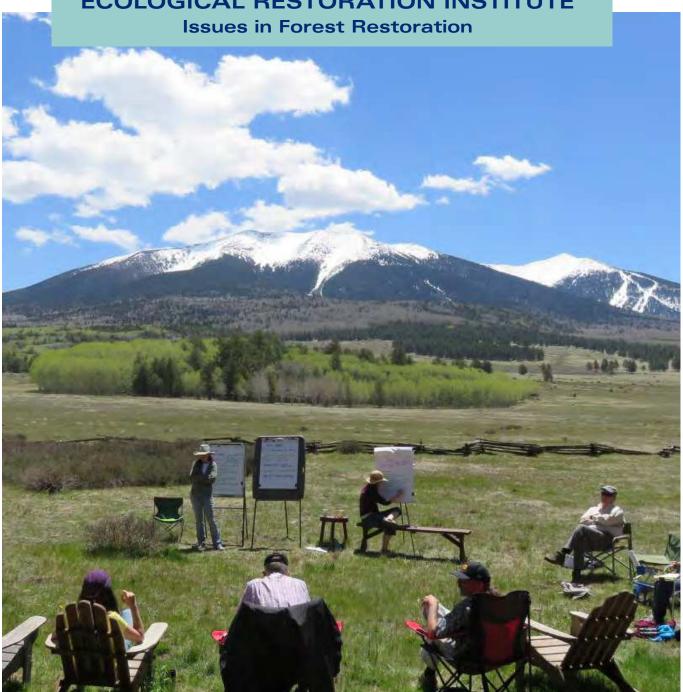
ECOLOGICAL RESTORATION INSTITUTE



The Four Forest Restoration Initiative (4FRI):
The Role of Collaboration in Achieving Outcomes



The Ecological Restoration Institute

The Ecological Restoration Institute at Northern Arizona University is a pioneer in researching, implementing, and monitoring ecological restoration of dry, frequent-fire forests in the Intermountain West. These forests have been significantly altered during the last century, with decreased ecological and recreational values, near-elimination of natural low-intensity fire regimes, and greatly increased risk of large-scale fires. The ERI is working with public agencies and other partners to restore these forests to a more ecologically healthy condition and trajectory—in the process helping to significantly reduce the threat of catastrophic wildfire and its effects on human, animal, and plant communities.

Cover photo:

In May 2015, Four Forest Restoration Initiative stakeholders, partners, and USFS staff came together for a two-day, facilitated retreat at The Nature Conservancy Hart Prairie Preserve in Flagstaff, Arizona. The retreat provided the opportunity to reflect on the collaborative process of the past six years. *Photo courtesy of The Nature Conservancy*

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Executive Summary

The first collaboratively developed Environmental Impact Statement (EIS) for the Four Forest Restoration Initiative (4FRI) was finalized in April 2015. This achievement provides an opportunity to review the lessons learned during the last six years of collaboration. This white paper describes the successes, challenges, and evolution of the 4FRI collaborative process as told by the stakeholders and U.S. Forest Service (USFS) staff. This white paper examines the following conclusions.

- Building trust takes time. The 4FRI Stakeholder Group had difficulty building trust between members, however, consensus and outcomes were still produced. With respect to the stakeholders and USFS, trust was occasionally undermined by "unseen" decision-making at the regional level. In one case, there was frustration over the inability of the USFS to provide an explanation that satisfied all stakeholders for the methods used to create a data layer describing the distribution of large young trees. This led to several members negotiating with the USFS outside the stakeholder group.
- Collaboration is slow. At times, the stakeholder group may have slowed the USFS planning process; however, the planning time overall was shorter than the USFS EIS average. Conversely, collaboration may be one reason the project was not delayed by litigation.
- The pace and scale of restoration treatments did not increase across the 4FRI project area. Issues beyond the stakeholder group's control, such as private industry and contracting complications, contributed significantly to slow treatment implementation.
- There were several factors that contributed to a successful relationship with the USFS:
 - The 4FRI stakeholders were involved in all facets of planning and felt that collaboration increased and improved over time.
 - The USFS demonstrated a willingness to listen to the stakeholder group and stakeholders felt their contributions were valued. For example, several stakeholder-developed products were included in the analysis.
 - Specific actions were taken to increase communication such as scheduling office hours for informal communication and posting draft documents on the public website in order to provide adequate time for document review and discussion.
- The stakeholder group-USFS partnership experienced challenges:
 - Stakeholders had difficulty understanding the NEPA process, its complexity, and the planning timeline.
 - It was difficult for stakeholders to understand where their contributions would be most effective.
 - Stakeholders had difficulty understanding how their contributions fit into the USFS decision space given the constraints the NEPA process.
- Inclusion of the stakeholder group in the objection process was deemed valuable. Stakeholders were able to actively participate in conversations with objectors on topics that had already been deliberated by the stakeholder group. This allowed the stakeholder group to provide support for collaborative decisions and best available science included in the EIS.
- The stakeholders felt that professional facilitation was important.
- By working with the USFS to co-sponsor public meetings and open houses public participation (beyond the stakeholder group) was improved.

Introduction

The Four Forest Restoration Initiative (4FRI) is a collaborative effort to restore forest ecosystems on more than 2.4 million acres of national forest land along the Mogollon Rim in northern Arizona. The project spans portions of the Coconino, Kaibab, Apache-Sitgreaves, and Tonto national forests. The 4FRI Stakeholder Group is led by citizens who represent more than 30 diverse governmental, non-governmental, environmental, and conservation organizations, and businesses. Although not formal members of the 4FRI Stakeholder Group, U.S. Forest Service (USFS) personnel collaborate with the stakeholders to achieve common restoration goals. The 4FRI Stakeholder Group coalesced in 2009 after a 12-year history of smaller collaborative forest restoration efforts in northern Arizona. In 2010 it became the largest restoration pilot selected by the congressionally authorized Collaborative Forest Landscape Restoration Program (CFLRP) (Figure 1). Over the next six years, 4FRI stakeholders and partners worked with the USFS to produce the first of what is expected to be three Environmental Impact Statements (EIS). The first EIS analyzed approximately one million acres on the west side of the 4FRI landscape located on the Coconino and Kaibab national forests. This EIS ultimately identified almost 600,000 acres for restoration treatments (Figure 2). The EIS also provided the first opportunity to test a new objection process established by the USFS in 2013. Despite nine objections, most were resolved and a final Record of Decision (ROD) was signed in April 2015. Although a complaint was filed in U.S. District Court, District of Arizona on November 9, 2015, injunctive relief was not requested and the case was ultimately dismissed for lack of plaintiff standing.

The first 4FRI EIS represents a major breakthrough in contemporary forest management. It demonstrates that the USFS can successfully complete a large-scale, restoration-based National Environmental Policy Act (NEPA) analysis in collaboration with diverse stakeholders. The extent to which collaboration was the key to avoiding litigation that would have stopped or delayed implementation is a matter of keen interest by policy makers, federal agencies, and citizens. Since 2000, all major forest policy has promoted collaboration as a means to lower conflict and help avoid litigation, thereby accelerating forest restoration. Other anticipated benefits of collaboration include identification and use of best available scientific information, a fairer process that involves all interests, and easier implementation, to name a few (CEQ 2007).

Purpose and Methods

The purpose of this white paper is to document the collaborative experience of the 4FRI Stakeholder Group over the last six years, capture lessons learned, and answer the question, "Did collaboration work?"

In May 2015, stakeholders, partners, and USFS staff came together for a two-day retreat to celebrate the signed ROD for the first 4FRI EIS, and other 4FRI accomplishments. The celebration also created the opportunity for the group to reflect on the collaborative process before launching the "Rim Country" EIS (for the next million acres to the east on the Tonto and Apache-Sitgreaves national forests). The facilitated meeting was held at The Nature Conservancy Hart Prairie Preserve in Flagstaff, Arizona, and was attended by 30 people representing a diversity of stakeholder organizations. Four Forest Restoration Initiative charter organizations are listed in the end notes.v

The 4FRI retreat is the primary source for identifying the lessons learned by the stakeholder group. Information was gathered



Figure 1. The Four Forest Restoration Initiative (4FRI) landscape covering approximately 2.4 million acres.

in two ways. First, it was captured by the facilitators who, prior to the retreat, conducted a set of phone interviews with a common set of questions; and second, through transcribed notes from the retreat. For the stakeholder interviews, one facilitator asked questions while the other captured responses. These results were combined and summarized into a synthesis document that was used to objectively inform the agenda design and discussions at the retreat. This process allowed perspectives to be included without name attribution.

The annual 4FRI stakeholder self-assessments provided a rich data set to support the conclusions from the retreat. The 4FRI facilitator, in cooperation with the stakeholders, conducted annual self-assessments to evaluate progress, trust, and success. Surveys were completed in 2011 (n=40), 2012 (n=31), 2013 (n=28), and 2014 (n=17). The most recent three surveys (2012–2014) used identical questions, while 2011 had a similar, but not identical, set. These surveys were elective, therefore not all stakeholders participated, nor did the same number of stakeholders participate every year. The survey results are not statistically valid and only reflect the views of those who took the survey; however, they do offer valuable insight into stakeholder perceptions of how the 4FRI performed.

U.S. Forest Service staff provided valuable feedback by sharing their internal After Action Review (AAR) with the group. Relevant feedback from the AAR is also incorporated in this white paper.



Figure 2. Map of first 4FRI EIS.

Finally, in the spirit of collaboration, this white paper was shared with the stakeholder group to ensure accuracy. A penultimate draft of the report was posted on the stakeholder's internal website, BASECAMP, and members were given two weeks to comment. Two stakeholders responded with comments. Those members were contacted for clarification and modifications were made to address their feedback. Additional review was provided by former 4FRI facilitators, a USFS staff member, a stakeholder group steering committee member, and a collaboration researcher.

Assessing the 4FRI Collaborative Process

Defining Successful Collaboration

Collaboration is characterized as a process where diverse stakeholders work together to solve a common problem or to achieve a common objective. In forest management, collaboration is viewed as a way to increase meaningful public involvement and input in natural resource management decisions with the goal of reducing environmental conflict and litigation (CEQ 2007).

Measuring the effectiveness of collaboration is notoriously difficult (Marek et al. 2014). The general assumption is that collaboration will lead to better management decisions that will result in implementation as opposed to litigation. The Collaborative Forest Landscape Restoration Act (CFLRA) established "the strength of the collaborative process and the likelihood of successful collaboration throughout implementation" as one of the selection criteria for projects. The purpose of the act is "to encourage the collaborative, science based ecosystem restoration" through processes that:

- 1) Encourage ecological, economic, and social sustainability;
- 2) Leverage local resources with national and private resources;
- 3) Facilitate the reduction of wildfire management costs through reestablishing natural fire regimes and reducing uncharacteristic wildfire risk; and
- 4) Demonstrate the degree to which various ecological restoration techniques can achieve ecological and watershed health objectives, affect wildfire activity and management costs, and offset restoration costs and benefit local communities via forest restoration by-products.^{vii}

These goals set out by the CFLRA will require longer time scales for assessment. The 4FRI collaborative group has leveraged local, national, and private resources, but otherwise it is too early to say if the project is accomplishing the other objectives of the act. Therefore, this analysis measures the success of 4FRI collaboration on the basis of how well the group accomplished its own goals and how participants felt the collaborative process contributed to achieving those goals.

The 4FRI stakeholders' goals and structure for the collaborative process were articulated in three foundational documents. These documents include the Path Forward, the 4FRI Charter, and the Memorandum of Understanding (MOU) between the 4FRI Stakeholder Group and the USFS. The annual assessments and May retreat reveal how well the stakeholder group believed it performed.

The goals of the 4FRI Stakeholder Group are clearly articulated in the MOU:

The purpose of this MOU is to document a framework of collaboration by all parties involved and interested in the restoration of northern Arizona's ponderosa pine forests, and the cooperative relationship among the parties, in accordance with the following goals: 1) accelerate landscape-scale restoration across the Mogollon Rim to support resilient, diverse stands, that sustain populations of native plants and animals; 2) restore forests so they pose less threat of destructive wildfire to forest communities; 3) create sustainable forest industries that strengthen local economies while conserving natural resources and aesthetic values; and 4) engage the public at large through increased public outreach, education, and support for this initiative.

How collaboration should contribute to achieving those goals is best summarized in the Path Forward:

... we believe that sustained investment in collaboration can build agreement and trust and minimize controversy surrounding forest management, thus allowing ambitious landscape scale restoration to proceed with maximum efficiency and effectiveness without sacrificing quality of work.



The May 2015 retreat was held at The Nature Conservancy Hart Prairie Preserve in Flagstaff, Arizona. It was attended by 30 people representing a diversity of stakeholder organizations. Photos courtesy of The Nature Conservancy



Later in the document, it states that collaboration will help to "navigate difficult decisions" and "build agreement necessary to move forward."

The 4FRI Stakeholder Group goals for collaboration were distilled into two questions based on the Path Forward in order to evaluate stakeholder group performance.

- 1. Did the stakeholder group build agreement and trust?
- 2. Did collaboration minimize controversy surrounding forest management, thus allowing ambitious landscape-scale restoration to proceed with maximum efficiency and effectiveness without sacrificing quality of work?

Evaluating Collaboration Within the Stakeholder Group

Did the stakeholder group build agreement and trust?

Based on the self-assessment, interviews, and retreat outcomes, the group had varying degrees of success in building trust. The self-assessments in particular indicate that while trust increased overall, lack of trust persisted. In the 2014 self-assessment, half of respondents agreed that "trust has increased among members of the stakeholder group over the last year," an increase from 2013 (9 percent agreed) and 2012 (11 percent agreed). However, also in 2014, only 40 percent of stakeholders agreed that "all members of our stakeholder group want the 4FRI project to succeed," less than the 60 percent who agreed with this statement in 2013, but similar to results from 2012.

The survey also asked stakeholders, "Are you willing to make the trade-offs that collaboration requires?" Most respondents said they were, but when asked if they believed that their fellow stakeholders were willing to make those same trade-offs, most were unsure, or didn't think their fellow stakeholders were willing.

The self-assessments across all years reveal that trust issues within the group arose from many respondents feeling that not all group members were honest about their motivations. A subset of survey respondents mentioned that they believed some stakeholders had "hidden agendas" and "(had) spoken to the press," or "sought alternative processes" to collaboration in order to meet their needs. The respondents felt this behavior was dishonest or damaging to the collaborative. Pre-retreat interviews revealed that "dysfunction" of the stakeholder group was a primary concern of participants who identified the elements of the dysfunction to include the unwillingness of some stakeholders to disclose personal agendas and "bad behavior." Stakeholders also recognized the inability of the group to hold each other accountable for bad behavior. A concern raised in the literature about bad behavior is that some stakeholders may choose not to participate in collaboration if the perceived costs to participation outweigh the perceived benefits (Cheng and Mattor 2006).

Although trust is often cited as a necessary quality to achieve collaborative outcomes, it leads to the question of whether or not trust was necessary to successfully complete the first 4FRI EIS. Despite the challenges in building trust among a broad base of group members, the 4FRI Stakeholder Group continued to meet and produce consensus-based products to inform the USFS planning process. Trust did exist among many individual members of the stakeholder group (surveys indicate that most trust issues were with a few individuals, not the majority of stakeholders) but the levels of trust were neither uniform nor possible in all stakeholder relationships. Building trust was an ongoing process, as demonstrated by the assessment results that show an incremental increase of those stakeholders who believed that trust was improving, and who became more likely to believe that their colleagues were willing to compromise.

While absolute trust in all stakeholders may not be necessary to move forward, commitment in the form of time, effort, and participation, proved essential to 4FRI success during the first planning process. In pre-retreat interviews, stakeholders cited 4FRI's "grit" (i.e. staying power) as a primary strength of the group. Based on the answers to questions in the annual assessment, the qualities that drove 4FRI success were a commitment to addressing the challenges of large-scale forest restoration as a group, and the understanding that more can be accomplished to address the challenges facing northern Arizona forests as a group rather than as individuals. This in part can be attributed to the long history of collaboration in the region. Private and public groups have worked to address restoration challenges since the mid-1990s, creating momentum that many 4FRI stakeholders are unwilling to abandon. This commitment within the group may also have stemmed from a regular representation of diverse view points and a resulting tension, for example between stakeholders who argued for full restoration and those that were concerned about the removal of too many large trees. Based on information provided in the assessments and pre-retreat interviews, many stakeholders continued to attend meetings in order to represent their diverse points of view, and to decrease the chance that any one view point dominated the discussion.

In addition, professional third-party facilitation helped the group work through contentious issues and maintain forward momentum by assisting with annual strategic planning. Beginning in 2009, the 4FRI Stakeholder Group cycled through five facilitators in six years, two of whom were forced to leave due to Stakeholder Group dissatisfaction. In the stakeholder self-assessments for 2012 through 2014, the majority of respondents agreed that "external facilitation is important for the success of this group." All stakeholders attending the retreat felt that professional facilitation was essential for effective operations of the group.

Did collaboration minimize controversy surrounding forest management, thus allowing ambitious landscape-scale restoration to proceed with maximum efficiency and effectiveness without sacrificing quality of work?

Members of the stakeholder group have expressed frustration with the pace of the collaborative process. Self-assessment survey respondents reported that the stakeholder group "gets stuck on process often," "too much time is spent on areas of disagreement," and "overall, the process is slow." However, the self-assessments reflect improvement over time in stakeholders' feelings that progress was made as a group, and that the group became more timely and efficient in moving processes and products forward. Improvements in efficiency could be attributed to facilitation, becoming more familiar with the USFS planning process, developing a system and routine in how the collaborative does business, and also an adjustment of expectations over time.

When compared to other NEPA timelines, the first 4FRI EIS was completed in a reasonable period of time. According to an analysis by the National Association of Environmental Professionals (NAEP) and documented in the report "National Environmental Policy Act: Little Information Exists on NEPA Analyses" the 197 Final EIS's prepared in 2012 had an average preparation time of 1,675 days, or 4.6 years. The start was defined as the publication of the Notice of Intent (NOI) to complete an EIS and the end was the Notice of Availability for the Final EIS. It is generally acknowledged that this timeframe underestimates the total preparation time because it does not include data development and other activities that contribute to the NOI. Nevertheless, it provides a benchmark to compare the 4FRI EIS. From NOI to the final ROD, the first 4FRI EIS took 1,561 days, or 141 days less than the 2012 average. It is also worth noting that the 4FRI EIS is far more complex than the average EIS, having integrated a full collaborative dimension, meeting the site specificity requirement for almost a million acres, and incorporating a legislated monitoring and adaptive management framework. Ultimately, the process analyzed the largest number of acres in USFS history for restoration-based mechanical treatments, approving 430,261 acres for mechanical thinning and prescribed burning and 155,849 acres for burn-only treatments. The number of acres successfully analyzed in one document is an alternative approach to evaluating the efficiency of collaboration during the NEPA process.

Although the 4FRI planning process fell within the average length of time required for an EIS, there were times when collaboration did slow the process. Negotiations over collaboratively developed products like the Landscape Strategy in 2010 (required under the CFLRA) and controversy around the document that provided guidance on large tree retention and removal slowed progress, leading the USFS to periodically exhort the stakeholder group to complete its discussions in order to help inform and complete the Proposed Action.xii

Measuring the effectiveness and efficiency of collaboration with respect to NEPA timelines extends beyond the core planning process. While not mentioned in 4FRI stakeholder documents as a specific goal, one common aspiration for collaboration is that it will lead to decisions that avoid litigation. Fear of litigation is a legitimate concern. According to records from the Council on Environmental Quality (from 2009) the USFS was the most common federal defendant in legal action under NEPA (Mortimer and Malmsheimer 2011). U.S. Forest Service management, particularly with respect to timber harvest, has been under constant scrutiny and challenge by environmental advocates for the last 30 years (Broussard and Whitaker 2009).

By January 2015, the 4FRI Stakeholder Group endorsed the first draft 4FRI EIS, stating, "While no document can possibly encapsulate the integral embodiment of so many different stakeholders' and Agencies' individual visions, and while individual stakeholders may seek adjustments on specific issues during the objection process and through future collaborative efforts, we believe that the Draft Record of Decision adequately translates the Forest Service and Stakeholder Group common restoration goals for the 4FRI First Analysis Area."xiii

This unanimity among diverse interests arguably supports the conclusion that the collaboration built durable agreements through the assessment process. However, two potential hurdles remained before getting to implementation: 1) the new objection process, and 2) whether objectors would be satisfied and/or not litigate.



Kaibab National Forest Supervisor Mike Williams (left) and Coconino National Forest Supervisor Earl Stewart (right) sign the Final Record of Decision for the first EIS. *Photo courtesy of the USDA Forest Service*

Effect of Collaboration on the Pre-Decisional Objection Process

In 2013, the USFS created a new pre-decisional objection process^{xiv} with the goal of identifying and resolving contentious issues after the issuance of the Final EIS and Draft ROD and before the Final ROD in order to avoid litigation. Participants in the objection process are limited to those who have standing established during the NEPA analysis. It also leaves it to the discretion of the deciding officer if and how to make the objection proceedings a public process. The deciding officer for the first 4FRI EIS was the Region 3 regional forester. His decision was to engage the 4FRI Stakeholder Group in the process.

Participating in the objection process in the spring of 2015 gave the stakeholder group an opportunity to support the USFS in decisions that were made collaboratively, advocate for the best available science used in the EIS, and to learn from the objectors possible points of contention for the second EIS that was scheduled to begin in late 2015. The objection process was not only new to the stakeholder group, but was also a new approach for the regional and forest level staff involved with the project. Two of the objectors were stakeholders who participated in the collaborative process.

Many members of the stakeholder group attending the retreat felt that inclusion in the process and the receptivity of the regional forester, and other regional staff, to their input was a positive affirmation of the value of collaboration. However, stakeholders indicated that navigating the objection process was complicated and confusing at times because the process was new for the agency and non-agency participants. The primary challenges were related to communication, which included staying abreast of rapidly changing relevant documents, to keeping apprised of meeting schedules. The stakeholder group members who participated in the objection process also found the process too quick, with insufficient time to specifically address objector concerns or have more dialogue. A tight timeline also created short turn-around times for contributing information or reviewing documents. Strategies identified by the stakeholder group for future objection processes included continuing to use best available science and incorporating evidence-based reviews. Developing a communication strategy with the USFS ahead of the process also would have been helpful.

In November 2015, a complaint was filed against the first ROD and 4FRI EIS in the U.S. District Court, Arizona District. The lawsuit was process-based, seeking clarity on the new objection process rules, asserting that the EIS violates portions of the Administrative Procedures Act, NEPA, and the CFLRA, and therefore requested that the EIS be remanded to the USFS for revision to achieve compliance.* The case was dismissed on September 14, 2016 because the court found the plaintiff lacked standing.

Ultimately, the organizations that often litigate in order to stop management elected not to litigate the Final ROD. Was collaboration through NEPA successful? The events and evidence suggest that collaboration did contribute to the successful completion of the first 4FRI EIS.

The Challenge of Post-NEPA Implementation

The core goal of the 4FRI Stakeholder Group appears in the MOU with the USFS. It is to "accelerate landscape-scale restoration across the Mogollon Rim to support resilient, diverse stands that sustain populations of native plants and animals." More specifically, it is to implement restoration treatments (as opposed to timely, successful planning). However, implementation requires conditions and actions that are largely outside of the control of the stakeholder group. Most stakeholders would agree that implementation of treatments did not increase as quickly as originally envisioned by the collaborative.

From federal fiscal year 2010 to April 2016, 131,069 acres have been mechanically treated across the entire 4FRI landscape. This is significantly less than the stakeholder goal of 50,000 acres of mechanical treatment per year. The number of acres accomplished to date has been and continues to be influenced by a number of factors including problems with the largest thinning contract, proximity of acres to processing facilities, lack of manufacturing capacity, the cost of biomass removal, and the overall marginal economics of wood utilization.

The acres reported treated in 2016 were based on NEPA shelf stock and do not represent the project acres collaboratively planned by the stakeholders under the first 4FRI EIS. The first acres to be treated under the 4FRI stakeholder-developed EIS are still in preparation for treatment. By August 2016, only three task orders of 3,358 acres were completed as part of the 300,000-acre 4FRI contract, originally awarded in 2012.^{xvi}

According to the original 4FRI CFLR proposal, in order to attract new restoration-based wood industry, a contract "at a large enough scale and with enough predictability of supply" would be needed to encourage significant industry investment in the region. "The first contractor failed to perform, and the contract was reassigned to Good Earth Power Arizona (GEP) in October 2013. With no existing harvest and manufacturing capacity on the ground, GEP was tasked with rebuilding infrastructure, a process that has been slow. In addition, GEP has experienced other delays. The result is that the intent of having one large contractor thin 30,000 acres per year (with other contractors achieving an additional 20,000 acres a year) is not yet realized.

Four Forest Restoration Initiative collaboration has set the stage for industry by successfully approving hundreds of thousands of acres for mechanical thinning. Restoration treatments may accelerate over the long term as industry capacity grows, but this will be more a function of the actions of the private business sector and wood product marketplace rather than collaboration.



Stakeholders tour a group of mature ponderosa pines on the 4FRI landscape. Photo courtesy of USDA Forest Service

Evaluating Collaboration Between the 4FRI Stakeholder Group and the U.S. Forest Service

An influential factor in stakeholder willingness to participate in collaboration is the expectation of having a direct influence on USFS planning, and as part of that, that stakeholder group contributions to that process are valued (Cheng and Mattor 2006). The MOU between the 4FRI Stakeholder Group and the USFS defined the role of each partner.

The U.S. Forest Service and the 4FRI Collaborative will work together through all phases of the NEPA process potentially including the framing of the issues, the development of a range of reasonable alternatives, the analysis of impacts, and the identification of the preferred alternative – up to, but not including, the agency's final decisions made by the relevant Line Officer (CEQ Handbook, p. 13).

The 4FRI stakeholders were involved in all facets of planning. Most 4FRI stakeholders felt they influenced the planning of the first analysis area and that their contributions were valued by the USFS. From 2011 to 2014, stakeholders believed that the USFS went beyond the minimum collaboration required by NEPA increased over time. Also, stakeholders believed that by working with the USFS, progress was made on concrete issues and on the 4FRI project (more so than progress just within the stakeholder group). Additionally, up to 90 percent of the stakeholders in 2014 agreed that the USFS 4FRI staff evaluated stakeholder ideas, which was up from about 50 percent in 2011.

The extent to which documents and negotiations influenced the Final EIS varied. In the early years of the process some stakeholders expected all collaboratively derived products and positions to be adopted and incorporated into the NEPA analysis. This expectation became a point of contention with respect to the stakeholder group Large Tree Retention Strategy (LTRS), which described how large young trees would be managed. Despite the USFS assertion that there were legal reasons that the document could not be adopted verbatim, the interpretation of the LTRS included in the Draft EIS left some stakeholders dissatisfied. In contrast, the complete monitoring plan developed by the stakeholders was included in the Final EIS with only minor edits. When the stakeholders delivered the monitoring plan to the ID team it was accompanied by a letter stating clear stakeholder expectations. Including a letter of expectation may have contributed to better mutual understanding about desired outcomes. For example, the stakeholder group acknowledged the need for monitoring prioritization, and that the USFS would not be fiscally responsible for all desired monitoring.



In February 2011 members of the 4FRI Stakeholder Group and the U.S. Forest Service Apache-Sitgreaves, Coconino, Kaibab, and Tonto national forests signed a Memorandum of Understanding to define the role of each partner. *Photo courtesy of the USDA Forest Service*

This level of commitment and willingness to hear stakeholder ideas presented by the collaborating USFS partners could be a factor driving continued stakeholder involvement. Several innovations to increase communication were tested by the 4FRI Interdisciplinary (ID) Team as well. For example, team members held office hours to encourage informal conversations.

Finally, an important and surprising outcome from collaboration was the role the stakeholder group played in public meetings. The stakeholder group co-hosted several public meetings and open houses. There was a notable improvement in turnout when the USFS and stakeholder group combined efforts in public outreach.

Did trust improve between the stakeholders and the USFS during the planning process?

Building trust between the USFS staff and stakeholders was an ongoing process. Initially, miscommunications and missteps strained 4FRI stakeholder and USFS relations. An example of this issue emerged during pre-retreat interviews and was discussed at the retreat. The initial proposed action was drafted by the USFS based on input from a series of public open houses. This approach, although consistent with conventional public input process, did not meet stakeholder expectations for decision-sharing. This left some members of the stakeholder group feeling that the planning process was moving forward without them.

The USFS 4FRI staff indicated that their intent was not to exclude the stakeholders, but to provide a starting point. As a part of their After Action Review (AAR), the 4FRI USFS staff identified a few areas of improvement for the next proposed action development. Areas of improvement included providing more and better quality data to stakeholders, engaging the stakeholder group in the development of desired conditions, and asking the stakeholder group to advertise public meetings in order to improve public participation and streamline the public participation process.

Conflict arose between the stakeholder group and the USFS 4FRI staff regarding the intent of the stakeholder group's Large Tree Retention Strategy. This issue also caused friction within the stakeholder group. The most contentious issue revolved around a category titled, "Preponderance of Large Young Trees." The consensus stakeholder position was that large trees should be retained across the landscape unless removal was necessary in order to achieve restoration goals (such as fire risk reduction and/or to re-establish pattern and function in the landscape). In other words, when restoration goals could not be achieved there would be an "exception" made that allowed the removal of large young trees. Conflict arose when the USFS indicated that most of the landscape fit this description, but then did not immediately produce the data and map layers to support this assertion. Discord developed in the stakeholder group between those individuals who were satisfied with the USFS contention that much of the landscape fell under this description and those who distrusted the USFS and felt the USFS was applying it too broadly. Ultimately, the dissatisfied parties negotiated directly with the USFS outside the stakeholder group.

Having a dedicated USFS ID team and low rate of turnover within that team helped the stakeholder group maintain consistent working relationships with agency staff, leading to increased trust and communication over time.

What were the successes and challenges to the 4FRI Stakeholder Group and USFS partnership?

Challenges for stakeholders have included struggling to learn the NEPA process, understanding the planning timeline, and determining where in the process their actions would be most effective. The USFS identified this problem in their AAR and proposed they continue to educate stakeholders about the NEPA process and timeline.

Several times the stakeholder group and USFS had to discuss the legal limits of collaboration and the public process before it impinged on rules regulating pre-decisional actions. The NEPA process and the variable interpretations of where legal boundaries exist for collaborative decision-making were confusing to stakeholders and difficult for USFS planning staff to interpret. At one point, the stakeholder group and USFS evaluated the efficacy of seeking Federal Advisory Committee Act (FACA) designation but concluded that it would limit participation. To avoid FACA violations, the 4FRI stakeholder group convened all meetings and developed the agendas. U.S. Forest Service staff were not voting members of the collaborative but participated at the invitation of the stakeholder group.

During the first EIS analysis, stakeholders learned to accept that the collaborative group was not the sole voice for the public nor even for all members of the 4FRI collaborative. Issues that were painstakingly discussed and resolved by the collaborative had to be reconsidered by the USFS because of public comments on the proposed action, draft and final EIS document, and objection process.

Dissatisfaction with the collaborative outcome on one issue led some members to step outside the collaborative process in order to pursue their organization's position. Neither the SHG nor the USFS can require any member to stick with the process, and the USFS cannot refuse their input. At the retreat, some members of the collaborative stated they were offended by this behavior and it caused them to question the purpose of having a formal collaborative group.

The length of time required to produce an EIS caused frustration in the group. Yet, while the stakeholder group would complain about the need for a faster process at some points, more time to review or produce documents would be requested at other times. Like many federal and state agencies, the USFS 4FRI staff have multiple demands on their time that limit their availability to collaborate. Capacity to accomplish a project as large and complex as the first EIS analysis was an issue for both the stakeholders and the USFS. In order to give the stakeholder group more time to review documents, the ID team posted draft documents on the public website prior to official publication to give more time for review.

Stakeholders at the retreat identified implementation of the first EIS as a big issue still pending resolution. Many of the stakeholder group's foundational documents advocate positions that focus on implementation issues, such as the strategic placement of treatments to facilitate management with prescribed or wildland fire. The USFS postponed discussion of these issues during the NEPA process, maintaining that the proper time for consideration would be during post-NEPA implementation.



The Four Forest Restoration Initiative is a collaborative effort to restore forest ecosystems on more than 2.4 million acres of national forest land along the Mogollon Rim in northern Arizona. The collaborative work completed over the past six years has set the stage for accelerating the pace and scale of restoration and reducing the threat of fire to communities. Photo courtesy of the USDA Forest Service

As previously mentioned, stakeholders were and continue to be frustrated with the contracting process. Concern about the USFS decision process for the first 300,000-acre contract, and the failure of the first contractor and slow performance of the second has been a primary concern of some members of the group and been a recurring, lengthy topic for discussion at meetings. The USFS has responded to criticism by providing information to verify compliance with all legal procedures. They have also stated that as long as the contractor is not in default, no legal action can be taken to terminate the contract. Nevertheless, this element of the 4FRI process and the inability of the stakeholders to influence it is a frustration to some members.

As part of the May 2015 retreat, stakeholders and USFS 4FRI staff identified strategies to improve their partnership. The stakeholders prioritized increased access to information, data, and draft documents to increase the transparency of the planning process. Stakeholders also expressed a desire to reduce stakeholder group response time to USFS planning documents, and to reduce conflict over contentious planning issues. The USFS 4FRI staff expressed a desire for increased clarity in stakeholder comments and feedback, quicker response times, consolidated comments from different groups within the stakeholder group, and increased recruitment, representation, and capacity in the stakeholder group. The stakeholder group expressed a desire for more USFS participation in the collaborative, especially by line officers.

Conclusions

Goals developed by the stakeholder group include building trust and agreement, and increasing the pace and scale of forest treatments. Over time the stakeholder group increased their efficiency, enhanced their understanding of the EIS process, and improved trust within the stakeholder group and between the stakeholder group and the USFS. Collaboration has not led to a singular outcome of "successful" or "unsuccessful." The group has reached varying levels of success across stakeholder developed goals, which have been described in this paper. Issues still persist in the workings of the collaborative group; however, these were secondary to the stakeholders' grit and determination to see the first NEPA analysis to completion.

In April 2015, the Final EIS and ROD was signed for the first one-million-acre analysis for the 4FRI. This action approved almost 600,000 acres for restoration treatments that include thinning and burning, and burn-only. This EIS exceeded the size and scope of previous EIS's that include mechanical thinning and it demonstrated that landscape-scale EIS analysis can be successful. Although a complaint was filed in Arizona District Court, the plaintiff did not seek an injunction and ultimately the case was dismissed. The question arises, would this NEPA process have succeeded without the six-year collaboration between the USFS and the 4FRI Stakeholder Group?

The last six years demonstrate that collaboration did contribute to the successful completion of the first 4FRI EIS. The process and outcome of the pre-decisional objection process is an illustration of the power of collaboration. The process strives to resolve objections during the time between the release of the Draft and Final ROD. How the process works is left to the discretion of the deciding officer. In the case of the first 4FRI EIS, the regional forester chose to include the stakeholder group throughout the proceedings, often requesting input about whether or not the stakeholder group had discussed the issue raised by the objector. Where the stakeholder group had discussed and resolved issues, the USFS aligned with the stakeholder group.

The true measure of whether or not collaboration works is whether or not the group was able to achieve the goals identified in the MOU between the stakeholder group and USFS. For outcomes within its control the stakeholder group has been successful. Collaboration has set the stage for accelerating the pace and scale of restoration and reducing the threat of fire to communities by supporting the NEPA process and successfully completing the analysis. The next step for accelerating treatment implementation is beyond the authority and capacity of the stakeholder group. It requires the creation of appropriately scaled industries to do the restoration work — a remaining challenge that is a work in progress. Finally, the 4FRI is well known to the interested public, in part due to the innovative approach taken to conduct joint public meetings with the USFS and promotion and outreach done by the stakeholder group members and their organizations. The second "Rim Country" EIS is already underway, demonstrating the commitment of the stakeholder group and the USFS for achieving the 4FRI goal to restore 2.4 million acres across the Mogollon Rim.

End Notes

i http://www.4fri.org/description.html, 4FRI Stakeholder Group Website, Accessed on 2/26/2016.

ii For more history see ERI white paper, "The History of the Four Forest Restoration Initiative: 1980s–2010." http://library.eri. nau.edu/gsdl/collect/erilibra/index/assoc/D2014031.dir/doc.pdf.

iii The Notice of Intent to prepare an Environmental Impact Statement was first published in the Federal Register on January 25, 2011.

iv Western Governors' Association 10-Year Comprehensive Strategy, The Healthy Forest Restoration Act (HFRA),

Collaborative Forest Restoration Program (New Mexico), the Collaborative Forest Landscape Restoration Act, 2012 U.S. Forest Service Forest Planning Rule

v The following is a list of organizations that signed the 4FRI Stakeholder Group Charter:

Arizona Elk Society The Natural Resources Working Group

Arizona Game and Fish Department Navajo County

Arizona State Forestry

Arizona Wildlife Federation

NAU Forest Ecosystem Restoration Analysis

Bejac Corporation

Northern Arizona Wood Products Association

Campbell Global Northland Pioneer College
Canyon Creek Logging Inc. Novo BioPower, LLC.

Center for Biological Diversity Pine Strawberry Fuel Reduction Inc.

City of Flagstaff-Fire Department Pioneer Association

Coconino County Real Arizona Development Council

Coconino Natural Resource Conservation District Southwest Forestry Inc.

Coconino Rural Environment Corps Southwest Forests Sustainable Partnerships
Eastern Arizona Counties Organization The Nature Conservancy

Ecological Restoration Institute, NAU

Tri Star Logging Inc.

Empire Machinery

Town of Pinetop - Lakeside

Forest Energy Corporation Town of Snowflake

Gila County TRACKS
Grand Canyon Trust Trout Unlimited

Great Old Broads for Wilderness U.S. Fish and Wildlife Service

Greater Flagstaff Forest Partnership White Mountain Conservation League

Greenlee County White Mountain Stewardship Multiparty Monitoring

Little Colorado River Plateau RC&D Area, Inc.

Board

Mottek Consulting Wildwood Consulting

National Wild Turkey Federation

vi Rural Voices for Conservation Coalition. April 2007. "Collaboration Issues Paper."

vii CFLRA, Omnibus Public Lands Act of 2009, P.L. 111-11

viii The Path Forward, http://www.4fri.org/pdfs/path_forward_032410.pdf. Accessed on 6/8/2016.

ix The 4FRI Charter: http://www.4fri.org/pdfs/4FRI_charter_amended_022713.pdf. Accessed on 6/8/2016.

x The Memorandum of Understanding between the Four Forest Restoration Initiative (4FRI) Collaborative Stakeholder Group Representatives and the U.S. Forest Service Apache-Sitgreaves, Coconino, Kaibab, and Tonto national forests. http://www.4fri.org/pdfs/MOU_with_signatures.pdf. Accessed on 6/8/2016.

xi GAO-14-369, http://www.gao.gov/assets/670/662543.pdf

xii Provencio, Henry. U.S. Forest Service, personal conversation July 9, 2016.

xiii 4FRI Stakeholder Group Position Statement, http://www.4fri.org/pdfs/press/4FRI_SHG_ResponseToFEISDRODFinal.pdf xiv 36 CFR Part 218, http://www.fs.fed.us/emc/applit/36cfr218a.htm

xv U.S. District Court, District of Arizona. Case 3:15-cv-08265-PCT-NVW. Filed 11/09/15.

xvi An additional 4.058 acres have been harvested but not accepted by the USFS.

xvii The 4 Forest Restoration Initiative: Promoting Ecological Restoration, Wildfire Risk Reduction, and Sustainable Wood Products Industries: A Proposal for Funding Under the Collaborative Forest Landscape Restoration Program. http://www.fs.fed.us/restoration/documents/cflrp/2010Proposals/Region3/R3_4FRI/R3_4FRI_CFLRP_Proposal_05142010.pdf. Accessed on 7/7/2016.

References

- Broussard, S.R., and B.D. Whitaker. 2009. The Magna Carta of Environmental Legislation: A Historical Look at 30 Years of NEPA-Forest Litigation. Forest Policy and Economics, 11 (2009) 148-154.
- Cheng, A.S., and K.M. Mattor. 2006. Why won't they come? Stakeholder perspectives on collaborative national forest planning by participation level. Environmental management, 38(4), 545-561.
- Council on Environmental Quality (CEQ). 2007. Collaboration in NEPA: A Handbook for NEPA Practitioners. October 2007.
- Marek, L.I, Brock, D.P. and J. Savla. 2014. Evaluating Collaboration for Effectiveness: Conceptualization and Measurement. American Journal of Evaluation 1-19. http://aje.sagepub.com/content/early/2014/04/18/1098214014531068
- Mortimer, M.J., and R.W. Malmsheimer. 2011. The Equal Access to Justice Act and U.S. Forest Service Land Management: Incentives to Litigate. Journal of Forestry, (352-358).
- USDA Forest Service (USFS). 2012. The WGA Cohesive Strategy, Healthy Forest Restoration Act, CFLP, CFRP, 2012 Forest Planning Rule.

Intermountain West Frequent-Fire Forest Restoration

Ecological restoration is a practice that seeks to heal degraded ecosystems by reestablishing native species, structural characteristics, and ecological processes. The Society for Ecological Restoration International defines ecological restoration as "an intentional activity that initiates or accelerates the recovery of an ecosystem with respect to its health, integrity and sustainability....Restoration attempts to return an ecosystem to its historic trajectory" (Society for Ecological Restoration International 2004).

Throughout the dry forests of the western United States, most ponderosa pine forests have been degraded during the last 150 years. Many ponderosa pine areas are now dominated by dense thickets of small trees, and lack their once diverse understory of grasses, sedges, and forbs. Forests in this condition are highly susceptible to damaging, stand-replacing fires and increased insect and disease epidemics. Restoration of these forests centers on reintroducing frequent, low-intensity surface fires—often after thinning dense stands—and reestablishing productive understory plant communities.

The Ecological Restoration Institute at Northern Arizona University is a pioneer in researching, implementing, and monitoring ecological restoration of dry, frequent-fire forests in the Intermountain West. By allowing natural processes, such as fire, to resume self-sustaining patterns, we hope to reestablish healthy forests that provide ecosystem services, wildlife habitat, and recreational opportunities.

The ERI Issues in Forest Restoration series provides overviews and policy recommendations derived from research and observations by the ERI and its partner organizations. While the ERI staff recognizes that every forest restoration is site specific, we feel that the information provided in the series may help decisionmakers elsewhere.

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