

FLN Networker No. 278: March 13, 2019

The FLN Networker is a publication of the Fire Learning Network—a partnership of the USDA Forest Service, agencies of the Department of the Interior and The Nature Conservancy—intended to foster communication within the network and among its friends. Submit comments, information to share, and subscription requests to Liz Rank.

For more about the FLN, visit www.conservationgateway.org/fln or contact Marek Smith.

News from the Field

Arizona: A new [fact sheet](#) about the **Flagstaff Watershed Protection Project** highlights a **novel funding mechanism** used by the FWPP, the “only known example in the country where forest restoration and treatment work on federal lands are being funded from municipal bonds.” For more, contact **Paul Summerfelt** (psummerfelt@flagstaffaz.gov).

California: The [article](#) “**Prescribed Fire Gains Momentum**” gives a good overview of where prescribed fire stands now in California—and how recent progress has been made. **Lenya Quinn-Davidson** (lquinndavidson@ucanr.edu) and **Nick Goulette** (nickg@hayfork.net), who have long been on the front lines, helped tell the story here.

And for an in-depth view of one landscape, see “**Trinity Integrated Fire Management Partnership: A Case Study**,” published by the Rural Voices for Conservation Coalition last month. The [report](#) notes the critical roles that the **FLN**, **TREX**, **FAC Net** and **SPER** have played in the partnership’s success.

Colorado: The [FAC Net blog post](#) “Collaborative Spatial Fire Management: Getting Ahead of Fire Using **Potential Operational Delineations**” by **Mike Caggiano** (michael.caggiano@colostate.edu) was cited (p. 11) in a [White House report](#) on **2018 science and technology highlights**.

Colorado: In a [recent story](#), TV station Denver7 named **FAC Net affiliate** member John Van Doren an “**everyday hero**” for his work in helping the community of Bailey be ready when wildfire hits. ([Read more](#) about his work in an interview on [preparing for wildfire season](#).)

New Mexico: The FAC Net [blog post](#) “How the **Forest Stewards Guild** is Building the **Next Generation of Fire Practitioners**: The Forest Stewards Youth Corps Fire and Fuels Program” is a great look at some of the challenges and successes of this program. (The Guild is accepting applications for its [fall 2019 youth crews](#) through June 9.)

North Carolina / South Carolina: **Cynthia Fowler** and **Kaycia Best** (Wofford College) interviewed **Brian Bowling**, burn boss on a burn in the **Southern Blue Ridge Escarpment FLN** landscape. He spoke about some of the challenges—and enabling conditions—in planning and implementing the **State Line Burn**. Read the interview in the attached *Notes from the Field*.

Indigenous Peoples Burning Network: At an early-March **IPBN** workshop in Hoopa, **30 people from five tribes** shared their recent advances in **revitalizing cultural burning**. The Hoopa Fire Department and the new Six Rivers National Forest supervisor joined the **ongoing dialogue** about meeting the needs of community members who depend on culturally-based controlled burning for food security, basket materials and ceremony. Three people from the Flower Hill Institute, a non-profit organization associated with the **Jemez Pueblo** in New Mexico, spoke about their **vision for national collaboration**. With a shared commitment to passing traditional fire knowledge from generation to generation, they connected with the **Cultural Fire Management Council** to plan a **youth cultural exchange**. The Conservancy’s co-lead of the **Sand Plains FLN**—an emerging collaboration among the Leech Lake Band of Ojibwe, Chippewa National Forest, Minnesota Department of Natural Resources, Conservancy and wood products companies—provided an introduction to that collaborative. For more, contact **Mary Huffman** (mhuffman@tnc.org) or **Andrea Brandon** (abrandon@tnc.org).

Prescribed Fire Training Exchanges: Winter in the Plains has just hung on too long for there to be effective burning during the **Loup River TREX** scheduled to begin this coming weekend; the call was made to **cancel**. However, participants in this TREX included 11 international participants who had already made nonrefundable travel plans. And TREX cadre strongly believe **you can always burn somewhere**. Enter the **capacity and connections** of the **TREX Coaches Network** and the **FLN**. In less than two weeks, arrangements have been made for the **Arkansas TREX** based in Little Rock, thanks to **Brad Elder** (Doane College) and **Kyle Lapham** (TNC) in Arkansas, and coaches from California, Colorado, Maryland and Spain. This demonstration of the strategy's **creativity, resiliency and flexibility** will ensure that participants have a great training and sharing experience, and the crews will augment the capacity of partners in the **South Central FLN** to complete spring burns. #ARTREX

Not unrelated, see the **FAC Net [blog post](#)** “Stop Focusing on Ignitions and **Start Investing in a Prescribed Fire Workforce**” by **Jeremy Bailey** (jeremy_bailey@tnc.org) and the [recording](#) of the webinar “**Prescribed Fire Is an Emergency**” by **Dave Lasky** (dave@forestguild.org), both from last week.

Opportunity: Eco- Entrepreneurs

Eco- Entrepreneurs: [Techstars Sustainability Accelerator](#), in partnership with **TNC**, is seeking **for-profit tech start-ups** that help tackle **climate change** and provide **food and water sustainably** to join the second class in its [accelerator program](#) this summer. Ten start-ups will be selected for the program, and will each receive **seed funding** up to \$120,000, plus exposure to **Conservancy's global footprint** of programs, projects and partners, and **Techstars' network** of more than 10,000 **mentors**. [Applications](#) are due by **April 7**; the program (held in Denver, Colorado) begins July 29.

Resources: Drones / LANDFIRE / Social Media Accessibility / Vulnerable Populations

Drones: “**NWCG Standards** for Fire Unmanned Aircraft Systems Operations,” which standardizes processes and procedures for interagency use of UAS in support of fire management, is [now available](#).

LANDFIRE: The first installments of the **new LANDFIRE base map**, [LF Remap](#), have been released. New topographic products for the continental U.S., as well as **disturbance**, **vegetation** and **fuel products** for the **Northwest**, are now available. The remaining data sets will be released in batches in the coming months (check the [schedule](#) for details). The team has also put out its **annual data call**. The primary focus on **disturbance and treatment** polygons for 2017 and 2018; a secondary focus is on vegetation/fuel plot data. See the [flyer](#) for details; please submit data by **March 31**.

Social Media Accessibility: **Explore Access** is a project of **University of Arkansas Partners for Inclusive Communities**. The site has a variety of resources, including a **social media accessibility toolkit**. The [toolkit](#) has links to platform-specific instructions to help you make sure the images, videos and other content you share are accessible.

Vulnerable Populations: The U. S. Department of Health and Human Services [publication](#) “Capacity-Building Toolkit for including **Aging & Disability** Networks in **Emergency Planning**” is a comprehensive overview. This **toolkit** covers issues that need to be addressed for these populations in a wide range of types of emergencies, with links to numerous supporting resources.

Articles: Natural Climate Solutions / Restoration Scales

Natural Climate Solutions: Fire management—through **prescribed burning**—is one of the practices touched on in the [article](#) “Natural Climate Solutions for the United States.” The various adjustments to management of forests, grasslands, agriculture and wetlands discussed could **potentially mitigate** a significant percentage of the country's **carbon emissions**.

Restoration Scales: Three people from the **Karuk Tribe** Department of Natural Resources—**Lisa Hillman**, **Leaf Hillman** and **Bill Tripp** (btripp@karuk.us)—are among the co-authors of the [article](#) “Decentring Watersheds and **Decolonising Watershed Governance**: Towards an Ecocultural Politics of Scale in the Klamath Basin.” The article “explore[s] two scalar frameworks—**firesheds** and **foodsheds**—that are **emerging as alternatives** to the watershed for collaborative natural resources management, and consider[s] their implications for Karuk ecocultural revitalisation.”

Also see yesterday’s *High Country News* [article](#) “The **Karuk Tribe Fights a Growing Wildfire Threat** and a Lack of Funding,” which features **Lisa Hillman** and **Leaf Hillman** and the work of the tribe’s DNR.

Videos: Smoke Safety / PODS 101 / Smokey Gets Some Nuance / NWCG

Smoke Safety: The **NWCG Smoke Committee** has a good new [training video](#), “**Smoke, Roads and Safety**.” Topics include identifying the hazard, planning, mitigation and response, and where to find tools to apply to your work.

PODS 101: The **Forest Service** recently posted a **three-video series** about **risk management tools** developed by the Rocky Mountain Research Station Wildfire Risk Management Science Team. Using **speed-drawn cartoons**, the videos very briefly introduce fire management ([video 1](#): Re-forging Our Relationship with Fire), then explain in general terms how quantitative wildfire risk assessment, suppression difficulty index and potential control locations can be used to identify potential operational delineations (PODS)—or, more plainly, answer questions like “How might fire harm or benefit the things we care about?” and “**What can we do to plan for fire?**”

Smokey Gets Some Nuance: The **Southern Research Station** [video](#) “Why Fire is Good (But You Still Shouldn’t Start a Forest Fire)” is a **fun look at the beneficial side of fire**, while still keeping the useful part of Smokey’s message. (It’s focused on longleaf pine, but would probably be a decent intro for folks from elsewhere as well.)

NWCG: The **National Wildfire Coordinating Group** now has a **YouTube channel**. [Current offerings](#) include several case studies and a variety of safety-related videos.

Jobs: Fire Management Program / Fire Ecologist / WUI Coordinator / Executive Director / Fire Modules / Rx Program Manager

Fire Management Program: The **Forest Stewards Guild** hiring **five people** to **staff a new office** in Loveland, Colorado. This includes a [business coordinator](#), a [regional coordinator](#) for the Intermountain West, and three mid-level fire positions on the **Gravitas Peak Wildland Fire Module** (two specialists will support [planning](#) and [training](#) needs, respectively, and a [technician](#) will support logistics). All five positions are posted at <https://www.forestguild.org/jobs>, and applications for all positions are due on **March 16**.

Fire Ecologist: The **National Park Service** is seeking a **fire ecologist** to be based in Springdale, Utah (serving **Zion**, **Bryce Canton**, **Mesa Verde**, **Arches** and other parks in the area). Details are on usajobs.gov (announcement [IM-1539-ZION-19-10433615-ST](#)); applications are due by **March 19**.

WUI Coordinator: The **Utah Department of Natural Resources** is hiring an **area wildland urban interface coordinator** for the southeast part of the state. Details are on the statejobs.utah.gov (filter the search by location (**Moab**) and enter keyword “fire”); applications are due by **March 31**.

Executive Director: **FAC Net** member **Dovetail Partners** is seeking an executive director. See their [news release](#) for details; applications are due by **April 1**.

Fire Modules: Wildland Restoration International is hiring for **two seasonal modules** that will be based in South Carolina, and for a **year-round team** based in Florida. Details for all positions are at <http://wildlandrestoration.org/work-for-us/>.

Rx Program Manager: The **Washington Department of Natural Resources** is seeking a prescribed fire program manager to serve as the **agency's lead expert on prescribed fire**. Details are in the attached flyer.

Webinars

March 21
new listing

Smoke Exposure Health Effects and Mitigations for Wildland Fire Personnel: Current Research and Recommendations

9:00 Pacific / 10:00 Mountain / 11:00 Central / noon Eastern

Presenters on this Northern Rockies Fire Science Network webinar will discuss recent research on lifetime risk from occupational exposure—and field-based experience with successes and challenges of implementing exposure mitigations. Details & registration: <https://www.nrfirescience.org/event/smoke-exposure-health-effects-and-mitigations-wildland-fire-personnel-current-research-and>

March 21
new listing

Engaging Fires Before They Start: Spatial Fire Planning for the 21st Century

10:00 Pacific / 11:00 Mountain / noon Central / 1:00 Eastern

Chris Dunn (Oregon State University) is the presenter on this Northwest Fire Science Consortium webinar. Details & registration: <http://www.nwfirescience.org/events/engaging-fires-they-start-spatial-fire-planning-21st-century>

April 2

Wildfires and Inland Mountain Forests: Is Nonforest Vital to Forest Resilience?

1:00 Pacific / 2:00 Mountain / 3:00 Central / 4:00 Eastern

Paul Hessburg will speak on this Northwest Fire Science Consortium webinar. Details & registration: <http://www.nwfirescience.org/events/wildfires-and-inland-mountain-forests-nonforest-vital-forest-resilience>

May 29

Hot Burns, Cold Burns, and Everything In Between: Exploring Prescribed Burning's Impacts on Forest Structure in the Appalachians

11:00 Pacific / noon Mountain / 1:00 Central / 2:00 Eastern

In this **FLN** webinar (originally scheduled for January 29), Jean Lorber will give a short presentation about new fire monitoring results; this will be followed by case studies of individual burn units, presented by the folks that burned them, to showcase a range of fire intensities and talk about why the units burned the way they did. Join the webinar:

<https://tnc.webex.com/tnc/j.php?MTID=mbf07c315242f99eb3ef9259be168998d>

(or use the attached file HotBurnsColdBurns-29May19 to add it to your calendar)

Network Workshops & Field Tours

April 22-26

Fire Adapted Communities Learning Network Workshop / Ashland, OR

FAC Net core members and key partners will meet at this national workshop.

May 14-16
updated

Southern Blue Ridge FLN / Athens, TN

Join partners for the 14th annual workshop of this regional network.

Details and registration: <https://nature.us6.list-manage.com/track/click?u=d249918d68e8b2816d484693a&id=5f4d5b8e0c&e=0d23243b0e>

November 4-8 rescheduled **Annual FLN Leaders-TREX Coaches-IPBN Workshop / Russellville, AR**
FLN network leads, TREX coaches and IPBN leads will meet at this joint national workshop.

FLN Prescribed Fire Training Exchanges (TREX)

- March TBD** **Yurok Prescribed Fire Training Exchange / Weitchpec, CA**
Rain and snow prevented burning during the February target, so this TREX is on standby for an upcoming burn window.
- March 17-30 cancelled** **Loup River Prescribed Fire Training Exchange / Ord, NE**
This TREX has been cancelled due to continuing wintry conditions that have prevented burn unit prep; the forecast also indicates that ecological objectives of burns would not be met during this window.
Save the date for next year on the Loup River—March 22-April 4, 2020.
- March 18-30 new listing** **Arkansas Prescribed Fire Training Exchange / Little Rock, AR**
This training has been arranged to accommodate some of the participants from the Loup River TREX; see the News from the Field section above for more.
- March 18-29** **Women in Fire Prescribed Fire Training Exchange (WTREX) / Tallahassee, FL**
The deadline for this TREX has passed.
- March 30-April 13** **Niobrara Valley Preserve Prescribed Fire Training Exchange / Ainsworth, NE**
The deadline for this TREX has passed.
- April 28-May 10 new listing** **Cascadia Prescribed Fire Training Exchange / Cle Elum, WA**
Applications for this TREX are due **March 15**.
Information and application: <http://waprescribedfire.org/trex>
- April 29-May 3** **Loess Hills Cooperative Burn Week / Council Bluffs, IA**
Save the date for this week of cooperative burning and learning together.
- April 29-May 10** **Central Oregon Prescribed Fire Training Exchange**
The deadline for this TREX has passed.
- May 13-24** **Ashland Prescribed Fire Training Exchange**
The deadline for this TREX has passed.

Conferences, Workshops, Training, Etc.

- March 16 (or 23) new listing** **Learn and Burn—Controlled Burning for Wildlife / Berea, KY**
This Forest Stewards Guild workshop is primarily aimed at landowners with zero-to-modest fire experience; natural resources professionals are also invited to take part. (March 23 is the back-up date, if live fire isn't possible on March 16.)
Details and registration: <https://www.forestguild.org/node/740>
- March 20-21 dates changed** **Oregon Prescribed Fire Council Annual Meeting / Lakeview, OR**
See below—June 4-5.
- March 26-28** **Wildland Urban Interface Conference / Reno, NV**
Pre-conference events will take place March 23-26.
Information: <https://www.iafc.org/events/wui>

- April 1-3** **After the Flames / Denver, CO**
 This conference is being convened by The Nature Conservancy, Forest Stewards Guild and Southern Rockies Fire Science Network, and hosted by Coalitions and Collaboratives (COCO). It will include sessions on community resilience and preparation, pre-fire planning for post-fire response, and “fantastic failures” (sharing lessons from what didn’t work). [Registration](#) is open.
 Information: <http://aftertheflames.com/>
- April 6 (or 13) new listing** **Learn and Burn—Controlled Burning for Wildlife / Sewanee, TN**
 This Forest Stewards Guild workshop is primarily aimed at landowners with zero-to-modest fire experience; natural resources professionals are also invited to take part. (April 13 is the back-up date, if live fire isn’t possible on April 6.)
 Details and registration: <https://www.forestguild.org/node/744>
- April 11-12 new listing** **Pacific Northwest Forest Collaborative Workshop / Hood River, OR**
 Information: <http://www.nwfirescience.org/events/2019-pacific-northwest-forest-collaborative-workshop>
- April 27-28 new listing** **Wildland Fire Fighter 2 Training / Stinson Beach, CA**
 This training from the Audubon Canyon Ranch will allow participants to earn a certificate enabling them to engage in prescribed burning with the Good Fire Alliance; it is also recognized by the California Office of the State Fire Marshal. Note: must complete S-130, S-190, L-180, I-100c and IS-700b online before attending (links provided). Information: <https://www.eventbrite.com/e/wildland-fire-fighter-2-training-tickets-54552156970>
- April 29-May 3** **6th International Fire Behavior and Fuels Conference / Albuquerque, NM**
 Information: <http://www.firebehaviorandfuelsconference.com/>
- May 4** **Wildfire Community Preparedness Day / Everytown, USA**
 Information: <https://www.nfpa.org/Public-Education/Campaigns/National-Wildfire-Community-Preparedness-Day>
- June 2-5** **North American Prairie Conference / Houston, TX**
 Information: <http://www.northamericanprairie.org/>
- June 4-5 new dates** **Oregon Prescribed Fire Council Annual Meeting / Lakeview, OR**
 The council will meet at the Fremont-Winema NF headquarters; topics will include cross-boundary fuels treatments and navigation of the state’s newly revised smoke management rules.
 Information: <https://www.facebook.com/events/2046390858992771/>
- June 6** **North Georgia Prescribed Fire Council / Jasper, GA**
 Workshop page: <http://www.garxfire.com/events.htm>
- July 23-25 updated** **Fire in Eastern Oak Forests Conference / State College, PA**
 "Laying out a Restoration Road Map" is the theme of this conference organized by the Oak Woodlands & Forests Fire Consortium and Consortium of Appalachian Fire Managers and Scientists, in partnership with the Pennsylvania Prescribed Fire Council. Sessions will cover fire and culture, building capacity, expanding the burn window, and fire effects on flora and wildlife.
 Information: <https://web.cvent.com/event/657273e9-143b-48ba-bcaf-0f04177312d5/summary>

- August 21-23**
new listing **Transforming Approaches to Forests and Forestry through Traditional and Local Knowledges Conference / Vancouver, BC, Canada**
The abstract submission deadline for the 2019 International Union of Forest Research Organizations ([IUFRO](http://www.iufro.org)) conference is March 31.
Information: <http://tek.forestry.ubc.ca/>
- October 1-3** **5th Biennial Shortleaf Pine Conference / Van Buren, MO**
Information: <http://www.shortleafpine.net/shortleaf-pine-initiative/conferences>
- October 21-24**
updated **3rd Annual Cohesive Strategy Workshop / Plymouth, MA**
The call for workshop sessions and presentation proposals is open.
Information: https://www.iawfonline.org/event/2019_cohesive_strategy_workshop/
- Nov. 18-22**
deadline **Cultivating Pyrodiversity: The 8th International Fire Ecology and Management Congress / Tucson, AZ**
The call for proposals is now open. The first deadline—for special sessions, workshops, trainings and courses—is April 1. Info: <http://afefirecongress.org/>

Send News, Links & Comments

Heather Montanye – hmontanye@tnc.org – Heather is in the office.

Jeremy Bailey – jeremy_bailey@tnc.org – Jeremy is in the office.

Marek Smith – marek_smith@tnc.org – Marek is in Atlanta, GA March 11-14; in Chapel Hill, NC March 20; and in DC March 27-28.

Mary Huffman – mhuffman@tnc.org – Mary is in DC March 27-28.

Wendy Fulks – wfulks@tnc.org – Wendy is out March 25-29; and in Denver April 1-3.

Liz Rank (editor) – lrank@tnc.org – Liz is out March 14-15.

Full Links

News from the Field—CA—Article: <http://calag.ucanr.edu/archive/?type=pdf&article=ca.2018a0044>

TIFMP case study:

https://static1.squarespace.com/static/562e839ee4b0332955e8143d/t/5c7d5e326e9a7f0c98fe64f4/1551719996847/Trinity+Partnership_Final-withUSFS_030419_WEB.pdf

News from the Field—CO—Spatial planning blog post: <https://fireadaptednetwork.org/collaborative-spatial-fire-management-getting-ahead-fire-using-potential-operational-delineations/>

Report: <https://www.whitehouse.gov/wp-content/uploads/2019/02/Administration-2018-ST-Highlights.pdf>

News from the Field—CO—Everyday hero: <https://www.thedenverchannel.com/news/7everyday-hero/7everyday-hero-john-van-doren-works-to-cut-wildfire-risk-in-bailey-colorado>

More: https://x-default-stg.ec.uplynk.com/ausw/slices/d89/0e3a3b3bc3ae4d6eac785fb8a26bdb6b/d89f4f721b3747a586bc7ba11560d536/d89f4f721b3747a586bc7ba11560d536_g.mp4

News from the Field—NM—Blog post: <https://fireadaptednetwork.org/how-the-forest-stewards-guild-is-building-the-next-generation-of-fire-practitioners-the-forest-stewards-youth-corps-fire-and-fuels-program/>

Fall 2019 info: <https://www.forestguild.org/FSYCFall>

News from the Field—TREX—Blog post: <https://fireadaptednetwork.org/stop-focusing-on-ignitions-and-start-investing-in-a-prescribed-fire-workforce/>

Webinar recording: <https://www.youtube.com/watch?v=Yj-SjhdqPII&feature=youtu.be>

Opportunity—Eco-entrepreneurs: <https://www.techstars.com/programs/sustainability-program/>

Accelerator program:

https://docs.google.com/presentation/d/1smkLBkxmKXOCb_w9tz_Wv_rsqEcrSmtsdxTsj9neK3s/edit#slide=id.g3cfa3e2fd10_1070

Apply: <https://www.f6s.com/sustainabilityaccelerator2019/apply>

Resources—Drones: <https://www.nwccg.gov/publications/515>

Resources—LANDFIRE—Remap: https://landfire.gov/lf_remap.php

Data call:

http://www.conservationgateway.org/ConservationPractices/FireLandscapes/LANDFIRE/Documents/LANDFIRE_DataCall_Letter_2018.pdf

Resources—Social media accessibility: <http://exploreaccess.org/social-media/>

Resources—Vulnerable populations: <https://www.naccho.org/uploads/downloadable-resources/Capacity-Building-Toolkit-for-Aging-and-Disability-Networks-2-5-19.pdf>

Articles--Restoration scales: <http://www.water-alternatives.org/index.php/alldoc/for-authors/488-a12-1-14>

High Country News article: <https://www.hcn.org/articles/tribal-affairs-in-california-the-karuk-tribe-fights-a-growing-wildfire-threat-and-a-lack-of-funding>

Articles—Natural climate solutions: <http://advances.sciencemag.org/content/4/11/eaat1869>

Videos—Smoke safety: <https://www.youtube.com/watch?v=aEO2F2rk3s0>

Videos—PODS 101: <https://www.youtube.com/watch?v=c0ZN-zIkwEs&list=PLNsZX2SBTIVn1ce0I9-0C6CCbID0j2kwn>

Videos—Smokey gets some nuance: <https://www.srs.fs.usda.gov/video/why-fire-is-good/>

Videos—NWCG: <https://www.youtube.com/channel/UC2UGc-Go278iRaagyubl6VQ/featured>

The Fire Learning Network is supported by *Promoting Ecosystem Resilience and Fire Adapted Communities Together: Collaborative Engagement, Collective Action and Co-ownership of Fire*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior.

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Fire Learning Network Notes from the Field

State Line Burn: Collaboration Across the Border of North and South Carolina

Southern Blue Ridge Escarpment FLN
January 26, 2018

An Interview with Brian Browning by Cynthia Fowler and Kaycia Best

Brian Browning is the fire management officer for the Nantahala Ranger District of the Nantahala National Forest. Cynthia Fowler is a professor of anthropology and the chair of the Sociology and Anthropology Department at Wofford College in Spartanburg, South Carolina. Kaycia Best is a student at Wofford College, double majoring in sociology-anthropology and biology.

Conducting a controlled burn across national forest boundaries and state lines requires cooperation and a well-oiled team of fire managers. The multiagency team that conducted the State Line Burn had the esprit de corps to successfully implement a prescribed fire in the mountainous terrain of the Nantahala Ranger District in North Carolina's Nantahala National Forest and the Andrew Pickens Ranger District in South Carolina's Sumter National Forest. The 1,762-acre burn included 956 acres in North Carolina and 806 acres in South Carolina. We spoke with burn boss Brian Browning about what made it work.

What stands out about the State Line Burn?

What is unique about this burn is that it crossed boundaries. Our team in the Nantahala district in North Carolina and our friends in the Andrew Pickens in South Carolina were looking for opportunities where we logistically could do a prescribed burn. Between our districts, we found a piece of property where there is a state line but no break in national forest lands.

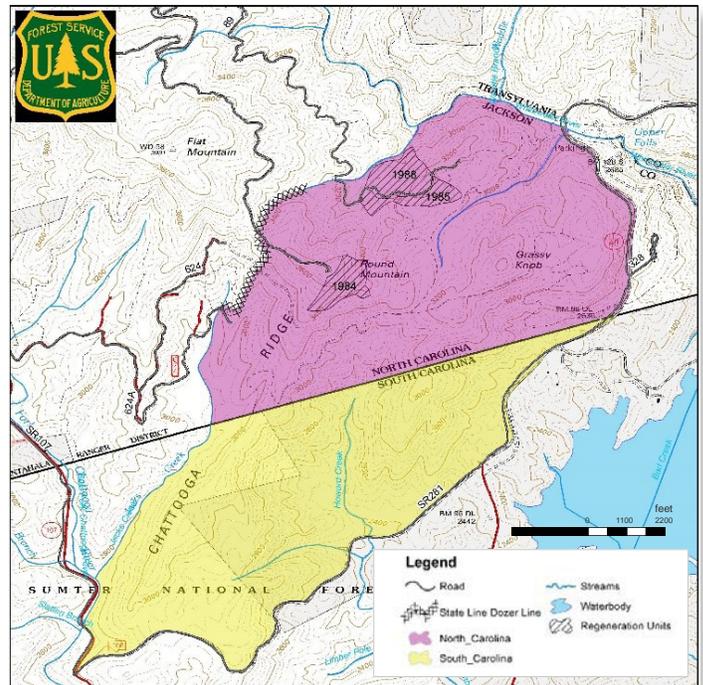
Why did you choose this location to burn?

When you look at the topography, at the other features that are there on the ground, it was a fairly large area, what we'd consider a landscape burn. Most of what we used for containment was either state road or water—creeks or a river. So it didn't take adding very much containment line at all. The less containment line that we can get by with, the better. So it really stood out as a large area that we could burn with minimal effort.

What's the process of choosing where to burn?

I spend a lot of time looking at maps and looking on the ground to figure out if this is an area that we have the control lines to keep it contained. Once you know that it's an area that you want to burn, you ask, Can we keep it in this area and not let it get loose? Can we feasibly construct control lines if they are not already in place? Can we get the resources to do it?

Once you have an idea of where you'd like your control lines to be, then you submit that map and then your specialists—your archaeologist, your botanist, your wildlife person, and all those people—are going to look at it and make sure there are no issues from their standpoint. For example, talking with



the botanist about this as a good area, we asked, Do you feel comfortable with fire being in this area? You have those yellow pine species in that area—that's typically a pretty good indicator that fire would be a welcome thing there.

We here at the Nantahala district have worked with the Andrew Pickens district for years, too. We've helped to do their prescribed burns and they've helped us out a lot over the past years. Having that relationship already was key. It wasn't difficult for us to come together on the day of the burn because we were used to working together.

I've been here for 17 years and what we called the Tri-State Agreement was in place then (it's not called that anymore). It was an agreement between the three districts—the Andrew Pickens in South Carolina, what's now the Chattooga River district in Georgia and the Nantahala in North Carolina. The districts share boundaries where the states come together. The agreement was a way to get the districts talking about wildfires and prescribed burning. It makes it easier to share resources across district and state boundaries. We've helped both those districts with wildfire and prescribed burning, and vice versa.

And when we were talking about burning this unit, Wes Bentley became the assistant fire management officer in the Andrew Pickens district, transferring from the Chattooga River district in

the Chattahoochee-Oconee National Forest. I've worked with Wes for years. That made accomplishing the burn a little easier.

Tell us about the process for planning and preparing the burn.

Both forests came together and ensured that we were comfortable with the process and exactly how we were going to work through it. The planning included making sure our control lines were going to be viable on both sides, on both forests, and working on who would be in what position on the day of the burn; and how we would work that.

At first we planned on doing one NEPA document. But we decided it would be easier for each forest to do their own. So we had to wait until both forests completed the NEPA process.

Another key part of planning was making sure that we had good communications. Some of the communications details we didn't really iron out very well, honestly, until the day of the burn when we realized, Hey what we are planning isn't going to work. It was kind of rough there for a minute to figure that out.

Another big communication thing was what dispatch we were going to use. Because it was a helicopter burn, and the Andrew Pickens people had requested the helicopter, we ran all of our communications out of the Columbia dispatch for the Andrew Pickens. I was talking with my dispatch center in Asheville as well. But if we had had an emergency and had to request something, it would have been out of the Columbia dispatch.

In a burn plan, we state what resources we will need for the burn. So we just worked together between the two districts to ensure that we had all of the resources that we felt like we would need to be successful.

Did you have one burn plan, or two?

That was one of the first things that we talked about: Do we do two separate burn plans, or just one? There were a few things due to different agreements in North Carolina and South Carolina—air quality and stuff like that—and some standalone things in the burn plan specific to each national forest. But we just did one burn plan. I wrote it, then Wes [Bentley, from the Andrew Pickens district] did the technical review. And we got the district rangers and specialists—the botanists, wildlife biologists, fisheries biologists, silviculturalists, archaeologists, recreation assistants—from both of the forests sign the one burn plan.

Who was on the burn?

We had a trainee burn boss and we wanted to let him run the burn, so I worked with him in that capacity. We originally talked about Wes being the firing boss. Then we decided that the best thing he could do, since he had the same qualifications as I did, was to not have him in an official role, but just kind of hold back and monitor the burn.

We had four of our Type 6 engines—two off of the Nantahala district, one off of Andrew Pickens district, and we brought one in from the Tusquitee Ranger District here in North Carolina. Primarily their job was to patrol the highways, because we used a lot of state highways for containment lines, and to burn off or clean up any edges at the end of the burn. We had a few people in pickup trucks that could patrol the control lines on the state roads, helping the engines patrol. We also had a bulldozer, to contain the fire in case something did go wrong.

We had one section of dozer line where we used a hand crew that fired off a section of dozer line, and then they held that

dozer line to make sure it wasn't going to go anywhere. And we had a firing boss in the helicopter. That person directed where the helicopter was going and firing. And we had one guy that hung out at Round Mountain, which was the high point of the burn unit, where he could keep an eye on the helicopter and make sure everything was going good with it.

We also tried hard not to have just South Carolina people working with South Carolina people. Like I said, it's not a big deal for us to come and just mix everybody together and be able to work well together. That's exactly the way we did it.

How did topography come into play here?

When you are burning in the mountains, most of our fire is terrain driven instead of wind driven. In the eastern part of the state, you'd be more concerned with the wind as far as your firing patterns go. In the mountains our firing pattern is going to be based on the terrain. Not that you don't pay attention to the wind—because you absolutely do—but for the most part, your fire pattern is going to be terrain influenced.

This wasn't a stand replacement burn. It was a fuels reduction burn, so we didn't want it to burn real hot. We wanted it to clean up those ground fuels. So lighting from the highest elevation, and letting it burn down is typically how we do that.

Sometimes our exact pattern is determined on the day of the burn. The weather plays into that: What kind of fire behavior you are seeing? And what type of resources are you using? We were using a helicopter on this, so it was pretty easy for him to start at the highest elevations and work his way down the mountain. Then, depending on your fire activity, you can change how you're firing with that helicopter real easy. If it's burning too hot, you can either narrow your strips up or you can fire your ridgetops and let your fire back off. If it's not burning with enough intensity, you can widen your strips and then let that fire have a little more distance to run. You have to be pretty flexible with it and be paying attention. That's where having someone—a firing boss in that helicopter that has some experience—really pays off because they'll know when they need to adjust their pattern to get the results you're looking for.

Do you have any lessons learned or advice you want to share?

Through that planning process, it doesn't hurt to get into the smallest details and talk those out between the districts or whoever the cooperators are that will be working together. Get into the weeds and make sure you are talking about those smallest details before the day of the burn.

I mentioned some of the communications stuff. All of a sudden there, in the briefing the day of the burn, we realized that there was a communications issue that we had not worked out yet. Just really make sure you look at even those minute details and make sure that you have talked your way through that to make sure there is as little confusion as possible.

For more on the Southern Blue Ridge regional FLN, visit <http://www.sbrfln.com>

The Fire Learning Network is part of *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. For more information about PERFACT, contact Marek Smith at marek_smith@tnc.org.

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JOB OPPORTUNITY – Prescribed Fire Program Manager



WASHINGTON STATE DEPARTMENT OF **NATURAL RESOURCES**

Service, Science, Sustainability

Under the leadership of the Commissioner of Public Lands, our work at the Department of Natural Resources (DNR) is done with the public's interest in mind, which means transparency and public knowledge. Our decisions are guided by sound science as we manage state trust lands, native ecosystems and natural resources. We support the vision of a sustainable future by protecting and managing the natural resources so future generations will have them.

DNR manages over 5 million acres of state-owned land that includes forest, range, commercial, agricultural and aquatic lands. We generate revenue that supports public schools, state institutions and county services. But managing lands is only half of our story. We also protect other public resources such as fish, wildlife, water, and provide public access to outdoor recreation. Two of our largest and most important state-wide resource protection responsibilities are fire prevention and suppression, and overseeing forest practices.

The DNR has an annual operating budget of approximately \$245 million and has over 1300 permanent employees with approximately 500 additional staff hired during the summer fire season.

We have some of the most talented people in the industry. We honor diversity in the workplace and support one another with respect and trust. We invite you to learn more about our culture, our careers, and why some of the top forestry and natural science professionals have joined Washington DNR by visiting our [DNR website](#).

Prescribed Fire Program Manager

Salary Range – \$66,120 - \$84,396

Type of Position – Permanent, Full-time.

Location – DNR Headquarters - Olympia, Washington

Position Overview

Serves as the agency's lead expert on prescribed fire – use, application and implementation. The primary purpose of the position will be to provide leadership in the

JOB OPPORTUNITY – Prescribed Fire Program Manager

use and applicability of prescribed fire in Washington, develop a prescribed fire program within the agency and develop a prescribed burn certification program for those who practice prescribed burning in the State of Washington (see RCW 76.04.183). This position serves as a mid-level manager providing oversight and program advocacy for the appropriate use of prescribed fire as well as long-term growth and viability of the program. The position will provide support for the successful operational use of prescribed fire in helping to achieve the goals of the agency's 20-year Forest Health Strategic Plan for Eastern Washington (<https://www.dnr.wa.gov/ForestHealthPlan>). Additionally, the position will be expected to collaborate with other prescribed fire experts within the region and regularly report on the use, application, implementation and effects of prescribed fire in Washington with an emphasis in forested ecosystems.

Required Education & Experience

- Bachelor's degree or higher in fire science, fire ecology, forestry, other applicable field.
- Minimum 10 years of experience as a wildland firefighter with experience in PNW or similar fuel types and use of prescribed fire.

Required Qualifications

- Knowledge of forest & fire ecology in the PNW or similar ecosystems and successful management strategies to address those issues.
- Demonstrated successful experience with fuels & vegetation management, fire management, and prescribed fire plans.
- Proven skills in the development and/or implementation of a similar program at the local, state or federal level.
- Prescribed fire and fuels management - experience in activities such as:
 - Professional forest or range inventory methods and procedures (e.g., Brown's planar intercept for dead and down fuels; fuel loading assessments)
 - Analysis of fuel loadings and determination of appropriate fuel treatment methods
 - Evaluation of prescribed burn plans or fire management plans
 - Conducting surveys before and after prescribed fires to determine attainment of resource objectives
- One year of experience in successfully administering contracts, interagency agreements, grants, or other partnership agreements.

Preferred Education/Certification

- Currently qualified as NWCG RXB2 or higher OR RXM2 or higher.

Working Conditions & Special Position Requirements

- Travel is required including overnight travel – lodging/meals covered.
- Must have valid Washington driver's license; this position requires driving as an essential function. Employees who drive for state business, whether in a state or privately owned vehicle, are required to possess a valid driver's license as defined in agency policy PO02-006 and abide by all other driver responsibility requirements.

JOB OPPORTUNITY – Prescribed Fire Program Manager

- Use/application of prescribed fire which will require ability to navigate on foot varying & diverse terrain; ability to work in smoke filled environment.

For More Information Contact Julie Sackett at 360-902-1765 or julie.sackett@dnr.wa.gov.