FLN Networker No. 164: August 6, 2014

The FLN Networker is a publication of the Fire Learning Network—a partnership of the USDA Forest Service, Department of the Interior (BIA, BLM, National Park Service, US Fish & Wildlife Service) and The Nature Conservancy—intended to foster communication within the network and among its friends. Submit comments, links and subscription requests to Liz Rank. For more about the FLN, visit www.conservationgateway.org/fln or contact Lynn Decker.

News from the Field

California: After a seven-workshop planning effort (based on the Open Standards), the **Western Klamath Restoration Partnership** has completed a **plan for restoring fire adapted landscapes**. The <u>document</u> includes some background on the landscape and the collaboration, a description of the work they have done over the last months, and a set of **prioritized proposed treatments**. For more information, contact **Will Harling** (<u>will@mkwc.org</u>) or **Bill Tripp** (<u>btripp@karuk.us</u>).

North Carolina: The latest CAFMS newsletter (excerpt attached) captured an email conversation about a recent growing season burn on the Grandfather CFLRP project.

Oregon: Last week, amid numerous wildfires in the state, Bend **TV station** KTVZ ran a <u>special report</u> titled "**Wildfires are Not All Bad**." Among those getting that word out were NW FLN lead **Pete Caligiuri** (<u>pcaligiuri@tnc.org</u>) and local FAC Net hub lead **Alison Green** (<u>projectwildfire.pw@gmail.com</u>).

Washington: And next door, the **TNC** state director, **Michael Stevens**, had a **guest op-ed** in the *Seattle Times* ("In the Wake of State's Fires, Learning How to Fix the Health of the Forests"). In <u>the piece</u> he stressed the importance of **preparation** for, rather than just reaction to, fires. In addition to the value of **restoration** work, he highlighted the work of the **Chumstick Wildfire Stewardship Coalition** and the **FAC Learning Network**.

Fire Adapted Communities: The <u>latest issue</u> of *Fire Management Today* focuses largely on fire adapted communities. Among the **must-read articles** are an introductory article on FACs by **Pam Leschak** and another by **Molly Mowery** and **Cathy Prudhomme**. The article "**Adopting a Learning Network Approach** for Growing Fire Adapted Communities" (**Nick Goulette**, **Lynn Decker**, **Michelle Medley-Daniel** and **Bruce Evan Goldstein**) discusses the **development of the FAC Learning Network**, based on the successes and **lessons of the FLN**. And the article on the Ready, Set, Go! program was written by Florida FAC LN hub lead **Ronda Sutphen**. Just read the whole issue.

TREX: An <u>article</u> by **Daniel Godwin** and **Jena Ferrarese** in the current issue of *Fire Ecology*, "**Student Wildland Fire Groups**: Common Challenges and Shared Solutions," mentions **prescribed fire training exchanges** under the "**Common Successes**" heading. This AFE journal now has its own website, called, unsurprisingly, <u>http://fireecologyjournal.org/</u>.

Posters: The **posters** from the **FAC Net-FLN workshop** in June are now available online—the <u>FAC Net</u> <u>posters</u> are linked to a page on the network's website that describes the 18 hub organizations, and the <u>FLN posters</u> are on the Conservation Gateway. Note to leads: contact **Liz Rank** (<u>Irank@tnc.org</u>) if you want your **poster corrected or updated** at any time.

Semi-Annual Report: Thanks to everyone involved with PERC for a great deal of good work (as always) over the last half year. A full report on that was submitted last week. A few highlights were collected into a set of 2-pagers (and one 4-pager) to print and share as introductions to the various areas of work: Fire Learning Network, Fire Adapted Communities Learning Network, prescribed fire training exchanges, SPER implementation projects and media and outreach efforts.

Reports: Scenario Planning / In the Anthropocene

Scenario Planning: The U.S. Fish & Wildlife Service report "Considering Multiple Futures: Scenario Planning to Address Uncertainty in Natural Resources Conservation" takes an approach long used in military strategy and land-use planning and applies it to conservation. Among its uses are exploring plausible futures to anticipate surprises, and to understand how current decisions may limit future options.

In the Anthropocene: The collection of papers in the <u>report</u> "Forest Conservation and Management in the Anthropocene: Adaptation of Science, Policy, and Practices" formed the basis of the September 2013 symposium on the topic held by the Pinchot Institute. The report addresses "the uncertainties associated with [the effects of human activities that] are creating a 'no-analog future' in which much of the existing science relating to the functioning and response of forest ecosystems."

The **Rio Grande Water Fund**—in which the FLN is a partner in New Mexico—is one of the **case studies** in the paper "Water Source Protection Funds as a Tool to Address Climate Adaptation and Resiliency in Southwestern Forests" by **Laura McCarthy** (pdf pages 351-356).

Articles: Klamath Fire Exclusions / Wildfire Trends / End of Sustainability

Klamath Fire Exclusion: The <u>article</u> "The Politics of Fire and the Social Impacts of Fire Exclusions on the Klamath" explores in depth the interrelated **ecological and social effects** on Karuk tribal members of the last century of fire management in this landscape.

Wildfire Trends: The <u>article</u> "Large Wildfire Trends in the Western United States, 1984-2011" in *Geophysical Research Letters* analyzed a database of large fires to identify trends in number and area of large fires. Both trends were upward, most significantly in the mountain and southern ecoregions of the West.

End of Sustainability: A <u>brief version</u> of the article "The End of Sustainability" summarized its argument that the concept of sustainable development may need to give way to the concept of resilience, or adaptive governance and adaptive management.

In the News: Homes at Risk / Small Steps

Homes at Risk: The *Denver Post* <u>recently reported</u> on a study by a company that provides real estate and financial information that indicate that **more than 10%** of the homes in **Colorado** are **highly vulnerable** to wildfires. Montana and Oregon aren't far behind.

Small Steps: *National Geographic* ran an <u>article</u> titled "New Wildfire Science Shows that Small Steps Can Save Homes, Communities." Among the work featured is that of Steve Quarles (see webinar listing below).

Jobs: Forest Program Associate / Program Managers

Forest Program Associate: Sustainable Northwest is hiring an associate who will, among other things, assist in the development and functioning of **collaborative networks**; the position is based in Portland, OR. For more information, see the <u>SNW website</u>; applications are due by **August 22**.

Program Managers: The Forest & Watershed Restoration Institute at **New Mexico Highlands University** is advertising two positions—a **Collaboration Program Manager** and a **Restoration Monitoring Program Manager**. Details are in the attached flyers.

Webinars

 August 19
 Mulch Combustibility: Choosing the Right Type for Your WUI Home

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

 In this Firewise webinar, Dr. Stephen Quarles will discuss the properties of

 various kinds of mulch and their potential to ignite from wildfire embers. You must

 pre-register—attendance is limited to 100.

Info: http://firewise.org/online-courses-and-education/virtualworkshops.aspx?sso=0

FLN Workshops

new listing

December 2-3 California Prescribed Fire Conference / McClellan, CA

Save the date: The Northern California Prescribed Fire Council, Southern Sierra Prescribed Fire Council and other partners will be hosting this conference focused on increasing the pace and scale of fire-based treatments both managed wildfire and landscape-scale prescribed fire—in California. An agenda and other information will be available soon.

FLN Prescribed Fire Training Exchanges

September 14-30 Spanish-Language Prescribed Fire Training Exchange / northern NM This Spanish-language TREX, supported by Scaling-up to Promote Ecosystem Resilience (SPER), will combine capacity-building and strategic implementation of fire on lands in and around the Santa Fe NF. (Application deadline passed.)

Sept 23-Oct 4 Arizona Prescribed Fire Training Exchange / Flagstaff, AZ The Arizona Prescribed Fire Council will host this TREX, which will help build capacity near Flagstaff, a FAC Learning Network pilot community. The 20 participants will stay at TNC's Hart Prairie Preserve and conduct controlled burns on strategic state, federal and private lands during this SPER-supported event. The application deadline has passed.

- Sept 29 Oct 11Klamath River Prescribed Fire Training Exchange / Orleans, CADEADLINESee the attached flyer for information on this TREX. Applications are due by
August 11 (note that there is a single form for both this and the NorCal TREX).
- October 13-26 Northern California Prescribed Fire Training Exchange / Arcata, CA DEADLINE See the attached flyer for information on this TREX. Applications are due by August 11 (note that there is one form for this and the Klamath River TREX).

Conferences, Workshops, Etc.

 August 21
 Pinaleño Field Trip / Safford, AZ

 This one-day SW Fire Science Consortium field trip will explore the fire and disturbance history of the Pinaleño range and management plans to restore mixed conifer and spruce-fir through the Pinaleño Ecosystem Restoration

 Project. It will include visits to the areas affected by the Nuttall-Gibson (2004) and Clark Peak Fires (1996).

 Information: http://swfireconsortium.org/events/

September 16-18	State-and-Transition Simulation Modeling Conference / Ft. Collins, CO Co-sponsored by the USGS, TNC and Apex Resource Management Solutions, the event includes an optional one-day training on ST-Sim software and two days of presentations on a range of topics. Information: www.stsm2014.org
October 20-31	Mississippi Wildland Fire Academy / Pearl, MS Among the courses being offered at the Southern Regional Fire Training Center during this time is Rx301 Prescribed Fire Implementation. Info: <u>http://www.mfc.ms.gov/pdf/Training/2014_Wildland_Fire_Academy.pdf</u>
October 21-24	Longleaf Conference & Eastern Native Grass Symposium / Mobile, AL Information: <u>http://www.cvent.com/events/our-roots-run-deep/event-summary-</u> e7799b2b1c014d61a029c82d19126b05.aspx
October 22-24, 2015	Backyards & Beyond: Wildland Fire Education Conference / Myrtle Beach, SC
save the date	The deadline for abstracts for next year's NFPA conference is this August 29. Information: <u>http://www.nfpa.org/training/backyards-and-beyond?order_src=C365</u>
Nov. 16-20, 2015	Fire Ecology & Management Congress / San Antonio, TX
save the date	The dates for the 6th international congress of the Association for Fire Ecology have been set. Information: <u>http://afefirecongress.org/</u>

Send News, Links & Comments

Lynn Decker – <u>Idecker@tnc.org</u> – Lynn is out August 6-8 and August 14.

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

Wendy Fulks - wfulks@tnc.org - Wendy is in the office.

Mary Huffman - mhuffman@tnc.org - Mary is in the office.

Heather Montanye – <u>hmontanye@tnc.org</u> – Heather is in the office.

Guy Duffner – <u>aduffner@tnc.org</u> – Guy is in the office.

Liz Rank (Networker Editor) – <u>Irank@tnc.org</u> – Liz is in the office.

To stop receiving the FLN Networker, please reply to this message and include your request in the body of the message.

Full Links

News from the Field—Oregon TV: <u>http://www.ktvz.com/news/special-report-wildfires-are-not-all-bad/27196602</u>

News from the Field—WA op-ed: <u>http://nature.ly/1roBfK0</u>

News from the Field—FAC Net posters: http://facnetwork.org/participants/

FLN posters: http://www.conservationgateway.org/ConservationPractices/FireLandscapes/FireLearningNetwork/ RegionalNetworks/Pages/Workshop-Posters-2014.aspx

News from the Field--Semi-annual report: <u>http://www.conservationgateway.org/ConservationPractices/</u> <u>FireLandscapes/FireLearningNetwork/Pages/PERC-Report-July-2014.aspx</u>

Reports—Scenario planning: http://www.fws.gov/home/climatechange/pdf/Scenario-Planning-Report.pdf

Reports—In the Anthropocene: http://www.treesearch.fs.fed.us/pubs/46127

Articles—Klamath fire exclusion: http://www.humboldt.edu/hjsr/issues/issue%2036/08_NORGAARD_Fire_Exclusion_on_the_Klamath.pdf

Articles—Wildfire trends: http://gallery.mailchimp.com/934b7746792f1dee6f60ea043/files/526e1f80-afde-4d8d-8698ea169f7d03a0.pdf

Articles—End of sustainability: http://ensia.com/voices/the-end-of-sustainability/

In the News—Homes at risk: <u>http://www.denverpost.com/business/ci_26247559/colorado-leads-country-share-homes-most-vulnerable-wildfires</u>

In the News—Small steps: http://news.nationalgeographic.com/news/2014/07/140730-fire-science-fireproofing-wildfire-california/

The Fire Learning Network is supported by *Promoting Ecosystem Resiliency through Collaboration: Landscapes, Learning and Restoration*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior.

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Notes from the Field - Observations on Growing Season Burns in the Appalachians: An email Discussion

Adam Warwick (The Nature Conservancy, Stewardship Manager, Southern Blue Ridge):

I thought you folks might be interested in this and wanted to get it out while it was still fresh. I helped out yesterday (July 8, 2014) on a growing season burn and just wanted to provide you with some initial observations since this was the first ever growing season prescribed burn conducted by US Forest Service in the NC mountains.

So this was a planned prescribed burn on the Grandfather Ranger District supported by Grandfather CFLR funds. It consisted of 560 acres with one previous dormant burn in 2012. The unit lies about 1.2 miles west of Wilson Creek, 4 miles SW of Linville and 2 miles SW of Grandmother Mountain and was comprised of about 70% Mesic Oak Hickory, 25% Acidic Cove, 5% Pine-Oak Heath. The unit is bordered to the south by Roseboro Road and east by Rockhouse Creek and west and north by an unnumbered USFS road.

The window became available as we have had about 9 days of relative drying time with no significant rainfall in the area and humidity was projected to reach a minimum of 48% with high temps in the upper 80's. The objective of this burn was Hazardous Fuel Reduction with 70-90% topkill of hardwood midstory. Initial discussions at the briefing amongst those that have had experience with fighting wildfire was that we could expect low intensity 1-2' flame lengths, which if obtained would meet our objectives. The same personnel cautioned that in their experience, 4-5' flame lengths in mid-summer would likely result in greater mortality of mature hardwoods, which we wanted to avoid. Ignition was by hand and consisted of 3 ignition teams of 4-5 people each with about 25 holding personnel.

Results: Unfortunately, the lowest site recorded humidity reached during the burn was around 63%, although I observed as low as 55% on my Kestrel. Regardless, it ranged from 60-70% throughout the day and was pretty difficult to get it to burn even with what I believe was mostly in some pretty receptive fuels. Generally, following ignition we'd get good initial intensity, but it would weaken pretty quickly. Intermittent 10mph gusts, cloud breaks, and canopy gaps would help increase intensity and spread, and certainly areas where we would strip farther down and get some run upslope helped as well, but again there was the hesitance with what greater overstory mortality and of course you don't get near the residence time on midstory hardwoods.

A rough visual estimate for the burn would be about 20% topkill of hardwood midstory, but I think we made a dent and that is an accomplishment for an initial growing season burn. The humidity just stayed a little too high and I think if it had gotten down to what was predicted, we would have come close to meeting the objectives.

Other: No accidents, no injuries. Dragging a drip torch through Rhododendron and 70% slope is tough work in February. You really have to stay on top of hydration and rest when you're doing it in July, (and generally try to avoid mountain biking 10-miles the previous day).

Tom Waldrop (USFS, Research Forester, Southern Research Station):

Thanks Adam. This is interesting stuff. When I was a young FS employee, the burn boss on the Andrew Pickens District had a rule of thumb about humidity and summer burning. He said you could burn at 60% RH in a clearcut for site preparation. For understory burning, however, RH had to be 50% or less. It seems that rule applied yesterday.

Mike Brod (USFS, District Wildlife Biologist, Chattahoochee-Oconee NF):

Thanks for sharing, Adam. I've had the same observations as you mention (see photo below). We had a successful GS burn a few weeks ago with around 50% RH; however, I wouldn't want to burn with any higher humidity than that. I think 40% to 45% RH would be ideal here in the mountains, but those days are hard to come by in the summer. However, like you mention, if you get a good window in in the summer, all you need is 1 - 2 foot flames to meet your objectives. Fire fighter safety and hydration are much higher of a concern for the "growing season" burn boss than escaped fires. We are going to try some growing season helicopter burns next season to minimize firefighter exposure.

Also, like you mentioned, for best chances of success in the mountains, focus on the pine communities with open canopy.

Tom Ledbetter (USFS, FMO on the George Washington & Jefferson NF):

It is encouraging to see that other folks in the mountains are starting to burn in the summer. We attempted to burn a 900 acre piece of New Road Run in the summer of 2009, but were only able to burn approximately 200 acres. In 2010 we came back and did the whole 900 acres and achieved very good results. You can certainly see the difference up there today between those 900 acres and what has since been burned in the spring. RH that day got down to 44%, dry bulb of 89, winds were westerly at 2-3 resulting in HFFL of 3'. To me those were optimum conditions. One parameter that I would add would be a heat index of <105. Though we didn't get any spots that day, production is limited in those conditions. We had planned at least one summer burn for this year but it looks like the budget won't allow that, but in future years we would like to do at least one summer burn. I really do believe this can really help us speed up the restoration process.



One week after a smooth coneflower/woodland restoration growing season burn completed on June 26, 2014 at Frady Branch on the Chattooga River RD in NE Georgia. As you can see, the low intensity fire did great job top-killing the hardwood understory and midstory.

Communicate With Us!



Find us on twitter @APfirescience or find us on Facebook by searching Consortium of Appalachian Fire Managers and Scientists.

Join CAFMS:

The consortium is for all land managers and researchers in the region who deal with any aspect of fire. To join, simply provide us with some contact information at the web site listed below.

https://spreadsheets.google.com/viewform?formkey=dDNiUnFrYzNNVU00dkxka1hKM2p0cFE6MQ

www.CAFMS.org

Helen Mohr helen@cafms.org

Tom Waldrop tom@cafms.org

NEW MEXICO HIGHLANDS UNIVERSITY Las Vegas, New Mexico PUBLIC VACANCY NOTICE

Posting Date: July 24, 2014	Application Deadline: Open Until Filled
Position: Collaboration Program Manager	Salary Grade: 16
Department: Forest & Watershed Restoration Institute	Minimum Starting Salary: \$51,491
Job Type: Full-Time/12 Months	FLSA: Exempt
Reports To: Director of FWRI	

Summary: The incumbent in this position is responsible to bring together stakeholder groups, facilitate cooperative action, and compile lessons learned from collaboration. The incumbent analyzes the social implications of biomass utilization and coordinates public outreach and education around forest health, fire use, and smoke production. The incumbent will catalyze the transition of the Southwest's renewable natural resource economy and culture. In addition, the incumbent will teach one course per semester in the newly SAF-accredited Forestry program in the Department of Natural Resources Management.

DUTIES & RESPONSIBILITIES:

- Serve as the Forest Watershed Restoration Institute's (FWRI) specialist in community collaboration, facilitation, and socio-economic dimensions of restoration.
- Work with federal, state, tribal, and local land management agencies to facilitate collaboration and actions that result in landscape-scale, restoration-based fuel-reduction treatments in woodlands and forests;
- Develop public awareness of the importance of fire in forest ecosystems and restoration;
- Represent FWRI in local, regional, or statewide collaborative watershed restoration and watershed working groups;
- Chair or facilitate meetings of standing or ad hoc committees and working groups;
- Engage in outreach and applied research in the area of collaborative natural resource management, especially as it relates to watershed restoration;
- Analyze socioeconomic data and prepares project reports and assessments;
- Provides field supervision of students or other staff;
- Teach one social science course a semester in the Forestry program;
- Acquire other funding for institute activities from federal, state, and private sources;
- Maintain regular attendance and punctuality;
- Perform additional duties as assigned by the FWRI Director.

MINIMUM JOB REQUIREMENTS:

- <u>Education</u>: A Ph.D. Degree in Anthropology, Rural Sociology, or a closely related field. (A Master's degree in a social science field with six (6) years of demonstrated applied research and experience in collaborative natural resources management may substitute for the Ph.D. degree.)
- **Experience:** Two (2) years' experience directly related to the duties indicated above.
 - **Preference:** Experience with the national Collaborative Forest Landscape Restoration Program and/or the Collaborative Forest Restoration Program in New Mexico, and fluency in Spanish.

SPECIAL REQUIREMENTS:

- Must possess and maintain a valid NM driver's license. Selection of an out of state candidate will require possession of a valid New Mexico Driver's license within sixty (60) days of employment.
- Must be willing to work weekends, evenings and odd hours as required
- Must be willing to travel.

<u>Continued employment is contingent upon grant funding</u>

KNOWLEDGE, SKILLS, AND ABILITIES:

- Knowledge and experience in facilitation of collaborative land management;
- Ability to work collaboratively with people of diverse backgrounds on natural resources issues;
- Ability to communicate effectively to diverse professional and public audiences;
- Ability to acquire federal and state grants, contracts, and other forms of funding;
- Ability to plan and conduct applied research in the broad area of collaborative natural resource management;
- Ability to write technical reports for internal and external publication;
- Ability to teach graduate and undergraduate students;
- Knowledge and experience facilitating collaborative groups;
- Ability to work productively, professionally and collegially with colleagues and diverse external stakeholders, as attested to by professional references;
- Knowledge and experience preparing information and findings and presenting information orally, in formal and informal settings, as demonstrated by documented products of these efforts;
- Knowledge and experience in applied research in an area of collaborative natural resource management;
- Knowledge, familiarity, and experience in New Mexico;
- Knowledge and familiarity with geographic information systems (GIS);
- Knowledge and familiarity with economic principles, data, and analysis.

PHYSICAL DEMANDS:

- SittingFrequently
- Standing.....Frequently
- Walking.....Frequently
- Bending.....Occasionally
- Squatting.....Occasionally
- ClimbingOccasionally
- KneelingOccasionally
- Lifting up to 20 pounds.....Occasionally
- Lifting greater than 20 poundsSeldom

WORK ENVIRONMENT:

Work is performed in rural and peri-urban environments with community groups that are often resource-limited.

<u>APPLICATION PROCEDURE</u>: Interested applicants must submit: 1) a letter of interest; 2) resume; 3) University employment application; 4) names/address/telephone numbers of 3 professional references; 5) Copies of transcripts.

Candidates who are invited for interviews will be <u>required</u> to submit official transcripts. References will be contacted in conjunction with interviews. Submit materials to:

New Mexico Highlands University Human Resources Collaboration Program Manager Box 9000 Las Vegas, NM 87701 or Email application materials to: jobs@nmhu.edu

For disabled access or services, call (505)454-3242 or TDD# (505)454-3003.

NMHU IS AN EQUAL OPPORTUNITY EMPLOYEER

NEW MEXICO HIGHLANDS UNIVERSITY Las Vegas, New Mexico <u>PUBLIC VACANCY NOTICE</u>

Posting Date: July 24, 2014	Application Deadline: Open Until Filled
Position: Restoration Monitoring Program Manager	Salary Grade: 16
Department: Forest & Watershed Restoration Institute	Minimum Starting Salary: \$51,491
Job Type: Full-Time/12 Months	FLSA: Exempt

Reports To: Director - FWRI

Summary: The Restoration Monitoring Program Manager is responsible for a program that emphasizes pre- and post-treatment measurements and involves land managers and organizations across the state. In addition this position is responsible for managing, training, and dispatching field crews for project-level monitoring. Finally, the incumbent will teach one course per semester in the newly SAF-accredited Forestry program in the Department of Natural Resources Management.

DUTIES & RESPONSIBILITIES:

- Oversee the Forest and Watershed Restoration Institute's (FWRI) activities in restoration monitoring;
- Evaluate and develop monitoring protocols and procedures to support the restoration programs of FWRI and its collaborators;
- Engage in support, outreach, and applied research in the broad area of vegetation and fuels monitoring, especially as it relates to watershed restoration, including prescribed fire effects;
- Analyze data and prepare monitoring project reports, and assessments;
- Provide field supervision of students or other staff;
- Chair or facilitate meetings of standing or ad hoc committees and working groups;
- Present instruction in field monitoring to partners;
- Teach one mensuration course a semester in the Forestry program;
- Acquire other funding for institute activities from federal, state, and private sources;
- Maintain regular attendance and punctuality;
- Perform additional duties as assigned by the NMFWRI.

MINIMUM JOB REQUIREMENTS:

• **Education:** Ph.D. degree in Forestry, Ecology, Conservation, or a closely related natural resources management field. (A Master of Science degree in a renewable natural resources field and six (6) years' experience in field measurements may substitute for the required Ph.D. degree.)

Experience: Two (2) years' experience directly related to the duties indicated above.
 Preference: Ph.D. in Forestry with biometric experience.

SPECIAL REQUIREMENTS:

- Must possess and maintain a valid NM driver's license. Selection of an out-of-state candidate will require possession of a valid New Mexico Driver's license within sixty (60) days of employment.
- Must be willing to work weekends, evenings and odd hours as required
- Must be willing to travel.

- Must be able to engage in field work, often under difficult/challenging environmental conditions, including, but not limited to, steep slopes, dense vegetation, extreme heat and cold, and snow cover.
- <u>Continued employment is contingent upon grant funding</u>

KNOWLEDGE, SKILLS, AND ABILITIES:

- Knowledge and experience with environmental and/or natural resource monitoring efforts;
- Ability to perform in field measurements using conventional and automated mensuration equipment;
- Ability to summarize, analyze, and manage quantitative data using common office and statistical software;
- Knowledge and experience preparing scientific information and findings and presenting scientific information orally, in formal and informal settings;
- Ability to write technical reports for internal and external publication, as demonstrated by documented products of these efforts;
- Ability to plan and conduct applied research in the broad area of vegetation monitoring;
- Ability to work productively, professionally, and collegially with colleagues and diverse external stakeholders, as attested to by professional references;
- Ability to work with multi-party monitoring as it relates to adaptive management;
- Knowledge of federal agency watershed monitoring protocols and programs, including USFS Common Stand Exam and DOI FEAT/Firemon Integrated;
- Knowledge and familiarity with fire effects monitoring;
- Knowledge and familiarity with management of secure, web-based databases;
- Knowledge and experience working with GPS and GIS;
- Ability to acquire federal and state grants, contracts, and other forms of funding.
- Knowledge of and experience in forests and woodlands of the Southwest.
- Ability to teach graduate and undergraduate students.

PHYSICAL DEMANDS:

- SittingFrequently
- Standing.....Frequently
- Walking.....Frequently
- Bending..... Frequently
- Squatting..... Frequently
- Climbing Frequently
- Kneeling Frequently
- Lifting up to 20 pounds..... Frequently
- Lifting greater than 20 poundsOccasionally

WORKING ENVIRONMENT:

• Work is performed in an indoor/outdoor setting to include working in the forest in environments that include hot, cold and wet conditions.

APPLICATION PROCEDURE: Interested applicants must submit: 1) a letter of interest; 2) resume; 3) University employment application; 4) names/address/telephone numbers of 3 professional references; 5) Copies of transcripts.

Candidates who are invited for interviews will be <u>required</u> to submit official transcripts. References will be contacted in conjunction with interviews. Submit materials to:

> New Mexico Highlands University Human Resources Restoration Monitoring Program Manager Box 9000 Las Vegas, NM 87701 or Email application materials to: jobs@nmhu.edu

For disabled access or services, call (505)454-3242 or TDD# (505)454-3003. **NMHU IS AN EQUAL OPPORTUNITY EMPLOYEER**



Training AnnouncementKlamath River Prescribed Fire Training ExchangeOrleans, CA • Oct 1 – Oct 11, 2014

Objectives: To develop the Klamath River community's capacity to safely and effectively reintroduce fire onto the local landscape by providing TREX participants with experience and training in planning and conducting controlled burns.

Target group: This training is designed to integrate a diverse group of fire practitioners with varying degrees of knowledge and experience. Participants include tribal members, local contractors, federal and state firefighters, volunteer firefighters, non-profit organizations including The Nature Conservancy staff and volunteers, university students, county/regional regulators and out-of-region and international guests and fire workers.

Description: The training is organized as an incident, using the Incident Command System. Participants will serve in qualified and trainee firefighting positions on a burn team and will assist with preparing, scouting, briefing, igniting, holding, mop-up, and patrol on numerous controlled burns in the area. We will also complete pre- and post-fire monitoring, train with equipment, practice fire line leadership skills, and learn about local fire ecology and fire management.

There will be field trips to areas burned in recent wildfires and presentations from local tribal elders and other community members, scientists, land managers, and practitioners. Participants will also present briefings about the fire regimes in their home region and discuss management challenges and opportunities there. In addition, participants will practice for and possibly be featured in local media interviews.

Fee (due no later than September 1, 2014): If selected, a **non-refundable \$200 fee** is required from each participant to secure a place on the team. This includes the \$100 registration fee plus a \$100 fee to offset the cost of meals and lodging. Scholarships/paid positions are available for qualifying local participants - contact Will Harling (will@mkwc.org) for more information.

Requirements:

- 1. All participants' qualifications must be current. At a minimum, everyone must have completed NWCG courses I-100, S-130, S-190 and FEMA IS-700. These trainings will be provided to participants who need them.
- 2. Participants must complete an **arduous pack test** before arrival at the event. Completion of a moderate pack test is acceptable if coming as a TNC volunteer and serving in an RXCM (prescribed fire crewmember) position.
- 3. All participants must have **insurance** (e.g., workers' comp, health or travel insurance) to cover any injury they may sustain during the training exchange.
- 4. Participants should come with **all appropriate Personal Protective Equipment** (PPE), including **fireline-approved boots** (all leather work boots, 8-inches tall, non-slip soles and <u>no</u> steel toe), a Next Generation Fire Shelter, a hard hat, Nomex clothing, all leather gloves, eye protection and canteens for drinking water. For individuals who do not have PPE, it will be available for rent from Firestorm, Inc., for \$50 at the beginning of the event.

Meals & Travel: All meals, ground transportation and lodging will be provided during the training. Participants are responsible for their own travel to and from Orleans, California and should **arrive by Wednesday, October 1**. However, burn bosses and the Incident Management Team must arrive by Monday, September 29. Although we encourage you to stay for the full assignment, we understand you may have time constraints and are happy to host you for the first or second week (non-refundable fees still apply).

To Apply: Please complete the separate Application Form (**note:** Be sure to select the Klamath River TREX) and submit it to **Lenya Quinn-Davidson** (<u>nwcapfc@gmail.com</u>) **no later than Aug 11, 2014**. Thank you!



This training is supported by *Promoting Ecosystem Resiliency through Collaboration: Landscapes, Learning and Restoration*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior.

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* * TRAINING ANNOUNCEMENT * *

Prescribed Fire Training Exchange (TREX) Northern California, October 13-26, 2014

Objectives: A diverse group of international and domestic fire practitioners will work together to share and build their experience in prescribed fire practices, fire effects, and other conservation efforts affecting forests and grasslands in northwestern California.

Target Group: Prescribed fire and wildfire personnel and other natural resource managers involved in fire and ecosystem management, including federal, state, tribal, non-governmental, and private practitioners.

Fee: US \$200 (non-refundable, due before September 1, 2014)

Description: The training will be organized as an incident, using the Incident Command System. Participants will serve in qualified and trainee firefighting positions on a burn team and will assist with preparing, scouting, briefing, igniting, holding, mop-up, and patrol on numerous controlled burns in the area. We will also complete pre- and post-fire monitoring, train with equipment, practice fire line leadership skills, and learn about local fire ecology and fire management. The work will take place in diverse forest and rangeland ecosystems in northwestern California, including open prairies, oak woodlands, and mixed-conifer forests. The training will include field trips to areas burned in recent wildfires and to prescribed fire and fuels treatment project sites, as well as presentations from local scientists, land managers, and practitioners. In addition, participants will practice preparing for interviews with local media.

Training activities and burn opportunities are shaped by weather and other local conditions and can therefore be variable. Weather for last year's TREX was optimal, and trainees participated in a total of 17 prescribed burns and treated more than 450 acres throughout the region (http://www.norcalrxfirecouncil.org/uploads/TREX_Summary.pdf).

Requirements:

*

- All participants' qualifications must be current. At a minimum, everyone must have completed NWCG courses I-100, S-130, S-190 and FEMA IS-700. Self-study materials for these courses will be offered to participants who need them.
- 2. Participants must complete an **arduous pack test** before arrival at the event. Completion of a moderate pack test is acceptable if coming as a TNC volunteer and serving in an RXCM (prescribed fire crewmember) position.
- 3. All participants must have **insurance** (e.g., workers' comp, health or travel insurance) to cover any injury they may sustain during the training exchange.
- 4. Participants should come with **all appropriate Personal Protective Equipment** (PPE), including **fireline-approved boots** (all leather work boots, 8-inches tall, non-slip soles, and <u>no</u> steel toe), a Next Generation Fire Shelter, a hard hat, Nomex clothing, all leather gloves, eye protection, and canteens for drinking water. If you do not have proper PPE, please let us know. For an additional \$50, we will provide you a complete set.

Meals & Travel: Meals, ground transportation, and lodging will be provided during the training. Participants are responsible for their own travel to and from Arcata, California. Participants should arrive in Arcata (ACV) by Sunday, October 12, so they will be ready to start the training Monday morning. The training concludes on Sunday, October 26.

Application: To apply for this training, complete the attached application form (**NOTE: be sure to select Northern California TREX**) and submit to Lenya Quinn-Davidson with the Northern California Prescribed Fire Council at nwcapfc@gmail.com **by August 11, 2014**. Space is limited to 25 trainees; selection will be made to ensure a diverse group.



This training is supported by *Promoting Ecosystem Resiliency through Collaboration: Landscapes, Learning and Restoration*, a cooperative agreement between The Nature Conservancy, USDA Forest Service and agencies of the Department of the Interior. For more information, contact Lynn Decker at <u>ldecker@tnc.org</u> or (801) 320-0524.

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PRESCRIBED FIRE TRAINING EXCHANGE (TREX) APPLICATION

PLEASE CHECK ONLY YOUR FIRST CHOICE:

KLAMATH RIVER TREX (OCT 1 - OCT 11, 2014)* 📃 NORTHERN CALIFORNIA TREX (OCT 13 - OCT 26, 2014)*

*IF NOT SELECTED FOR YOUR FIRST CHOICE, WOULD YOU LIKE TO BE CONSIDERED FOR THE OTHER TREX? IF SO, CHECK HERE:

1. PARTICIPANT INFORMATION (PLE	ASE PRINT LEGIBL	Y OR TYPE RESPO	NSES <u>IN SPAC</u>	CE PROVIDE	<u>:D</u>)
Full name (for course certificate):					
Organization and position:					
Complete work address:		Phone: cell ()	work ()
		Email:			
2. SUPERVISOR INFORMATION					
Name:	Job title:		Phone:		
3. QUALIFICATIONS (ALL PARTICIPA	ANTS MUST HAVE N	WCG WILDLAND F	IREFIGHTER T	YPE 2 TRA	INING):
Qualified positions (current only):					
Trainee position requested:					
Check here if you require introductory	Wildland Firefighter	Type 2 training (I-10	00, IS-700a, S-	130, and S-	190):
4. COURSE EXPECTATIONS					
Briefly describe your expectations for th	nis training:				
5. FEES (NON-REFUNDABLE)					
The Fire Learning Network and our par we depend on participants like you to h include the standard \$100 registration f	elp offset some of th	e expenses. The fo	llowing fees ap	oply to both e	events and
• The Klamath River TREX (10/1/2014	I-10/11/2014) has a	non-refundable fee	of \$200 per pe	rson.	
• The Northern California TREX (10/1	3/2014-10/26/2014)	has a non-refundat	ole fee of \$200	per person.	
If selected to participate, the entire fee close of business on September 1, 20 1	of \$200 (per TREX) 14 to secure your pl <i>a</i>	is due from every quice on the team. Re	ualifying partici member: che o	ipant no late ck correct T	r than the REX above!
6. PERSONAL PROTECTIVE EQUIPM	IENT				
Participants should come with all appro boots (all leather work boots, 8-inches Nomex clothing, all leather gloves, eye PPE, it is available for rent from Firesto	tall, non-slip soles an protection and cante	nd <u>no</u> steel toe), a N eens for drinking wa	lext Generatio ter. For individ	n Fire Shelte uals who do	er, a hard hat, not have
7. EQUIPMENT CONTRIBUTION					
These Training Exchanges would not b equipment we need includes engines, l Nomex clothing). If you or your organiza Guy Duffner (gduffner@tnc.org or 406-t List the equipment you can provide:	UTVs, chainsaws, ha ation can provide an	and tools, backpack y (or any combination	pumps, and P	PE (fire shel	ters and
8. SUBMIT APPLICATION (DUE NO L	ATER THAN AUGU	sт 11, 2014)			
Please forward any questions you may Northern California Prescribed Fire Cou					idson at the



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