriculum for a two-day live fire training for volunteer fire departments, and delivered it for the first time this spring in Trinity County. VFDs are a critical fire management resource in the region, and the training helped prepare them both to assist with the prescribed burning needed there and to more safely and effectively provide fire response to wildfires.

Also this spring, FLN staff, leads and partners in California worked out a new pilot program that is being called CalTREX. Building on a foundation laid by a state-wide fire partnership MOU last fall, CalTREX—modeled on TREX and other successful training models—will be a flagship initiative of the capacity-building workgroup of the partnership.



Evening and night ignitions extend the burn windows during warm, dry weather. © Ben Wheeler

Loup River Valley TREX

Ord, NE March 14-26

Excellent weather paved the way for several burning opportunities during Nebraska's Loup TREX in late March. A crew of 29—from Arizona, California, Colorado, Illinois, Massachusetts, Michigan and Nebraska—put almost 2,500 acres of healthy prescribed fire on native mixed-grass prairie in central Nebraska. The Loup TREX has been active since 2009, and their cumulative work has helped restore and maintain over 25,000 acres of



central Nebraska grasslands.

Niobrara River Valley TREX

Ainsworth, NE

March 19-27

As the longest running TREX—now in its eighth iteration—the Niobrara TREX has been used as a testing ground for several strategies including contractor development, volunteer fire department training, private land owner burn co-ops, and partnerships with universities. Recently, regional neighbors, including the U.S. Fish & Wildlife Service, the University of Nebraska and Nebraska State Parks are becoming more involved and are working with the planning team.

The Niobrara is also known for wicked weather—including weeks with red flags then blizzards then red flags again. This year's TREX started warm and dry, then saw a storm that dropped 7 inches of snow. But every day was treated as a burn day. This kept everyone on task, and offered many training opportunities for new fireline leaders. One of the hardest skills to master is getting the crew and equipment prepared and organized efficiently. But come a good burn day, repeated practice pays off. The 38 people at this TREX completed two burns at Fort Niobrara NWR—and left the event with smiles on their faces, happy with a successful learning experience.

Left: Local people—and local resources—play a key role in TREX. © TNC

Central Oregon TREX

Bend, OR

April 25-May 6

The second Central Oregon TREX built upon the successes and lessons learned from year one to provide 12 days of applied, experiential learning on the ecological, operational, monitoring and public engagement dimensions of prescribed fire. All told, 42 people from 11 organizations —including seven National Forests, three TNC state chapters and three universities—took part. They completed 850 acres of prescribed fire in seven operations across the three districts of the Deschutes NF, the majority in high priority wildland-urban interface areas.

The Central Oregon TREX was a prime opportunity to engage the community about fire-adapted forest restoration, the re-introduction of "good fire," and the building of fire adapted communities. This included some traditional approaches:



online content from the Deschutes Collaborative Forest Project, social media, radio and TV. But it also included a prescribed fire open house held in partnership with GoodLife Brewing to coincide with the latest release in their "Sustainability Session Ale" series--Wildland Session Ale—to raise awareness of the need for fire-adapted forest restoration in and around Central Oregon.

Ashland Forest Restoration TREXAshland, OR May 9-21

The community of Ashland is embracing the all-hands/all-lands approach of the Ashland Forest Resiliency (AFR) project in the dry, fire-prone forest surrounding town and its municipal watershed. The community views the work as abating the threat of severe wildfire while setting the stage for beneficial, restorative fire that works for nature and people. This TREX focused on AFR burns, implementing the project's first burns on private land, as well as several others on Forest Service and city land. Discussions with local experts, a variety of fuels and terrain, and the diversity of land ownership and burn objectives led to a rich experience for this event's diverse team—which included numerous local partners, and people from six other states, England, Spain and Ashland's sister city, Guanajuato, Mexico.



© TNC (Darren Borgia

"The [Niobrara] TREX continues to build social acceptance of fire in the landscape by demonstrating safe, thoughtful burns. The knowledge participants gain at TREX disseminates back into local culture through these people. We are supplying the mechanism for local partners to get the knowledge and confidence to implement prescribed fire on their own."



Partners with a variety of equipment stage for one of the cooperative burns. © Kody Wohlers

Cooperative Burn Week

Loess Hills, IA April 4-8

The Cooperative Burn Week held by the Loess Hills Fire Partners provided a way to gather resources to accomplish fire management at a wider scale in the Loess Hills region of western Iowa than is typically feasible. It is a TREX in intent, though not in name or in the fireline standards under which it is organized. This modification of the TREX model better fits the non-NWCG standards of the majority of Loess Hills conservation partners. The 39 participants came from three states, and from seven agencies and organizations, and also included volunteers. VFDs and private landowners. Their 1,083 acres of burning took place on state, nonprofit and private lands. The event influenced multiple regional objectives -meeting fire management goals, providing fireline training, and improving collaboration among partners.

MORE ONLINE

Loup River TREX—A story featuring several participating firefighters appeared on the local radio station KNLV: https://tnc.box.com/s/tnkcrgmc27xeom8opkntfk7szktz96qf

Niobrara TREX—The team produced a video featuring an interview with a first-time participant from a local VFD: https://www.youtube.com/watch?v=cgelD1PywuA&feature=youtu.be

Central Oregon TREX—The Deschutes Collaborative Forest Project website carries information on prescribed fire and TREX: http://deschutescollaborativeforest.org/forest-restoration-work/prescribed-burning-deschutes-forest-bend/

Ashland TREX—Jefferson Public Radio aired an interview with a member of the organizing team and a participant from the UK: http://ijpr.org/post/training-prescribed-burns#stream/0

Cooperative Burn Week—A member of the organizing team wrote an FLN Notes from the Field:

http://www.conservationgateway.org/ConservationPractices/FireLandscapes/FireLearningNetwork/USFLNPublications/Documents/100_NotesFromTheField LoessHills CoopBurn2016.pdf

Volunteer Fire Department Training—A member of the organizing team wrote an FLN Notes from the Field:

http://www.conservationgateway.org/ConservationPractices/FireLandscapes/FireLearningNetwork/USFLNPublications/Documents/104_NotesFromTheField CKS-VFD May2016.pdf

Interview with TREX Lead Jeremy Bailey—"Promoting a Prescribed Fire Workforce" (Two More Chains)

http://www.wildfirelessons.net/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=6c6dc6df-b275-d2dd-2c74-8a7bb3d9d259&forceDialog=0

Volunteer Fire Department Training

Trinity County, CA April 30-May 1

Twenty-two volunteer firefighters from four departments in Trinity Count took part in a new live-fire training that was tailor-made for them. Developed and implemented by the California Klamath-Siskiyou FLN, TNC. Shasta-Trinity NF and Firestorm. the two-day training included lectures, hands-on training and burn implementation on two units that totaled seven acres. The burns—on units identified as strategic for wildfire management in the area—provided excellent opportunities for training and local capacity-building as well as valuable treatments.

Looking Ahead

TREX Coaches Network Workshop

Twenty people—Forest Service partners, university professors, fire bosses, TREX experts and hosts, PERFACT staff and network design experts—met in June to



VFD training participants learn to take weather measurements in the field. © WRTC (D. Jaramillo)

help design a network to increase the scale of TREX delivery. The goal is to develop a national network of 50-100 TREX coaches who can organize, plan and deliver TREX across the country.

http://nature.ly/trainingexchanges











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

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Fire Adapted Communities Learning Network

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

Growing a Network for Fire Adapted Communities

The FAC Net is pursuing multiple growth strategies to spread fire adaptation concepts across the country. We are working with developing statewide networks to help deepen their impact and broaden ours. We continue to grow our core membership. And we are adding new ways, such as the new Affiliate Membership category, for individuals and organizations to engage with the network.

Our efforts are extended and enriched by work with several states—including Colorado, Nevada and Washington to support independent state-wide networks modeled after the FAC Net. By helping to launch and support such efforts we are creating opportunities for many additional communities to deeply engage and connect with other fire adaptation practitioners. At the same time, our members are connected to many more people and communities through these ties.

This spring we also began outreach to bring in a new set of core network members. In seeking additional members we looked to geographic areas where the network was not yet connected, and considered organization types and the scope and scale of fire adaptation work people were undertaking. As a result of this outreach we added two new members: a Rapid City (SD) community-based effort led by the municipal fire department, and the State of Utah, working through the state's Wildland-Urban Interface Coordinator.

"The most beneficial part of the FAC Net is the breadth and depth of experience and knowledge. No matter what challenge or new task we are facing, we know that someone within the network will have information that can help us avoid pitfalls and ensure that our efforts are as effective as possible. Having access to this great resource base is a tremendous confidence builder and makes it feel like someone's always 'got our back.'"



One of the areas of experience that the Rapid City Fire Department brings to the network is the work of their veteran wildfire mitigation crew. In turn, they are interested in learning from the network more about using prescribed fire as a treatment option.

The Utah WUI Coordinator engaged with the network at the annual workshop in April, which gave her an opportunity to meet other network members and engage with some of the communities of practice. She has said that Utah is particularly interested in lessons about best practices for CWPPs and FAC outreach, and reports that the FAC Net has already helped her tremendously. She and a colleague have submitted a proposal that will help them ramp up FAC outreach in the Wasatch Front, where much of the state's population lives, in the coming year.

Finally, early this year we added a new membership type—affiliate members—designed to allow more individuals and organizations to engage with the national network. Affiliate members are connected to our core members and each other through our new website and a special Podio online workspace.

The new website lets FAC Net reach a broader audience, and includes ways









Among the highlights of the year for many FAC Net imembers is the annual workshop, hosted this year in Jacksonville (FL) by the Florida Forest Service and their partners. The field day included a tour of a prescribed burn in progress, a first experience for many that inspired excellent dialog. *© Anne Mottek*







Inside, the workshop turned to making connections between people, ideas and scales of work. The sessions and exercises that accomplished this ran from the gamut from presentations to games, brainstorming sessions to work planning.

© TNC/Wendy Fulks, Nevada Land Trust

"All these tools are working incredibly well for sharing. The feedback on the new website from local partners has been positive. It explains the FAC Net and allows for them to engage much more in FAC concepts and the Network."

"Podio has been great for getting quick (and plentiful) suggestions from fellow practitioners. This really helps with credibility and confidence for all involved. For example, I had a homeowner looking for covenants that discussed maintenance of mitigation treatments. Within 10 hours of posting the question on Podio I had several examples to send him and the homeowner was extremely impressed with the quick response."

"The communities of practice introduce more frequent chances for reaching out to others in the FAC Net to keep vital personal connections active."

to engage in two-way communication. The addition of the Member Profile and Affiliate Membership features of the site are critical to our growth strategy and to achieve our long-term goal of spreading fire adaptation practices nationwide. In just over five months, we've added 40 affiliate members to the network. These new members have created profiles, many have attended the introductory webinar in May or joined Podio space, and several have written posts for the network blog.

Building Communities of Practice

Among the changes that will help the FAC Net both be more effective internally and reach outward to other practitioners is the development and support of communities of practice (COPs). There are currently seven active COPs, with members drawn from both the FAC Net and the Fire Learning Network:

- Community Wildfire Protection Planning
- Building Support for FAC (previously: Engagement and Communication)
- · Network Builders Club
- Wood Utilization (previously Treatment Economics)
- Community of Practice for Using Fire

- · Watershed Management
- Working with Landowners/ Homeowners

These groups are progressing in different ways, at different paces, as is expected in the development of needdriven communities. All seven COPs have online workspaces on Podio that are similar to that set up for the whole FAC Net, but that allow more focused discussion and resource collections. In addition, the Landowner/Homeowner COP and CWPP COP hold quarterly webinars. The Watershed COP held two webinars this spring on connecting upstream and downstream users, highlighting the Rio Grande Water Fund and watershed assessments. And discussions within the Communications and Outreach COP led to a more refined focus, and a name change to "Building Support for FAC" that reflects it. As an example of the work being done by the COPs, the CWPP group has started work on a series of "quick guides" to gather innovations and best practices from FAC Net members for easy reference. One guide will describe new strategies for engaging citizens

in helping to create, and use their

CWPPs. For example, some members

have begun investing in a separate

version of their CWPP that is nicely

designed, engaging and easy to read

to increase its usability—and use; lessons from this will be captured in a guide. A second guide will be about updating CWPPs to include fairly recent developments such as the Cohesive Strategy and the rise of fire adapted communities thinking. A third will look at how practitioners are leveraging technology to develop and implement CWPPs. For example, one FAC Net member is working on a smart phone app that citizens will be able to use to track their community's progress treating fuels.

The Net Builders Club is proving to be a critical strategy for sharing a range of approaches and models for state-wide network building. There is more demand for this topic than we are staffed to manage; without this forum, we would be able to support far fewer people exploring the potential to launch a state network. Members of this COP are using Connecting to Change the World, the Netweaver's Handbook and monthly group calls to further their practice of networkbuilding. Those participating in this COP report good learning about the methods and design considerations we are faced with, and are finding the group to be a solid resource for helping to offer and vet new ideas and solutions.



A landowner looks over a map with a fire team member on the 2016 Pony Fire near Happy Camp (CA). The FAC Net is supporting growth of the Community Liaison Program (CLP), which works to build effective communication between local communities and wildfire incident management teams.

When we talk about FAC, we often think about being prepared for fires—defensible space, fuels reduction, cleaning gutters, neighborhood risk assessments, fire-resistant building materials—and to a lesser extent recovering after fires have come and gone. There are very few resources or innovations out there to help create better outcomes for communities during wildfire events.

The Community Liaison Program tries to bridge that gap between fire preparedness and fire recovery. If we are going to be truly fire adapted, and live with the inevitability of fire, it is critical to figure out how to make the fire events themselves more approachable and understandable, to have a trusted source of current information, and to make sure that local place-based knowledge is available to assist in the fire management, strategy and operations. The CLP offers a potential solution to this part of the spectrum of being truly fire adapted. The concept seems to resonate with a lot of FAC Net members and affected communities.

© Mark DuPont

"The FAC Net has provided the opportunity for sharing with and learning from other networks and members that are located across the country. This has been invaluable to us. Interacting with the various members, especially at the annual workshop, and understanding their accomplishments, challenges and solutions has helped to inform us in moving our initiatives forward. More specifically, these interactions have confirmed that most of the national members face the same problems, and we have found that we can collaborate, learn and innovate collectively to provide solutions."

All seven COPs met in person at the annual workshop, making good progress refining priorities and identifying opportunities for colearning. We recently began holding regular calls for all COP leads, and have begun planning a COP leads training to be held in early December.

Coming Together to Weave Stronger Networks

Gathering people together to accomplish work—and perhaps more importantly, discover new ties and strengthen existing ones—continues to be a key role of the network.

Numerous examples of this took place this spring, with two particularly notable examples being the Pacific Northwest Learning Exchange and the annual Learning Networks workshop in April.

Three Pacific Northwest FAC Learning Exchanges held this spring in Deschutes County (OR), Leavenworth and Wenatchee (WA) and Jackson and Josephine Counties (OR) helped make new connections between members of the state-wide network in Washington and members of the two community-based FAC Net members in Oregon. In particular, Washington members from the Okanogan connected with members in central Oregon, sharing

information about long-term recovery and partnerships with community foundations. As a result of the connections made in this series of exchanges, members have proposed a second series of exchanges focused on getting their key partners, including city and county leadership, together to share ideas and connect.

The process of designing and implementing these exchanges also offered many valuable lessons that are being compiled into a handbook and short video that will help other FAC Net members host successful exchanges as well. In the after action review at the close of the set of exchanges, participants said that having FAC Net staff involvement was critical to help guide and document the process.

The annual Learning Networks workshop brought together members of the FAC Net with colleagues, partners and potential partners from across the FAC Net, as well as the Fire Learning Network (FLN), Indigenous Peoples Burning Network and Prescribed Fire Training Exchanges. In addition to the numerous ideas and resources shared in formal sessions, during breaks and meals, and during the field learning exchange, member conversations generated new energy and ideas. For

example, Flagstaff FAC Net members left with a plan to gauge interest in a state-wide network; a southwest Colorado FAC Net member left with a new planning paradigm and tools (the Open Standards for Conservation planning process) to help her run a watershed collaborative; and a member from Island Park took home a list of homeowner engagement strategies to try. Stronger connections were made between FAC Net and FLN fire users in California, Colorado, Oregon, Texas and Virginia, and a shared FLN and FAC Net strategy for development of FAC efforts across the Southern Blue Ridge and Central Appalachians. Network members and staff alike also gathered valuable feedback about their operations that will be used to inform adjustments to strategies in the coming year.

Right: This spring members of the Dolores Watershed and Resilient Forest (DWaRF) collaborative got into the field to talk key ecological attributes on an old Ponderosa Pine Partnership restoration unit. With initial support from the FAC Net, the DWaRF collaborative has been developing in southwest Colorado over the last year, and the collaborative has now become a priority of the San Juan NF. An early indication of the potential of DWaRF is the recent decision to manage a fire for resource benefit, with the political will to do so likely affected by the broad swath of agencies now talking about the need for fire. © Thurman Wilson



After the Sleepy Hollow Fire, all that was left of a home at one site was a campfire pit and a couple of chairs. The Pacific Northwest Learning Exchange visited this neighborhood located inside the city limits of Wenatchee. As a resident said, "No matter where you live, in this area you are vulnerable to wildfire." Although the devastation was still evident here, it had been the site of a recent community gathering to help the community healing process and restore a sense of order in the chaos created by the fire and resulting home losses.

A Learning Exchange participant said "It made me think a lot about what community members go through when they experience loss related to wildfire and the immeasurable value the support group and other recovery efforts that we heard about while visiting had on recovering from the fire. A resident characterized recovery as 'it's not how high you fly, it's how high you bounce.' That really spurred me to think about helping people bounce back from wildfires in the future."



"At the annual workshop Lynn [Decker] provided a handout that provided new—to me—definitions of cooperation, coordination, and collaboration. I still find it fascinating, and it provides a new context for me to communicate about our programs and how organizations and people interact professionally. Using this context, and looking back over the past several years, I can see how the culture of our programs has evolved over time, due in large part to the influence of the FAC Net. This influence has been the most beneficial part of the FAC Net for myself and my work.

The FAC Net to me represents the philosophy that human factors in collaborative processes should come before all else. Other components, like process, structure, documentation, and organization are incredibly important, but are secondary to the relationships and trust built among people. Bringing together diverse personalities and perspectives is important to have a successful program, and it also provides a concrete sense of personal growth and satisfaction. I attribute this philosophy primarily to the FAC Net team and its unique approach to leadership, which differs substantially from most fire-focused organizations. The diversity of core participants, who are singularly focused on the same mission but working with disparate resources at different scales lends to the richness of the experience and lessons learned."

For more about the Fire Adapted Communities Learning Network, visit our website at http://fireadaptednetwork.org/ or our YouTube channel (https://www.youtube.com/channel/UCw0iVlThjzZbd5A4bf3tGkw) where FAC Net videos (including select presentations from webinars) are shared.



At the Harvesting Methods Open House in Flagstaff, a contractor and the Fire Department displayed some of the forestry equipment that will soon be operating in the woods near homes in and around town, giving people a chance to see it up close—and providing fun photo opportunities.

The Greater Flagstaff Forests Project (GFFP) recognizes that the more people know, and the less uncertainty, the greater the support will be for the novel forest thinning projects needed here. The open house was creative, interactive—and provided a chance to speak with experts in the field. These included representatives from the Four Forest Restoration Initiative, Flagstaff Watershed Protection Project and The Nature Conservancy (demonstrating tablet technology that will eliminate the costly and time-consuming process of marking trees). Smokey Bear, Louie the Lumberjack, a university sports team, a creative kids corner and refreshments rounded out the day.

GFPP used the harvesting methods fact sheets created last year to explain the treatment methods that will be used. People learned about expected effects on recreational experiences and wildlife, set appointments to have their properties assessed by Firewise specialists, and met contractors.

Forest restoration has become a driving factor in this community. The open house was designed to address the relevance of forest treatments—and

Forest restoration has become a driving factor in this community. The open house was designed to address the relevance of forest treatments—and demonstrated the degree to which people will support them. GFPP plans to host this event again as the scale and pace of treatments increase.

© Anne Mottek



At the Leavenworth (WA) Senior Center, more than 40 people joined a discussion about wildfire risk and wildfire preparation and how to prepare for wildfire as part of the Wildfire Preparedness Week, and 75 starter "go kits" were distributed to participants and through the mobile meals program. "This year our inspiration for Wildfire Preparedness Week came from a FAC Net colleague in Austin (TX). We introduced the 'fire adapted family' concept to the Leavenworth community. Our outreach for the week was targeted towards students and seniors, with opportunities for all community members to take action on national Wildfire Preparedness Day."

© Chumstick Wildfire Stewardship Coalition













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

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Scaling-up to Promote Ecosystem Resilience (SPER III)

Scaling-up to Enable the Social and Operational Capacity for "Right Fire"

January 2015 – December 2017

The SPER strategy began in 2011, with relatively modest amounts of funding strategically targeting implementation that yields larger-scale impacts: SPER projects have filled gaps or otherwise helped bring work in progress to a landscape scale. They have been catalysts, accelerating work in key places. In the first phase, six SPER I projects completed more than 20,000 acres of treatments in support of ecosystem resiliency, community safety and watershed protection. Under SPER II, five projects completed 3,000 acres of treatments, and local fire management capacity was increased through several training opportunities.

SPER III is using a different strategy, focusing on fewer places, more intensively. The goal is to accelerate the development of both the social and the operational capacity for using fire, benefitting forest resiliency and community wildfire protection alike. 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.

The effort also addresses water security. Resources are focused on landscapes where fire management actions will affect critical water sources for local communities or downstream users. SPER III projects are in places where water security issues had been identified and where strategic and collaboratively-developed activities were already planned or underway, but can benefit from the additional input of funds, partnerships and expertise that SPER and the Fire Learning Network can provide.

SPER III is supporting three tests of getting to large-scale fire use. All three sites are cultivating the enabling conditions for success—developing the workforces, agreements and social license that will support the necessary work. Also key is getting fire on the ground in new ways—for example by setting the stage that allowed a broader range of partners to burn together, or building the relationships that allowed permits to be issued during a state-wide burn ban. Taken together, the multifaceted SPER efforts are bringing these large landscapes closer to "right fire."

The three projects proposed thinning and prescribed fire treatments on 965 acres over the three-year period. To date, at the half-way point, they have completed 669 acres of treatments (367 acres thinning, 302 acres of fire).





Burning at the Ashland Prescribed Fire Training Exchange © TNC The first VISTA Volunteer of the Bureau of Reclamation and Chama Peak Land Alliance provides outreach and education for forest and watershed resilience in the San Juan-Chama Headwaters. © CPLA



California: Trinity Integrated Fire Management Partnership

Getting fire on the ground at Eagle Creek (as well as another, non-SPER, project) during the statewide burn ban was this project's most significant accomplishment this spring. The burn at Eagle Creek was nearly two years in the making, so getting to implementation was a major success. Fire had been absent from the Eagle Creek site for over 100 years—and CAL FIRE had been unwilling to issue burn permits. But the emphasis on strengthening relationships with CAL FIRE bore fruit: it has significantly increased the capacity to work together through the permitting process—and has also allowed the use of CAL FIRE resources, and even burning together.

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

SPER support here is bringing people together in local and regional gatherings that promote the use of fire and cross-jurisdictional planning for forest restoration and fire risk reduction—necessary groundwork in a multi-owner landscape. This team has organized learning sessions about prescribed fire liability and state laws for ranch managers in the targeted demonstration area, and helped them select and contract with qualified staff to write burn plans that meet national standards (that are higher than those required locally). This has day-lighted a business model for conducting prescribed burns that is more professionally anchored with more rigorous thresholds than previously practiced here. This is working in favor of the project goals—just a year ago attitudes of managers and owners were extremely risk averse, but through careful and deliberate exposure to the process of planning and coordinating burns, SPER has moved them to a more comfortable place. The managers of two ranches, for example, have moved from a position of not wanting to be the first ones to "experiment," to being fully supportive of the current plan of work—which includes them deploying the first fire among their neighbors

Oregon: Ashland Forest All-Lands Restoration Project

With SPER support, the ongoing Ashland Forest All-Lands Restoration (AFAR) project brought the first Prescribed Fire Training Exchange (TREX) to Ashland this spring. Like all TREX, it met numerous objectives, including capacity-building, increasing social license for fire and getting "good fire" (and smoke) on the ground

in priority places. About half of the 40 or so participants were from Oregon, but many had not previously worked together in inter-organizational crews; the formal training offered—and the demonstration that these mixed crews can be effective—both served to increase the capacity to use prescribed fire in the area. In addition to media outreach, the organizers arranged to have key stakeholders—a City Council member, Chamber of Commerce board member, OSU Extension Program Coordinator, Department of Environmental Quality representative and a local photographer—experience the burn by touring it during firing operations; providing these vivid personal experiences helps build important support among necessary allies. And, finally, the burns included treatments on land identified by the long-term collaborative group as strategic for watershed protection, with burn objectives developed using a recently-revised collaboratively developed set of Ashland Forest Resiliency prescribed burn objectives.



A City Councillor and Chamber of Commerce board member enjoy an up-close view of the Rogue River Siskiyou National Forest and Prescribed Fire Training Exchange (TREX) participants using fire. © TNC (Darren Borgias)



This photo was taken while talking with the owner of the Eagle Creek Ranch, who was "super excited" to see the smoke rising, knowing that good fire was helping to restore the ecosystem she called home.

© WRTC (Dave Jaramillo)













Scaling-up to Promote Ecosystem Resiliency is supported by *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. For more information, contact Lynn Decker (Idecker@tnc.org).

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What Makes a SPER Burn Special?

Not all acres are the same. When SPER projects focus on implementation of treatments, projects are selected to have important leverage—in terms of their landscape effects, other objectives that can be met (such as training for work-force development), value as demonstrations of what is possible, or all three. The California SPER lead discusses what made the Eagle Creek burn unit a good SPER burn:

The unit is adjacent to the Trinity River in the Upper Trinity River Watershed, and much of the water coming from this area is tied to the Central Valley water system through a series of water diversions. Several large meadows, not common in the county, are found within the project footprint, and more than 100 years of fire exclusion has led to a significant decrease in meadow habitat and function, increased fuel loads, and loss of oak woodland habitat. Several landowners share an interest in ecosystem restoration and making the area less susceptible to wildfire. All of these reasons combined made this location an ideal place to use SPER funding to get fire back onto the landscape.

Before our involvement, most of the project area had received very little attention for forest and watershed health, fuels reduction and habitat improvement. As a result, much of the area has heavy fuel loads and a tremendous amount of conifer encroachment—thousands of trees per acre—leading to the loss of meadow and oak woodland habitat.

We engaged our partners at the Trinity County RCD and the landowners to conduct site preparation—thinning and piling ponderosa pine encroaching along the meadow edges and under power lines, pruning some trees that we knew would burn in a prescribed fire, clearing blackberry, and scratching a hand line. Many of the piles were burned by the landowners before our understory burn. Complications of burning in this area include the proximity to a highway (a major scenic corridor) and homes (including historic structures). One of the landowners runs a quaint destination resort and was fearful of smoke and visual impacts on guests. High fuel loads, species composition shifts, and social license all added to the complexity of getting fire back onto this landscape. We burned. Fire effects were great. We had good consumption and we met the objectives of introducing fire back into the landscape, reducing fuels, killing young conifers, and limiting mortality to overstory trees. It was a very limited burn window—we knew that the high end of the prescription would get pushed at some point the day of the burn. In fact, we stopped ignitions and let the fire back down the hill (due to the low fine dead fuel moisture) during the hottest portion of the day. Although we only burned a portion of the planning area, all of the landowners were pleased with the outcomes of the fire. One who was out of the country during the burn, called when he got back and expressed his satisfaction with the work.

Indigenous Peoples Burning Network

The mission of the Yurok-Hupa-Karuk IPBN is to revitalize the implementation of cultural burns in native communities through the cultivation of an intertribal support system in which traditional ecological knowledge is shared and our rights are protected.

In the fall of 2015 the Fire Learning Network facilitated the launch of a network to support the cultural burning practices of indigenous peoples. The Yurok, Hupa and Yurok Tribes in northern California—the first members of the Indigenous Peoples Burning Network (IPBN) have since been working to develop the foundational principles and first action steps of the network. Key to the success of this is putting the rights of tribes to self-determination first, which means supporting the effort to restore their fire cultures in their own way.

Planning Underway

The Yurok-Hupa-Karuk IPBN held two workshops in the winter and spring of 2016. At the first workshop, in January, participants reviewed and updated the network operating principles they had developed at the previous workshop; used aerial and satellite imagery from the 1940s and 2010s to visualize changes in vegetation cover and other features of their ancestral territories at the landscape scale; and networked and learned about the actions of fire management organizations in the area, including the Forest Service and the Yurok Cultural Fire Management Council. They also heard from Frank

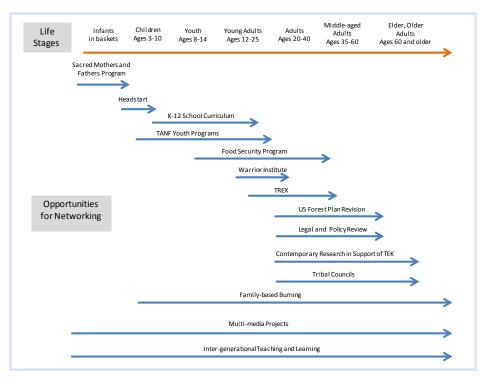
Lake, a USFS researcher and a descendant of the Yurok and Karuk Tribes, who had compiled a narrative of the fire management life stages for a traditional practitioner in a contemporary context (see diagram).

The second workshop this spring was the first of what will be two sessions in developing a Healthy Country Plan. This planning is patterned after similar efforts by aboriginal people in Australia and was brought to the attention of this group by Fire Learning Network (FLN) staff and The Nature Conservancy's Global Fire Director, who facilitated this workshop. One of the goals identified at this workshop was to increase the number of families involved in familyled burning to 40 families, distributed



Then and now: participants in the January 2016 IPBN workshop compare aerial photos from the 1940s and contemporary satellite imagery.

© TNC (Mary Huffman)



Framework for Developing Traditional Fire Practitioners in a Contemporary Context

Local programs and activities provide networking opportunities at each life stage in the development of traditional Yurok, Hupa and Karuk fire practitioners in a contemporary context. Maintaining traditional fire culture is an inter-generational endeavor that requires lifelong investment by the practitioners and the community. Restoration of local fire culture will require the Yurok-Hupa-Karuk IPBN to develop a support network for each stage of life.

across four communities. Workshop participants articulated characteristics of family-led burns (in contrast to agency- or NGO-led burns) and they

identified next steps. The session ended with a field visit to the area that may serve as the site of the first familyled burn, which is slated for this fall.

On the Ground in the Yurok-Hoopa-Karuk Landscape

Among the goals in this landscape is the development of a pathway for longterm restoration of traditional fire culture. The life stages diagram moves the group in that direction, describing in detail the lifelong training process required to develop a traditional fire practitioner, including what types of learning and practice need to happen in different life stages. Workshop participants have identified various programs in their communities—for example, the Warrior Institute in Hoopa —that they could use to accomplish training and practice at each level, and they are fitting them into this framework.



The Director of the Warrior Institute demonstrates the use of a fire drill during Spring Camp. © Cultural Fire Management Council (Margo Robbins)

Intergenerational learning is a high priority for the IPBN. To promote that, this spring IPBN leadership focused funding on supporting a local youth organization, the Warrior Institute, to put on a youth camp with sessions on traditional fire and its relationship to local culture. With help from leadership within the IPBN, the Warrior Institute organized and delivered its first three-day Spring Camp. For a long weekend, 21 young people hiked, camped, cooked salmon the traditional way and learned traditional storiesand learned about fire's relationship to basketweaving, regalia species, native foods, watershed and forest condition. and more.

Part of the PERFACT Family of Networks

The IPBN also made strides in integrating with the work of other PERFACT strategies and network members this spring. Members of the Yurok-Hupa-Karuk IPBN have been closely engaged with FLN, Fire Adapted Communities Learning Network (FAC Net) and Prescribed Fire Training Exchange (TREX) efforts in northern California from the start. This spring members from the Yurok, Hupa and Karuk Tribes joined the FLN and FAC Net at the annual national Learning Networks

How We Use TREX

Margo Robbins

TREX Coaches Network planning workshop

Excerpts from her introductory statement, available in full at http://www.conservation gateway.org/ConservationPractices/Fire Landscapes/HabitatProtectionandRestoration/ Training/TrainingExchanges/Pages/how-we-use-TREX-Yurok.aspx

... Five years ago we had no hazel sticks to weave with; this was the way it had been for many years before that as well. Impenetrable brush has grown up on the land, our traditional food sources, such as acorns and deer have been severely impacted, and the threat of wildfire is of great concern.

Restoration of the land, and preservation of our culture, is a number one priority for people living on the Yurok Reservation. We MUST put fire on the ground if we are to continue the tradition of basket weaving....

This is the task that TREX enables us to embark on. So far we have burned close to 300 acres. This year, for the first time in my life time, we had enough hazel sticks for everyone to gather as much as they needed! There is a basket class taking place in Hoopa and Weitchpec. The next generation of weavers is learning how to gather and weave!

As we build capacity in the local community to put fire on the ground in a safe way, we ensure the continuance of our culture.

workshop. This raised the profile of the IPBN and resulted in many discussions among FLN and FAC Net participants about how to incorporate work with indigenous peoples into existing networks. In turn, the IPBN leaders were able to see what the FLN and FAC Net are all about, and to connect with people in other landscapes.

In June, one of the key players in the Yurok-Hupa-Karuk IPBN was one of 20 people invited to take part in the design workshop for the TREX Coaches Network. As part of this group, she contributed a valuable cultural perspective on fire, real-time experience with the

development of a new network, and reflections on the role that TREX plays in cultural revitalization—including in her moving introductory statement (see box).













The Indigenous Peoples Burning Network is supported by 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. For more information, contact Lynn Decker (Idecker@tnc.org). An equal opportunity provider.