



4FRI Stakeholder Group Meeting

Wednesday, January 25th, 2017, 9AM-12:30PM

Coconino National Forest Supervisor's Office

1824 S. Thompson St., Flagstaff, AZ 86001

Teleconference line: (712) 775-7031, code: 439290611#

In Attendance: Brad Worsley, Bill Dyer, Jay Smith, Dick Fleishman, Tom Mackin, Steve LaFalse, Alan Reidhead, Steve Reidhead, Tom Holl, Greg Smith, Diane Vosick, Sue Sitko, Annette Fredette, Ryan Thomas, Sharon Boe, Heather Provencio, Patrick Moore, Steve Gatewood, Paul Summerfelt, Bryce Esch, Rob Nelson, Allison Jourden, Dave Huffman, Brienne Petit, Laura Jo West, Matt Cole, Patrick Rappold, Mark Nigrelli, Travis Woolley, Mark McGee, Jeri Ledbetter, Abe Springer, Wade Ward

Phone-In: Jason Whiting, Paul Watson, Trudy Balcom, Rob Davis, Travis Bruner, Todd Schulke, Kelly Wolff-Krauter, Steve Best, Wendy Jo Haskins, Steve Rosenstock

9:05 Approve minutes from the November 16th SHG meeting — Approved

9:10 Review action items from the November 16th SHG meeting — Worsley, Novo Power

Action Item	Lead	Status
1. Provide list of what the Stakeholders determined was done well in FY16	Dick Fleishman	Done
2. Post Sportsman's Values Map Project Handout on Basecamp / PowerPoint	Kelly Wolff-Krauter	Done
3. AZGFD to provide data layers to ID team	Kelly Wolff-Krauter	In process
4. FS to SHG: Expected Outputs for CFLR Project	Steering Committee	Done

9:15 Call to the Public

9:20 USFS Update – 4FRI Board, Coordinators

- **Draft Alternatives and Public Meeting to Help with Alternatives** – Fleishman, USFS

Operations – Not a lot of activity is going on due to frozen soil moisture conditions. Operations will continue to see limitations for the next month or two at least.

Various national teams are coming to Flagstaff for their national meetings:

National Sale Administration cadre - Dick will be giving an overview of 4FRI on how to do Sale Admin. On Designation by Prescription (DxP).

National Cruiser cadre – They meet in the first week of May to set and advise on the National Cruise Policy. They're interested in learning about DxP and tablet technology as we're doing more of that than anyone else in the country.

National Silviculture Meeting – In July FS will deliver several presentations on how they're implementing desired conditions out of GTR 310, as well as information on DXP and Tablet Technologies.

Washington Office Revisit for the CFLR program – Taking place sometime this summer. FS will be consulting the SHG to draft an agenda once a date is solidified.

*Whether or not any work sites are visited during these trips is dependent on the weather.

Provencio – The current focus of the board is coming up with a program of work (list of projects to work on) and the budget for the coming year. They're doing so by using a refined and universal process so that all four forests are operating in the same way to achieve transparency on what is and isn't being done efficiently and effectively.

Boe – The board made a decision that they wanted to go in and rework the work plan so that they're consistent across all four forests. The goal is to be able to talk at the end of the year about program areas (fire and fuels, mechanical thinning, etc.), and show what was allocated to these projects and what was accomplished through them. Communications from the regional office indicate that their funding for FY17 should be the same or similar to that of fy16. They expect fy18 budget planning to be much easier and much faster than in the past, following this budget planning transition.

Fredette – Mary Lata (fire ecologist) is on a detail to the regional office, so Ryan is filling in for her. Patrick Moore is the new 4FRI silviculturist.

Worsley – It's important to their industry to have diversity in availability of timber sales 12-mos. a year as much as possible. They always plan for Tonto to provide a bit of wood to get into by Feb. in case January gets a lot of snowfall. They encourage the FS to continue to work on that effort, as it looks like Tonto won't be available to in March. Their saw mill has been closed down since the beginning of January.

- **2017 Planning – Draft Planning Calendar and Potential Issues** – Fredette, USFS

Issues for 4FRI Rim Country – Smoke and Air Quality, Economics, Wildlife and Aquatics Habitat, Roads, Full Restoration, Treatments in MSO Packs, Treatments in Goshawk Habitat, Large Tree Retention, Dwarf Mistletoe Mitigation. These issues were determined from scoping comments on and internal concerns with the Proposed Action. They will be addressed in the alternatives. They will help focus the analysis and will help decision makers concerning the alternatives.

The Proposed Action – This was presented for scoping and made available to the SHG for comments. They're in the process of adding detail and clarifications as recommended, to respond to public comments received during scoping. This alternative will address the economics, Wildlife and Aquatics Habitat, Treatments in MSO and Goshawk Habitats, Large Tree Retention and Dwarf Mistletoe Mitigation issues.

Alternative 3 – Is being designed to increase mechanical and fire treatments to maximize functional restoration across the project area. It is designed to treat more acres to lower the basal area and move

farther towards desired conditions in the forest plan. This alternative is drafted to address the Economics, Large Tree Retention and Dwarf Mistletoe Mitigation issues.

Alternative 4 – This is determining where treatments can be optimized in areas that are most in need of treatment, due to being most highly departed from the natural range of variation, or they're in areas that put communities at risk for undesirable fire effects. These areas are those that can be moved furthest towards desired conditions and can be treated cost-effectively.

These represent a range of reasonable alternatives to address the identified issues. They would like SHG help to develop a public workshop for late February or early March to develop the framework for these alternatives, as well as some questions to guide their implementation. Fredette provides a timeline to the SHG that shows what is anticipated to happen, and when, concerning the proposed action.

What is Functional restoration? FSM 2020 – “This policy provides that “ecosystem restoration” can be carried out through the processes of ecological restoration and functional restoration. Ecological restoration typically focuses on recreating the ecosystem conditions that were present prior to European influences. However, some ecosystems may have been altered to such an extent that reestablishing pre-European conditions may be ecologically or economically infeasible. In such circumstances, management goals and activities should create functioning ecosystems in the context of changing conditions through the process called functional restoration (page 24786, 1st column).”

Vosick – Concerned that there isn't a discussion about grazing included in the identified issues. It was a largely disputed issue in the first EIS and she believes it should be addressed head-on with the 2nd EIS. She views the topic as a driver and not simply a concern in the sense of fine-field development and the direction of fire. Grazing is effecting the ability to manage fire. Todd Schulke agrees.

As a 4FRI Rim Country Project, grazing isn't something that they're analyzing in detail in this EIS. Those kind of NEPA analyses happen in the allotment management plan. It is not something that is going to change an alternative because it's not defined as an activity in this EIS. They will address the effects to grazing, as they do to any resource, but it's not a driver, which means there's no 'cause and effect,' based on their actions associated with it. None of the actions proposed directly affect livestock grazing.

Vosick –A lot of discussion in the alternatives relate to the dwarf mistletoe. Ecologically, she thinks a lot of people have concerns about using the dwarf mistletoe as a justification and wonders what the science behind it will be.

Fredette - The comments they've heard through scoping regarding dwarf mistletoe mitigation is to not do it. It is a big issue and they will do their best to draft alternatives with a range of mitigation tactics and intensities. They anticipate getting many more comments on that. They're aware that they have to make the activity reasonable, but dwarf mistletoe is a forest health concern, so that has to be balanced with its benefits.

Reidhead – Also concerned about Dwarf Mistletoe. He understands the concerns of keeping large trees, but when the dwarf mistletoe infects a large tree, it spreads and effects an even larger area under it. He thinks the solution is to remove the infected tree, no matter the tree size.

Worsley – What is an alternative and what role does it play in the final EIS? When do we start discussing contracting concerning the 2nd EIS?

Fredette –When we get to the point of solidifying a final EIS, a decision maker can either choose one alternative or pieces of different alternatives for the entire EIS, which is a decision on what will be done in the Rim Country Project Area EIS. They will be discussing contracting throughout the whole process. Contracting falls more under the implementation stage than the planning stage.

Fleishman – One thing the group will do is look at five different pools for implementation: how are we going to continue supporting existing industry on the east side and on the west side, how are we going to continue supporting the existing GEP contract and their acre potential based on capacity. The 5th item is looking at potential ROI through fed. business operations on what to do with additional acres. When they go to DC they'll need to have that plan in hand.

Worsley – First contract was awarded before record of decision. Industry is potentially uneasy about a record of decision being reached before discussion on contracting have taken place. He comments on the time spent by industry on 4FRI items and how it would be disappointing for some kind of contracting disaster to occur.

9:50 Restoration and Managed Fire – Huffman, ERI

Dave Huffman is the Director of Research and Development at the Ecological Restoration Institute and is presenting work they're doing on the efficacy of resource objective wildfires for restoring ponderosa pine ecosystems in northern Arizona. The need for ecological restoration is primarily a result of fire exclusion in historically frequent-fire forests. Some of the impacts have been increases in tree density, loss of diversity, reduced ecological function, increased fuels loadings and increased crown-fire potential. Recently there has been an increase in interest to manage natural ignitions (wildfires) to achieve an ecological benefit, but there isn't a lot of information on how effective natural wildfires are for meeting restoration objectives. This is the information Dave's team has worked to find.

Research Questions: How effective have past Resource Objective Wildfires been at restoring historical ranges of variability? Does burn severity matter? How does burn severity effect individual forest attributes? Which levels of burn severity meet the most restoration objectives? The fewest?

HRV (Historical Ranges of Variability) is used to guide the evaluation on what the objectives of these restorations are. HRV comes from many different sources – biological evidence from tree rings, evidence from fire scars, historical pollen levels. These are the biological sources going into developing an understanding of what the forests looked like before fire-regime interruption.

HRV Objective Attributes: Tree Density, Basal Area, Tree-Diameter Distribution, Coarse Wood, Large Snag Density, Tree-Patch Density, Mean Tree Patch Size, Maximum Tree Patch Size, Canopy Cover, Canopy Base Height, Canopy Fuel Load, Canopy Bulk Density

Analysis – Dave’s team took 8 samples per burn severity per fire to determine whether different fire severities have more or less favorable outcomes in relation to the HRV Objective Attributes. When looking at each attribute’s burn-results, they found that unburned low severity fires met 25% of objectives. Low-severity fires met 50% of objectives, which seems high but whenever these low-severity fires met an objective, it wasn’t the only severity to do so. Moderate-severity fires met 67% of objectives. High-severity fires were least effective and only met 17% of the HRV objectives. Moderate-severity fires, the most successful at meeting objectives, only represent 12% of the fires occurring. Low severity fires represent 50% of fires occurring. Overall effectiveness of resources objective wildfires is calculated at 42% success at meeting restoration objectives.

Conclusions - We can meet 66% of our objectives using moderate-severity fires. Attributes we cannot manage with fire are tree diameter distributions, large snag densities, patch densities, and maximum tree-patch sizes, regardless of severity. We could be more effective in meeting restoration objectives by increasing moderate-severity fires, but it will come at a cost as it can increase high-severity fires, which were least effective.

Summerfelt –To be having these kind of discussions and being able to implement these kinds of fires is a huge accomplishment for ecological restoration. Fire managers by training are risk-averse. There’s a human dimension to the individuals who practice this, from those who make the decision on what to implement, to those who are implementing this on the ground. Only ten years of experience with this work exists, and this determines the comfort levels of these human dimensions to the issue. Perhaps we’re not achieving ecological benefits in some ways, but we are achieving benefits in acceptance on the human level.

Fleishman –A lot of variability in stand structures exists in these forests and this has to be a big indicator to how different plots are going to burn. Perhaps the plots that are burning at U/L and low-severity had limited fuels to burn in the first place.

Huffman – that’s a good assumption but the unburned low actually show the least variability in tree densities. They tried to control for initial variability by avoiding areas that had been thinned or had received any sort of treatments that affected structure.

10:45 Spring Stewardship Institute Monitoring – Springer, NAU

In the 1st 4FRI EIS, 74 springs that might receive benefit from the proposed action were identified within the 600,000 acre analysis area. With funds granted from the Pulliam Trust, Springer and NAU worked with the Wildlands Network and the Spring Stewardship Inst. to develop a smartphone application that could be used to monitor spring activity.

Spring monitoring is the cheapest, easiest and best way to assess the aquifer hydrological responses from ongoing forest restoration actions. The hypothesis is that springs that are seasonally dry might become perennial or begin producing more water as a result of forest restoration, though this may take considerable time. The challenge is that the resources to visit and monitor these locations to see these responses don't yet exist.

The application was developed with the idea of making it user-friendly enough to be able to train citizens to use it in the field. Through the application, you can download maps for spring sites, so that they're accessible when out of wifi-range. After undergoing training, citizen-scientists can assess and record some qualitative condition and risk data of the spring. They can make notes about the survey date and location, collect information on water quality and quantity, collect animal data and also record a photo of the site. 108 surveys at 98 springs were completed with over 3000 volunteer hours invested over the summer. Once this data is collected, it can be easily delivered to an online database. Most of the springs were in the moderate geomorphic condition in the 4fri area. Over half of the springs were dry or had water levels that were too low to measure.

A conclusion from the project has been that they require more oversight on quality-control of data collected by citizens. They found they lacked in their training of giving volunteers an idea of the broad range of stream flows they could encounter. They're performing outreach to 4FRI and related stakeholders – if there's interest in continuing the development of this technology, additional resources are required.

Jeri Ledbetter– Before the application was developed, there was SpringsOnline. SpringsOnline is a database application that is user-friendly, fast, and secure, and it contains data on over 140,000 springs across the western US. It has the ability to search by treatment area (4FRI). When viewing information on a particular spring, one can view most recent photos of the site, directions on how to locate it, a general description of the spring, grazing allotment information, water rights, and geo-referencing, and other information on the spring that doesn't change over time. On the surveys tab, one can view all surveys, via hyperlinks, that were completed on each particular spring.

Additional Funding Requested - \$26,000 for the Spring Stewardship Institute and \$8,000 for NAU

11:05 2017 DC Trip – Vosick, ERI

4FRI does an annual trip to DC as an official delegation of the group, which usually occurs in the spring. Generally, the aim is to include broad representation - one person who can speak for the FS, as well as someone from industry, an elected official, and an environmental person. The hope is to limit the party to 6 people. The intended audience is our delegation, key committee's in the House and Senate, USDA appointees, and the Forest Service in a panel forum. 4FRI is a curiosity and the more diverse the stakeholders, the higher the curiosity is, as to how we're all working together. We want to encourage investment by showing people that what we're working together and what we're doing is important and we're making progress. We're also there to provide the opportunity for the group to give a direct message to congress, straight from the horse's mouth. We usually bring a fact sheet and other groups

are open to bringing their own fact sheets or other items to help portray their message. The group that goes tries to meet with members as directly as possible.

Who is interested in going on the trip, and who is interested in working on the materials that will be brought and presented in DC? TNC, Brad Worsley, Jason Whiting, Todd Schulke, Rob Davis. Scott Russell, Travis Bruner

11:20 GEP Ownership Update – Dyer, COO GEP

Bill Dyer is the new Chief Operating Officer of Good Earth Power, Version 2. Bill represents a group of local AZ folks that made an investment in GEP in November, for two reasons – the economics of the investment were acceptable, and they were excited about the spirit of what 4FRI does, and felt that they could make a difference here. They plan to start strategically reaching out to the community to try and create partnerships, which they've already started work on, for example, concerning trucking logistics.

Jay Smith – He's been tasked with going back and revisiting the logging-force in az. GEP is entertaining loggers from out of state to address how far behind they are right now with their contract, as they don't feel the logging force in AZ is large enough to get them back on track. Their goal is to get to a point where they're making a positive movement for restoration in Arizona. One of their biggest hurdles is their reputation. A rebranding has been discussed but at this point, their focuses are in more pressing areas.

The company is trying to learn from some mistakes. They're now focusing on sawmills. They're going to stop being micromanagers and will start focusing on using partnerships to better accomplish their goals. They're reaching out to find biomass markets as this has been an ongoing struggle. Right now they're operating primarily below cost and they believe that's why they're so far behind.

Tom - What can we expect to see from GEP relative to future communications? Jay Smith will be more involved with the SHG to provide communications and an update at every 4FRI SHG meeting. Sue invites Jay to sit on the CWG. Realistic quarterly updates were requested by Brad Worsley.

Fleishman – Currently, the contract has Jason as its signatory, will that change? Yes, they've been discussing this with contract offices. Jason is still involved in the process, but Bill is receiving all of the appropriate access and delegations concerning operations.

*Comment – This is a great start showing their involvement and transparency with the group

11:30 Working Group Updates – All

- Planning WG (10 min) – Fredette

FS working with PWG in planning the next large SPLYT.

- Industry WG (10 min) – Worsley

They're working at a high level with FS to lay out a realistic plan on how the industry can be involved through FY17. There are likely meetings coming up to address the RFI where the IWG will represent industry interests. Jay requests involvement with the IWG.

- Communications WG (10 min) – Sitko

The next newsletter will come out in April. Items of interest are requested to be given at the February meeting.

- MPMB WG (10 min) – Esch

The group is working on FY17 planning and are looking to wrap up in the next month, as they're on a deadline for contracts and agreements they want to do. They held a water information meeting at the beginning of this month with FS and state agencies, discussing the information we already have on water. As the Rim Country EIS contains more water, they've identified this as an important topic to look into.

- Comprehensive Implementation WG (10min) – Travis Bruner

The first comprehensive restoration project is coming together to restore the T-Six Spring, early summer. Dick Fleishman involvement with the group is helpful in determining some other restoration projects. Amy Waltz has given a helpful preview of the Alan Ager Optimization model at the last CIWG meeting.

Diane – Everyone here is invited to come back to attend a presentation by Alan Ager at the FS Coconino SO on Feb. 1st, from 2-4PM, where Alan Ager will present the work they've been doing on optimizing the treatments done for the first 4FRI EIS. He's created a model to use in determining where to go to optimize restoration objectives, fire-risk reductions, and where we may see some economic benefit.

12:20 Stakeholder Disclosures – All

Worsley – Requests to look into video conferencing for SHG meetings.

Esch – Provides a reminder that the self-assessment survey is available and will be closing at the end of the month.

Smith - Mayoral duty of Pinetop, AZ ended in November.

12:25 Review Action Items

Action Item	Lead	Status
1. Send out poll to gauge interest in attendance and involvement in upcoming DC trip	Vosick	
2. FS to work with SC to discuss dates and times to hold public workshop on EIS Alternatives	Fredette	
3. Post meeting presentations on BC	Jourden	
4. Industry round-table discussion on contracting topics for 2 nd EIS	IWG	
5. SHG to come to Feb. meeting with ideas for April Newsletter	SHG	

12:30 Adjourn

02/22/17 SHG meeting information:

Wednesday, February 22nd, 2017, 9AM-12:30
 City of Show Low – Deuces Conference Room

181 N. 9th Street Show Low, AZ 85901
Teleconference line: (712) 775-7031, code: 439290611#

Future Agenda Items:

1. Industry Economics around Restoration USFS & AZSF