

## Four Forest Restoration Initiative

Quarterly Stakeholder Newsletter



### Forest Restoration in Action

*Two Public Meetings Enhance Public Involvement for Rim Country Project*

This June, the U.S. Forest Service initiated the public input process for the 4FRI Rim Country Project. This environmental analysis covers



over 1.2 million acres along the Mogollon Rim in Arizona's high country. Its Proposed Action includes re-establishing forest ecosystems that support natural fire regimes, promoting functioning populations of native plants and animals, and reducing the threat of destructive wildfire. Two public meetings co-hosted by the 4FRI Stakeholder Group and the USFS in Show Low and Payson were held to allow the USFS to discuss their Proposed Action and obtain comments from the public.

The USFS set up numerous tables for different resource areas (i.e. range, wildlife and fisheries, cultural), along with a looping powerpoint that gave background information on 4FRI and explained the Rim Country Project planning process. The Stakeholder Group had its own table, and distributed information on our collaborative work.

At the July 14 meeting in Show Low, about 20 people attended to learn more about the Proposed Action. Comments ranged from "I'm impressed with all the tables of information, you're not just

about cutting trees" to "I'd like to help as a citizen scientist."

At the July 21 meeting in Pay-

son, over 50 people attended, including several local government and business representatives and a few attendees from the Phoenix area. Several remarks were heard about the high level of openness and expertise of the USFS interdisciplinary team. In addition, many attendees seemed impressed with the full suite of restoration activities proposed,

as one indicated "I expected to hear a lot about cutting trees, but found it's much more than that."

The Rim Country Project is the second landscape-scale multi-forest analysis within the 4FRI footprint.

The next step in the planning process will be to review and address comments, define issues, and develop alternatives to be described and analyzed in the Draft Environmental Impact Statement. The Draft EIS is expected in July 2017, and the Final EIS is expected in September 2018.

To follow the planning process, visit [www.fs.usda.gov/got/4FRI/RimCountry](http://www.fs.usda.gov/got/4FRI/RimCountry).



#### Upcoming Meetings/Events:

Natural Resources Working Group Aug. 16  
Sept. 20

[Greater Flagstaff Forest Partnership](#) Aug. 16  
Sept. 20

[4FRI Stakeholders](#) Aug. 24  
Sept. 28

Multi-party Monitoring Board Contact  
[Byrce Esch](#)

#### Bulletin Board

Dick Fleishman, U.S. Forest Service (USFS) 4FRI Operations Coordinator, is on a three-month detail to the USFS's Washington, D.C. headquarters. In an agreement between the State of Arizona and the USFS, [Patrick Rappold](#), Wood Utilization Specialist for the Arizona Dept. of Forestry and Fire Management, will assume this role for these three months.

The 4FRI Multi-Party Monitoring Board is seeking volunteer Board members to help provide a good representation of interests! Please contact Bryce Esch at [byrce\\_esch@nau.edu](mailto:byrce_esch@nau.edu) if you can become a Board member.



## Industry Insider

### Perkins Timber Harvesting: 50 Years and Counting!

A major milestone occurred this July, with Perkins Timber Harvesting (PTH) celebrating 50 years in the timber harvesting business. Family-owned and operated through multiple generations and based in Williams, PTH has persevered through the ups and downs of the timber industry. James and his wife Lydia and their extended family welcomed dozens of friends to a gathering July 9 in Williams. The celebration reflected a broad base of support from across northern Arizona. The 4FRI Stakeholder Group thanks Perkins Timber Harvesting for a job well done and cheers you on for continued success!



### Across Our Forest: A Busy Weekend at Buck Springs



Removing and replacing old fence

For several years now, the Arizona Elk Society (AES) has organized a volunteer work weekend near Buck Springs on the southern end of the Coconino National Forest (CNF). This year's event was held June 11-12. Over 100 volunteers, mostly from AES and Friends of Northern AZ Forests (FoNAF), completed a remarkable suite of activities under the direction of CNF staff Tom Runyon and Mike Dechter. Volunteers rebuilt an enclosure fence surrounding Lower Buck Springs designed to protect a small grove of aspen from heavy browsing and to reduce compaction in the area around

the spring box. This entailed placing over 1,000 linear feet of 8' tall woven wire fence.

In addition, volunteers thinned encroaching small conifers from an ephemeral stream channel at McClintock Draw while others placed numerous rocks in the channel to reduce head-cutting in the stream channel.

Newly-repaired enclosures along Forest Road 321C and in Merrit Draw also received Bebb's willow plantings, and several miles of old or damaged barbed-wire fencing were removed as they were no longer needed for pasture or allotment boundaries. The AES wants to thank all volunteers and CNF staff who helped make this weekend a true achievement for the forest, water, and wildlife resources!

*Submitted by Tom Mackin, 4FRI Stakeholder and member of both AES and FoNAF*



Conifer thinning and rock placement at McClintock Draw

### Stakeholder Spotlight: Trout Unlimited



Apache Trout: Our State Fish

The Arizona Council of Trout Unlimited is proud to be a stakeholder in the 4FRI process. As a national conservation organization, Trout Unlimited seeks to preserve, protect and restore the clean, cold water habitat necessary for trout to exist. Particularly in the southwestern US, where our native Apache and Gila trout struggle to maintain their threatened populations, the dangers posed by the threat of wildfire are a



*Expanding and Improving Arizona's Native and Wild Trout Fisheries*

grave concern for TU. We see the 4FRI undertaking as crucially important in protecting the future of the forests and thus protecting the critical habitat these native trout must have if they are to survive and, hopefully, prosper.

Trout Unlimited's SWNTS (Southwest Native Trout Strategy) program is a collaborative effort to ensure a future for our area's trout species, most of which in Arizona live in the streams and lakes contained in the planning area for the Rim Country EIS. Success as envisioned by this project is integral to the future of Arizona's native trout species and wild trout streams. In Arizona, all of our programs, including the extensive Stream Temperature Monitoring efforts we share with the Arizona Game and Fish Department and the USFS, and our rapidly expanding Trout in the Classroom effort, are designed to help achieve the goals we all share in the 4FRI total forest systems restoration approach.

Contact our 4FRI Stakeholder Group Co-Chairs: [Pascal Berlioux](#) [Steve Gatewood](#) [Tommie Martin](#) [Allen Reidhead](#) [Steve Reidhead](#) [Sue Sitko](#) [Greg Smith](#) [Paul Summerfelt](#) [Diane Vosick](#) [Paul Watson](#) [Jason Whiting](#) [Brad Worsley](#)

## The Wood Basket

### Video Explains Importance of Fire

The Kaibab National Forest recently released a video on the importance of wildland fire in northern Arizona forests from the perspectives of natural and cultural resource specialists. Art Gonzales, Kaibab fire staff officer and creator of the video, wanted to highlight all program perspectives in managing fire, not just fire managers. “I was looking for a video about fire but from a non-fire perspective.”

Gonzales teamed with the Southwest Fire Science Consortium and producer Josh McDaniel to create a 10-minute video titled “Keeping Fire on the Ground: Resource Specialist Perspectives on the Kaibab National Forest,” viewable [here](#). Jackie Banks, Kaibab Information Officer

### Stakeholder Perspective

*“Remember, it’s a trip, not a destination”*



Randy Fuller, U.S. Forest Service Silviculturalist for 4FRI, speaking to the group on the mixed conifer field trip. “It’s not about what the forest looks like immediately after treatment. Instead, it’s

## A View From the Inside: In the Field with Mixed Conifers

On June 8, the U.S. Forest Service and the Ecological Restoration Institute (ERI) invited 4FRI Stakeholders into the field on the Black Mesa district of the Apache-Sitgreaves National Forest to initiate discussion and share perspectives on potential mixed conifer restoration treatments. A turnout of nearly 40 people indicated a high level of interest in this topic (plus a desire to get out into the woods on an Arizona summer day!). Thanks go to Dave Huffman, Andrew Sanchez Meador (both ERI); Jim Youtz and Gayle Richardson (USFS), and Shaula Hedwall (USFS) for their leadership.



Discussion in dry mixed conifer

Recent research by ERI looked at fire return intervals at this “warm/dry” mixed conifer site. Dry mixed conifer forests are currently predominated by mature ponderosa pine and Douglas fir, along with Gambel oak and an increasing density of young southwestern white pine and white fir that have established from fire exclusion and historical selective harvesting. These sites are often found at elevations of about 7,500’ - 8,500’ on benches, ridgetops, south-facing slopes and tops of canyons. The study site we visited had fire return intervals ranging from 2-14 years, fitting within the historical range of 2-35 years. In addition, moist microsites that harbored fire intolerant tree species can be found interspersed on steeper, northern-facing slopes and in some drainages within this landscape, having typically longer fire return intervals (multiple decades to centuries) but highly variable, depending on patch size.



Wandering in a wet mixed conifer microsite

So how will we restore dry and wet mixed conifer forests? This field trip was one of the first steps to let stakeholders see the complexities of managing fire-adapted landscapes where fine-scale variability may challenge prescription interpretation and implementation. Suggestions such as treating or thinning increasingly shade-tolerant species in dry mixed conifer stands, such as white fir and white pine, in order to maintain the mature ponderosa pine component, were discussed. What we did learn is that fire was—and will continue to be—a part of this complex landscape. Exactly how fire will affect one of Arizona’s limited habitat types may be up to us and how we approach the concept of restoration. Regardless, we all came away with more questions than answers, and we look forward to continuing the conversation.



Dave Huffman, ERI, explains research findings on fire return intervals

about current conditions, what the forest looks like some time after treatments, AND into the future. We cannot manage forests with a one-treatment entry mentality (same for fire); it is a series of planned options and entries—a trip where you never really reach the destination.”

## The Wood Basket

### Moving into the Digital Age: Tablet Technology & Trees

#### May 7 Harvesting Methods Open House a Success

On May 7, dozens of Flagstaff-area residents found out what is going on in the forests outside their back door and within their neighborhoods and city. Harvesting trees for both forest restoration and community safety interests most of us in the high country—and the community become more informed and engaged with the hands-on displays of equipment; the presence of Smokey Bear and Louie the Lumberjack; and a Kid's Corner activity area. Homeowner "Firewise" prepared-



ness information also helped residents determine how to safeguard their own property. An attendee remarked "cooperation among agencies was remarkable—and obvious." Sponsors were Campbell Global, Fire Adapted Communities Program, Flagstaff Watershed Protection Project, and Greater Flagstaff Forest Partnership. They would like to thank the many other partners that stepped up to make the day a success!

To reduce the time and cost associated with traditional paint-tree marking practices, forest managers in northern Arizona are testing different tree marking methods. In partnership with Arizona Department of Forestry and Fire Management, Coconino National Forest, and Perkins Timber Harvesting, The Nature Conservancy tested new technology to mark tree stands and guide harvesting operations on the Bob Fry Fuel Reduction Project. The project, which was initiated in October 2015 and completed in May 2016, was located on 1,200 acres of Arizona State Lands in Coconino County ten miles southwest of Flagstaff.

Trees were "digitally marked" using GPS-enabled computer tablets and new Geographic Information Software on 114 acres (Figure 1). Harvesting on those acres was completed via mechanical thinning and guided by in-cab tablets displaying the results of the "digital mark." The remaining acres were treated using the Designation by Prescription (DxP) process where a written outline of treatment guidelines is provided to the harvester. In both cases, the harvester selects which trees to cut. Treatment objectives focused on creating a variety of clumps/groups and designated interspaces and openings. This past June, project participants conducted a field review to evaluate results and discuss lessons learned on behalf of both harvesters and silviculturalists.



Fig. 1. Digital Tree Marking guide as seen in tablet. Key provided to harvester.

Among several findings, here are a few key observations:

- ◇ Delineations between tree groups and openings/interspaces were more readily distinguished in digitally-marked areas—DxP treatments appeared to leave more trees in areas designated for interspace/openings.
- ◇ Over a sample of 8 days, productivity (trees harvested/time) was similar between DxP and digitally-marked units. Often, interspaces/openings were created first in digitally-marked areas, making it easier to then create groupings. We expect that productivity with digitally-marked treatments may improve given this process.
- ◇ Should these alternative methods increase in use, the development of procedures for use and oversight is warranted to ensure consistency for land managers, operators, and stakeholder monitoring.

A more detailed presentation on tablet technology will be provided at an upcoming 4FRI Stakeholder meeting. For more information, please e-mail: [Travis Woolley](mailto:Travis.Woolley@nature.org) or [Neil Chapman](mailto:Neil.Chapman@nature.org) with The Nature Conservancy, or [Henry Provencio](mailto:Henry.Provencio@aphis.usda.gov) with the U.S. Forest Service.



Example, Cutter Select DxP treatment



Example, Digital Tree Marking Guide