



Four Forest Restoration Initiative

Quarterly Stakeholder Newsletter



Stakeholders Work for Comprehensive Restoration

The Comprehensive Implementation Working Group (CIWG) is one subgroup of the Four Forest Restoration Initiative (4FRI). CIWG's projects help to round out the broad suite of restoration activities and focus on those that are not covered by contracted mechanical treatments and prescribed and managed fire. What does that mean? In this issue, you'll read about some of their projects. CIWG members work together to solicit funding for, and get out in the field to do, projects that include spring and stream restoration, wildlife habitat improvements, and vegetation management such as plantings and removal of invasive weeds.

This year, CIWG is getting into full swing. Natural Channel Design has completed survey and design work for restoration of T-Six and Hoxworth Springs. We expect dirt to be moving at T-Six by later this summer. The Forest Service is compiling a list of comprehensive restoration projects across the four forests in an Excel spreadsheet. The spreadsheet tracks the status of NEPA and any required surveys for each project by type (project types are springs, stream channels, noxious weeds, wildlife, grassland and meadows, roads, and range). Once all required NEPA and survey work are completed, the project is shovel-ready. Then the CIWG can move forward locating partners and funding to complete the project. The Forest Service will transfer the spreadsheet to a public access database later this year. One such source of funds may be the National Forest Foundation, who met with the CIWG in May to discuss opportunities to move comprehensive restoration projects forward.

Meetings

Natural Resources Working Group	July 18 Aug 15 Sept 19
<u>Greater Flagstaff Forest Partnership</u>	July 19 Aug 16 Sept 20
<u>4FRI Stakeholders</u>	July 26 Aug 23 Sept 27
Multi-Party Monitoring Board Contact <u>Bryce Esch</u>	July 12 Aug 9 Sept 13
Comprehensive Implementation Work Group Contact <u>Travis Bruner</u>	July 13 Aug 10 Sept 14
Communications Work Group Contact <u>Sue Sitko</u>	July 10 Aug 14 Sept 11

Stay Connected

4FRI Stakeholder website:
www.4fri.org

The Forest Service's 4FRI webpage:
www.fs.usda.gov/4fri includes all public documentation of the 4FRI project, including maps, contacts, and public input opportunities.



Read about how the CIWG helped pronghorn on Page 2

Comprehensive Work Group Field Projects

Stakeholders Assist Pronghorn Habitat Project

Our western grasslands are home to many species, but perhaps none are quite as iconic as the pronghorn antelope. These four-legged speedsters can outrun most predators and their keen eyesight is a valuable defensive adaptation. Unfortunately, pronghorn cannot negotiate major roadways, encroaching pinyon and juniper trees, and old livestock fences. The Arizona Game and Fish Department (AGFD) and Forest Service, with assistance from the Arizona Antelope Foundation and other volunteer organizations, have been addressing these problems by thinning trees, relocating right-of-way fences away from road margins, and removing or modifying fences throughout pronghorn range.

Following an invitation to the stakeholder group, several 4FRI stakeholders set aside their daily grist of conservation biology and joined AGFD “Uber” Volunteer Tom Mackin and Forest Service staffers for an afternoon of fence work north of the San Francisco Peaks. This woven-wire sheep fence was built decades ago and effectively blocked north-south pronghorn movement on the west side of Highway 89. The group of eight volunteers removed approximately 1,000 feet of woven wire, repositioned three strands of existing barbed wire to wildlife-friendly standards, and installed a strand of smooth double-strand wire approximately 20 inches above the ground, allowing pronghorn to scoot under the fence (unlike deer or elk, pronghorn do not generally jump fences and must find a suitable location to pass underneath). It appears the pronghorn approved, as a group of them was seen nearby shortly after this segment was modified. Special thanks to Tom Mackin for organizing this opportunity and his tireless efforts to improve wildlife habitat in northern Arizona!

These activities took place following the May stakeholder group monthly meeting in an area where the AGFD has been monitoring pronghorn movements for several years now, using GPS-enabled collars and GIS to map pronghorn movements. Additional work on this fence, stretching more than 4,000 feet, was completed a few weeks later by Friends of Northern Arizona Forests (FoNAF) volunteers and Forest Service district wildlife staff. This was the first project organized by the CIWG. There will be many other opportunities for stakeholders to spend sweat equity in the future.



Other Volunteer Efforts



On May 20 and 21, approximately 150 volunteers from the Arizona Elk Society (AES) and the Boy Scouts of America descended upon the Mogollon Rim Ranger District of the Coconino National Forest for a watershed restoration work day to: 1) place loose rock structures to fix head cuts in Long Valley Draw; 2) hand thin to remove trees from the edge of the meadow; 3) install buck and pole fence to restrict vehicular access in meadows; and 4) install geotextile and aggregate to fix a spring crossing on a forest road.

Other volunteer “comprehensive restoration” projects are being completed by the Friends of Northern Arizona Forests (<http://www.friendsofnazforests.org/>) including fence repairs and fence construction to help regenerate aspen and protect riparian areas on the Coconino and Kaibab National Forests. TRACKS (<http://www.tracks-pinetop-lakeside.org/>) is completing trail maintenance and trail steward activities in the Pinetop-Lakeside area. The Grand Canyon Trust (<http://www.grandcanyontrust.org/get-involved>) also provides volunteer opportunities for comprehensive restoration as well as resource surveys. Please visit these organizations’ websites for further information about how to get involved in comprehensive restoration.

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

Managing Water Resources in Rim Country Planning Effort

On Friday, June 9, the 4FRI Planning Work Group and Stakeholder Group had a field trip to discuss aquatic and watershed resources in relation to the Rim Country Project. The field trip was coordinated by AGFD, Trout Unlimited, and the Rim Country Planning Team in an effort to inform attendees of the importance of water resources to Rim Country, what stream restoration looks like, and to introduce the flexible toolbox approach currently being developed to assist in planning for the implementation of projects. Canyon Creek, on the Tonto National Forest, was chosen to showcase a recent stream habitat restoration project as well as different treatment types.



Stakeholders review stream habitat restoration along Canyon Creek

The Rim Country project area encompasses approximately 4,000 miles of stream channels including perennial, intermittent, and ephemeral streams. Of those, more than 350 miles are considered streams bearing aquatic species such as fish, garter snakes, and frogs. The project area also includes numerous springs, wet meadows, and riparian areas within three major river basins in Arizona. Maintaining or improving the condition and function of these areas can improve aquatic species habitat, water and soil resources, as well as improve overall watershed condition. Rim Country includes restoration of these resources as part of the proposed action and alternatives; however, complete baseline information on the conditions found on every stream, spring, or meadow across the project area is not feasible. Instead, a flexible toolbox approach is being used to account for imperfect information and to allow adaptive management to define management options. The toolbox would be used to identify and analyze a suite of “tools” for possible treatment options and would not tie implementation to a single pre-determined treatment. It will allow for analysis of a wide variety of possible treatments for aquatic and watershed resources and defer the final treatment determination until we have the most accurate site-specific information. The toolbox describes a series of “current conditions” and then identifies a set of possible treatments that could be applied to achieve a desired restoration “outcome.”

A diverse group of 38 people attended the field trip to Canyon Creek to learn about the importance of aquatic and watershed resources. Curt Gill (AZGFD) and Allen Hayden (Natural Channel Design) walked the group through the restoration treatments in Canyon Creek, explaining why the area was a restoration focus after the 2001 Rodeo-Chediski Fire and the various treatments used to improve the stream. During lunch, the group had a wonderful, open discussion about the toolbox and its utility in Rim Country. The group provided feedback to the Rim Country Planning Team on potential ways to improve the toolbox.



Field trip coordinators and stakeholders Pascal Berlioux and Joe Miller

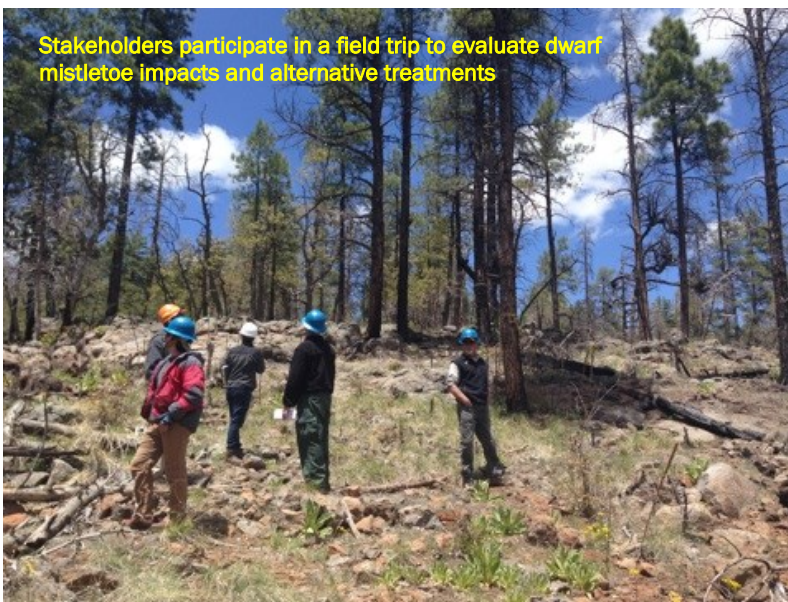
While the group can provide comments and feedback at any time, a request will be made for a formal presentation of the toolbox to the 4FRI Stakeholder Group as well as a request for comments.

Dwarf Mistletoe: Forest Service Approaches Stakeholder Group for Input

On April 5, 2017, members of the Forest Service's 4FRI Rim Country Planning Team gave a presentation to the 4FRI Planning Work Group (PWG) on dwarf mistletoe (DMT) concerns in the Rim Country EIS planning area. It included a review of the role of dwarf mistletoe in forest ecosystems, an assessment of historical and current mistletoe infection levels, and a proposal for aggressive, targeted treatments to mitigate moderately to severely infected stands. This "mitigation" approach was included in the Proposed Action for the Rim Country EIS planning area prepared by the Forest Service. It was asserted that a failure to implement dwarf mistletoe "mitigation" would be contrary to direction in the Forest Plans.

The PWG evaluated the information presented by the Forest Service, and helped coordinate the participation by stakeholders in two field trips to DMT-infected sites over this past spring. Forest Service staff including Regional Forester Cal Joyner and multiple regional and forest-level staff joined more than 25 stakeholders evaluating examples of heavily infected stands as well as alternative treatment examples. Afterwards, the PWG developed a proposed recommendation for consideration by the 4FRI Stakeholder Group (SHG), and with unanimous stakeholder approval at the April 26, 2017 meeting, communicated this recommendation to the Forest Service. The recommendation essentially states:

- The SHG appreciates the Forest Service's outreach to the PWG and concurs with the stated goal of maintaining mistletoe as a natural component of restored forests. Dwarf mistletoe is a natural disturbance agent and component of coniferous forests within the planning area. The plant provides food and cover for wildlife and large-tree mortality caused by mistletoe is an important factor in recruiting snags that provide habitat for cavity-nesting birds and other species.
- Data presented by the Forest Service did not make a compelling case that mistletoe infections within the planning area are significantly outside the natural range of variability and pose a meaningful obstacle to meeting restoration objectives.
- The SHG believes that restoration treatments consisting of mechanical or hand thinning, followed by application of prescribed/managed fire at regular intervals, meet the intent of the Forest Plans and are the preferred approach for stands with high levels of mistletoe infection. Where needed, those stands could also be buffered to reduce mistletoe spread. The SHG also supports testing alternative restoration treatments for affected stands, if done at limited scale and in a learning/adaptive management framework.
- Lastly, the SHG also feels that traditional silvicultural approaches to managing dwarf mistletoe (e.g., overstory removal, even-aged management) are inconsistent with an ecological restoration approach and are not supported by the best available science and may be at odds with directions in 4FRI stakeholder foundational documents, the Collaborative Forest Landscape Restoration Program, and the 2012 Forest Service Planning Rule.



At the June 28, 2017 stakeholder meeting, the Forest Service updated the SHG that their recommendation had been received and considered, with agreement made for its key points. Planning documents for the Rim Country analysis area will reflect this consensus.

Firewise Landscaping Contest Showcases Smart and Beautiful Yards

On Tuesday, May 23, staff and officials from the Greater Flagstaff Forests Partnership, City of Flagstaff, Arizona Department of Forestry and Fire Management, USAA Insurance, The Nature Conservancy, NAU's Ecological Restoration Institute, and many other partners gathered to honor Flagstaff-area residents selected as winners of the 2017 "Firewise Landscaping Contest." The contestants this year were recognized for their proactive efforts in wildfire reduction on their property, while creating an attractive landscape. Their use of appropriate native flowers interspersed with a balance of Firewise trees, shrubs, and stone proved that using these principles can create a beautiful landscape while increasing the safety of their home and neighborhood.



Implementing Firewise principles around homes is a key component of what it means to become "fire adapted." A fire adapted community is one that accepts fire as part of the natural landscape. To ultimately minimize potentially devastating impacts from wildfire, a Firewise community understands the fire risk and takes action before a wildfire occurs. The collective actions of our contest winners and proactive work of all area residents who have also implemented Firewise principles around their homes continues to increase our safety and sustainability. Flagstaff Mayor Coral Evans spoke at the event and said, "Safety of the citizens in the community is the first priority for the City and Coconino County. We are the model for coming together on this issue ... the lift is easier when we all do our part."



Wildfire is the greatest threat to our community. Flagstaff residents need to consider their individual responsibility to protect their home and apply the "Lean, Clean and Green" concept to reduce flammable vegetation, clean up debris such as pine needles, keep firewood safely at home, and use fire-resistant landscaping. Greg Lamontagne of USAA Insurance explained in his presentation, "Maintaining your property is important ... if this occurs over a small segment of a neighborhood, this can create a firebreak."

The contest, organized by the Greater Flagstaff Forests Partnership, was funded by the Fire Adapted Communities Learning Network. For understanding their role in a Fire Adapted Community and exemplifying what it means to be Firewise, we'd like to congratulate our contest winners: Dennis and Ruth Moore, Diana Pennington, Bobby Eccleston, Tommy Bustamante, Kim and Tim Bonatus, and Marcella Hill.

For more information on how your neighborhood can become Fire Adapted and what you can do to protect your property, contact your local fire district. For more information visit: www.gffp.org, or www.fireadapted.org. -- article submitted by Anne Mottek

Wildfire and Spotted Owls: It's a Burning Issue

The Wildlife Society (TWS) is hosting a one-day symposium at their annual meeting in Albuquerque, New Mexico on September 25, from 10:30 a.m.—5:00 p.m. on wildfires, their extent and severity within forest types occupied by spotted owls, and results of recent studies on both prescribed burns and wildfires on this species. Uncertainty regarding the tradeoffs between risks of habitat loss from both forest restoration activities and wildfire effects has elevated this issue for this species' conservation efforts. From evaluating fire effects to understanding its role in managing this species, experts will help advance collective understanding of the science behind fire and owls.

This symposium is part of TWS's annual national, multi-day meeting held at the Albuquerque Convention Center. Discussions are underway for enabling one-day attendance for those interested in this series of lectures. For more information, please visit www.twsconference.org.

In 1993, the Fish and Wildlife Service (FWS) listed the Mexican spotted owl as threatened under the Endangered Species Act. The FWS appointed the Mexican spotted owl Recovery Team in 1993, which produced the Recovery Plan for the Mexican spotted owl in 1995. The FWS released the final Mexican spotted owl Recovery Plan, First Revision (Recovery Plan)



in December 2012. There are two main threats that continue to affect the persistence of the Mexican spotted owl: the loss of habitat that can result from large scale, high-severity wildfire; and the potential effects of mechanical thinning. Therefore, as a part of the Four Forest Restoration Initiative (4FRI), the FWS worked with the Forest Service to develop a management experiment that should aid in helping us better understand the effects from mechanical thinning and prescribed burning on owl occupancy and reproduction, as well as habitat. This is not the only project area where we are working with partners to better understand the effects of these treatments.

The FWS and the Forest Service conducted pre-treatment monitoring in four occupied protected activity centers (PACs) that are proposed to be mechanically thinned and then burned, and five occupied PACs that will only be burned (prescribed fire) as part of the 4FRI project. Each monitored PAC has a reference PAC that is also surveyed, which will not be treated (at least during the management experiment) as part of the proposed action. In addition, pre-treatment vegetation data was collected for each PAC.

The goal is to conduct the thinning (both mechanical and hand-thinning) in the thin-burn PACs and conduct prescribed burns in the burn-only PACs this fall. Occupancy and reproduction monitoring will continue for at least two to three years post-treatment and the vegetation plots will be re-measured so that we can better understand habitat changes following these treatments. The FWS intends to publish the results of this work in cooperation with the Forest Service and our other partners.

-- article submitted and photo credit: Shaula Hedwall

- The Ecological Restoration Institute (ERI) at Northern Arizona University (NAU) is working with the 4FRI Innovation and Rim Country Planning Team, Forest Service's Region 2 and 3, Arizona Department of Forestry and Fire Management, and The Nature Conservancy (TNC) to identify ways to improve sale preparation efficiency from post-NEPA through implementation. Issues identified by industry will be included in the analysis. The goal is to identify existing Forest Service directives that enable greater efficiency in sale preparation but may not currently be used to their fullest potential, as well as uncover areas where the Forest Service Handbook and Manual require amending in order to facilitate greater efficiency. This effort will complement TNC's boots-on-the-ground analysis underway by Michael Kirby to identify sale preparation efficiencies. ERI will produce a compilation of recommendations emerging from the analysis and workshop.

- The ERI is hiring a new Director of Forest Restoration Operations and Biomass Utilization (a nonacademic position). The ERI expects to hire the new Director by August. The Director will spend his or her first two months interviewing representatives of existing harvest and business operations to determine where the unique strengths of the university can be mobilized to help accelerate the pace and scale of ecological restoration. This is a new program area for the ERI and is an explicit recognition of the critical role of implementation for achieving science-based forest restoration that is both effective and efficient.