

# Field-Level Implementation of the US Forest Service's Shared Stewardship Strategy: Six Case Studies of Large-Scale Cross-Boundary Forest Management

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## **List of Acronyms**

Beaver Ranger District (BRD)	Missoula Ranger District (MRD)
Bureau of Land Management (BLM)	National Environmental Policy Act (NEPA)
California Climate Investment (CCI)	National Fish and Wildlife Foundation (NFWF)
Chiloquin Community Forest and Fire Project (CCFFP)	National Forest Foundation (NFF)
Civil Society Organization (CSO)	Natural Resources Conservation Service (NRCS)
Collaborative Forest Landscape Restoration Program (CFLRP)	Non-Governmental Organization (NGO)
Community Assistance Funds Adjacent [to National Forest System lands] (CAFA)	Oregon Department of Forestry (ODF)
Community Wildfire Protection Plan (CWPP)	Protected Activity Center (PAC)
Department of Natural Resources and Conservation (DNRC) in Montana	Potential Operational Delineation (POD)
Environmental Quality Incentives Program (EQIP)	Records of Decision (RODs)
Focal Treatment Area (FTA)	Rocky Mountain Research Station (RMRS)
Good Neighbor Authority (GNA)	State Forest Action Plan (SFAP)
Idaho Department of Lands (IDL)	State Institutional Trust Lands Administration (SITLA)
Infrastructure Investment and Jobs Act (IIJA)	United States Department of Agriculture (USDA)
Joint Chiefs' Landscape Restoration Partnership (JCLRP)	United States Forest Service (USFS)
Klamath-Lake Forest Health Partnership (KLFHP)	Watershed Restoration Initiative (WRI)
Klamath Watershed Partnership (KWP)	Wildfire Adapted Missoula (WAM) project
Lolo Restoration Committee (LRC) collaborative group	Wildfire Preparedness Coordinator (WPC)
Master Stewardship Agreement (MSA)	Wildland urban interface (WUI)
Memorandum of Understanding (MOU)	Yosemite Stanislaus Solutions (YSS)
Missoula County Fire Protection Association (MCFPA)	

# Executive Summary

## Study Overview

Our team evaluated how field-level actors were operationalizing the United States Forest Service (USFS) Shared Stewardship Strategy through six large cross-boundary forest management projects. Our goals were to understand the partners involved with each project, the prioritization processes that each project utilized, and the institutional factors influencing each project's design and trajectory.

To gather the information we needed, we conducted 60 semi-structured interviews in 2021–2022 with people involved in the six projects. We interviewed staff members at USFS, at other federal and state agencies, in local government, and at non-governmental organizations (NGOs), as well as timber industry representatives and forest collaborative group members.

## Findings

### 1. Partners involved with the projects

In some cases, the USFS selected project landscapes before they engaged other partners, but in all cases, interviewees noted that project landscapes and associated restoration needs were well known by the USFS and stakeholders alike. In all cases, various agencies, organizations, and stakeholders worked together, influencing the placement and priority of projects across these identified landscapes, although the exact makeup of these partners depended on project location and context. Many interviewees said that project actors harnessed existing collaborative forums and networks to facilitate prioritization discussions. In addition, interviewees said that the USFS collaborated with partners during and after the National Environmental Policy Act (NEPA) process to determine project parameters, sometimes including partners on NEPA teams. In some cases, USFS planners added land treatments into existing NEPA design parameters, based on partner recommendations or priorities. In most projects, the Natural Resources Conservation Service (NRCS) was an essential player for working with private landowners to implement hazardous fuels reduction treatments on their lands through the agency's Environmental Quality Incentives Program (EQIP). They also often worked with other county-level organizations to augment funding and outreach. Finally, during the implementation of projects, agencies and organizations frequently worked with

private contractors to implement hazardous fuels treatments. Other partners included state land management agencies and local entities such as watershed councils, resource conservation districts, and rural fire protection districts.

### 2. Prioritization processes

Interviewees from all projects shared that they used collaborative processes to prioritize projects, and that partners shared past, present, and future project locations and timetables to identify opportunities to expand treatments across boundaries. For example, some projects used modeling and mapping exercises to inform their prioritization processes, and some projects conducted community meetings to assess local landowner and stakeholder priorities while communicating general project objectives. These included using potential operational delineations (PODs) and other state-specific risk assessments.

### 3. Institutional factors influencing project success

The Good Neighbor Authority (GNA), utilized by most of the projects included in our study, was frequently mentioned as one of the USFS's most essential tools to complete cross-boundary work. Interviewees from two projects also discussed the importance of agreements signed under the Wyden Authority (a federal law that allows the Departments of Agriculture and Interior to enter into "cooperative agreements" to protect or restore wildlife habitat) to work across boundaries, though they frequently noted challenges associated with the bureaucratic requirements tied to this mechanism. On the Social and Ecological Resilience Across the Landscape (SERAL) project, a Master Stewardship Agreement was key for project implementation.

Interviewees agreed that regular appropriations were insufficient to sustain large-scale work, which required additional funding sources. The Joint Chiefs' Landscape Restoration Partnership (JCLRP) was an important source of funding for some projects. Interviewees in Idaho and Utah said that their work benefited from their states' respective Shared Stewardship programs, and that these programs provided funding assurances that brought more partners to the table. Interviewees from most projects commented that Stevens Hazardous Fuels Grants (Community Assistance Funds Adjacent to National Forest System lands, also called CAFA funds) from the State and Private Forestry branch of the USFS were essential funding sources for private land and ingress/egress treatments. More recent infusions of

funding from the Infrastructure Investment and Jobs Act of 2021, along with non-federal funding sources, supported implementation of some projects. Challenges included having the necessary knowledge to use multiple sources of funding and navigating timelines for state versus federal funding.

Lack of staff capacity was a major limiting factor to cross-boundary work. Interviewees said that USFS grants and agreements staffing capacity was insufficient to scale up management actions. They also frequently mentioned that yearly fire season demands on staff members with firefighting qualifications interrupted their capacity to conduct environmental assessments and slowed the pace of NEPA work. This was widely considered a significant challenge to efficient progress on complex actions such as cross-boundary work.

Participants from all projects routinely said that leadership and sustained commitment of key individuals, both inside and outside the USFS, kept collaborative efforts together and maintained momentum. Interviewees across projects said that revenues from GNA timber sales were a significant incentive for states to collaborate with the USFS. Many cautioned, however, that hazardous fuels treatments needed to consistently include merchantable volume, or states might be less inclined to enter into future GNA agreements with federal agencies. Industry capacity was a limiting factor on most projects.

## **Recommendations**

We synthesized the following suggestions for those who are seeking to plan and execute cross-boundary forest management, based on the perspectives and direct recommendations of interviewees:

### **1. Identify and provide access to stable, multi-year funding.**

Interviewees were clear that the existing capacity and funding available to individual management units through regular appropriations were not sufficient to drastically scale up forest management actions. All the projects we studied relied on shared capacity through GNA, or additional funding sources such as Joint Chiefs' or other federal and/or state sources to scale up and out from federal lands. Previous research also identified the importance of stable multi-year funding and collaborative history, and raised questions about how to build collaborative capacity where it does not already exist (e.g., Schultz et al. 2018).

### **2. Ensure that local agencies build relationships with local communities.**

Interviewees recommended that local agencies increase their time investments in relationship-building with their local communities. Collaboration with community partners can streamline planning and prioritization processes, support innovation through community support, and facilitate cross-boundary project work to meet fuel management objectives. Creating incentives to engage community members often and over extended periods of time will likely increase the overall success of future cross-boundary work.

### **3. Assign a project coordinator to cross-boundary projects.**

A long-term coordinator can ensure the longevity and success of projects. Coordinators provide leadership; help to align the interests, timelines, and capacities of diverse partners; and keep projects on track to meet their objectives. They organize project tasks, provide consistency, and strategically leverage resources and relationships. Other research on the USFS's Collaborative Forest Landscape Restoration Program (CFLRP) also identified coordinators as key to success (McIntyre and Schultz 2020).

### **4. Create forums to share information between agencies and organizations.**

Creating forums where agencies and organizations can share information helps to ensure that investments over a project's lifespan are indeed in "the right place at the right time." It ensures that investments are well prioritized and coordinated. Finding ways to share information fluidly between agencies and organizations is a key step in facilitating cross-boundary work. It is especially important to find ways to engage private landowners.

## **Next Steps**

Our next steps are to understand how efforts undertaken as part of Shared Stewardship are facilitating fuels reduction and forest restoration work that is being conducted with new funding. We will investigate investments in current priority landscapes and examine how these projects are leveraging past partnerships across state, federal, and local agencies, and with other partners.

## Introduction

In 2018, in response to calls for a new management paradigm to address fire hazard, the USFS announced the Shared Stewardship Strategy to increase the pace and scale of cross-boundary forest management activities (USFS 2018). Key objectives of the strategy included reducing wildfire hazard and enhancing forest resilience at large scales by partnering with states, tribes, and other federal and non-federal entities to collaboratively prioritize management actions and locations, leverage capacity, and coordinate work to maximize impact across boundaries.

Specifically, the strategy called for:

1. Working with states to share in the ownership of risks presented by wildfire through joint prioritization and coordinated planning and action, with emphasis on the State Forest Action Plan (SFAP) revision process as a forum for these discussions.
2. Efficiently utilizing existing tools such as GNA and stewardship contracting to increase the pace and scale of forest management work.
3. Harnessing a suite of new scientific tools to identify strategic places to invest in forest management by modeling and mapping fire risk.
4. Pursuing complementary goals, such as engaging stakeholders, streamlining internal agency processes, and increasing the adoption of risk management principles in fire management.

Shared Stewardship builds on the foundation of previous efforts intended to accelerate forest management, facilitate work across jurisdictional boundaries, and prioritize funding to accomplish work at scales large enough to impact ecological outcomes. Beginning in 2009, leadership at the U.S. Department of Agriculture (USDA), which oversees the USFS, started emphasizing an “all lands” approach to forest management (USFS 2009). In 2009, Congress passed the Collaborative Forest Landscape Restoration Program, which provides 10-year funding through a competitive application process to collaboratively designed projects on fire-adapted USFS lands (Schultz et al. 2012). The JCLRP, initiated in 2013 and permanently authorized by the Infrastructure Investment and Jobs Act of 2021<sup>1</sup>, funds work both on national forestland and private lands with three-year funding commitments (Cyphers and Schultz 2019). The GNA, permanently authorized nationwide in the 2014 Farm Bill, and amended in 2018, permits states, tribes, and counties to sign cooperative agreements with federal agencies to utilize state, tribal, or county capacity to

implement restoration activities on federal land (Bertone-Riggs et al. 2018). The 2014 National Cohesive Wildfire Management Strategy provided leadership and laid out key objectives that fire managers across jurisdictions should work toward, though it provided no additional funding opportunities or management authorities (WFEC 2014).

The Shared Stewardship Strategy was the next step in the effort to promote cross-jurisdictional work. Nationally, it was largely a strategic document emphasizing joint prioritization, leveraging diverse capacities, and encouraging work across boundaries, raising the question of how this direction would be put into practice. As a result of the strategy, some states entered into unique agreements with the USDA that created novel funding opportunities or positions that supported cross-boundary work (Kooistra et al. 2021). A key question was whether additional institutional work or change might be required to support cross-boundary work.

In 2019, Colorado State University entered into a challenge cost-share agreement with the USFS State and Private Forestry deputy area to execute independent research on the implementation and development of Shared Stewardship efforts. The principal investigator for this research is Dr. Courtney Schultz, and Dr. Heidi Huber-Stearns at the University of Oregon and Dr. Jesse Abrams at the University of Georgia are co-principal investigators. Our research to date consists of three phases. Phase 1, completed in 2020, explored initial national and state-level expectations on the strategy in western states with signed Shared Stewardship agreements (Kooistra et al. 2021). Phase 2 research, completed the following year, explored perspectives among state-level players in states east of the Rocky Mountains with signed agreements (Kee et al. 2021). Phase 3 (reported upon herein) focused on the field level and investigated the perspectives of actors involved with individual projects who met the intent of Shared Stewardship. The objective of this phase was to understand how actors are operationalizing cross-boundary work to increase the pace and scale of management actions, with a focus on the western United States. Further phases will investigate the strategy’s maturation at the state level, as well as its influence on cross-boundary projects across the United States that were developed after the strategy’s publication.

**The following research objective and questions guided Phase 3 of our research.**

**Objective:** Understand the nature of cross-boundary, landscape-scale project partnerships, project identification, and project implementation within the USFS’s Shared Stewardship Initiative.

**Questions:**

1. What partners are involved in identifying and prioritizing projects?
2. What prioritization processes do partners use to identify and plan the projects?
3. What collaborative forums, policies, funding tools, and other factors (i.e., various institutional factors) constrained or facilitated project progress?
4. What lessons learned and recommendations can be drawn from these cases?

## Approach

We used qualitative data collected from semi-structured interviews, a technique that is designed to facilitate a detailed understanding of human perceptions and experiences (Glesne 2016). All of our interviewees were involved with one of six hazardous fuels reduction projects (Table 1):

1. Beaver River Improvement Project in south-central Utah (Beaver River)
2. Chiloquin Community Forest and Fire Project in southeastern Oregon
3. Craggy Vegetation Management Project in northern California (Craggy)
4. Scattered Lands Project in northern Idaho (Scattered Lands)
5. Social and Ecological Resilience Across Landscapes (SERAL) Project in California’s Sierra Nevada range
6. Wildfire Adapted Missoula Project in western Montana (WAM)

Table 1. The Six Hazardous Fuels Reduction Projects

<b>Project</b>	<a href="#">Beaver River Improvement Project, Fishlake National Forest, Utah</a>	<a href="#">Chiloquin Community Forest and Fire Project, Fremont-Winema National Forest, Oregon</a>	<a href="#">Craggy Vegetation Management Project, California</a>	<a href="#">Scattered Lands, Idaho Panhandle National Forests</a>	<a href="#">Social and Ecological Resilience Across the Landscape (SERAL), Stanislaus National Forest, California</a>	<a href="#">Wildfire Adapted Missoula, Lolo National Forest, Montana</a>
<b>Interviewees (Total)</b>	10	7	8	12	9	14
USFS	3	2	2	3	4	5
State agency	4	1	1	3	0	1
Other federal agency	0	0	1	2	0	1
Local government	2	1	2	1	0	2
NGO	0	2	1	0	3	3
Industry	0	0	0	1	1	1
Other	1	1	1	2	1	1

We selected these six projects from an initial list of 45 possible projects. Each of these projects contained cross-boundary components, in which actors worked together to coordinate activities beyond their own agency's jurisdiction. We identified projects by talking to Regional and National Shared Stewardship coordinators and reviewing reports from each region on their Shared Stewardship projects. We looked for projects where implementation was underway and occurring across jurisdictions. To find interview participants, we asked project line officers for the key players involved with that project thus far. Our initial list of participants for each project included land managers and officials from the USFS, other federal and state agencies, and local county and city governments. As data collection progressed, our sample grew, based on interviewee recommendations, to include additional members of government organizations, as well as members of local NGOs, timber industry representatives, and collaborative groups.

As a research team, we developed an interview guide (see Appendix B) that guided our line of inquiry for each participant. We conducted a total of 60 interviews (between 7 and 14 per project) between June 2021 and August 2022. The interviewees included 23 people from federal agencies, 10 from state agencies, 8 from local governmental organizations, and 12 from NGOs, the timber industry, and other key local partners (e.g., university partners, fire and rescue, homeowners' associations, collaborative forest groups). Each confidential interview lasted approximately 30–90 minutes and took place via phone call, video chat, or in person. Interviews were recorded with permission from the participant and transcribed using the software Otter.ai, after which a member of the research team reviewed and cleaned the transcript.

Interviews were then coded and segments of data were sorted into categories based on our research objectives and other major themes that emerged during the interview process. These codes were then analyzed individually by project to identify primary recurring themes for each case, and again to determine relevant themes across cases. Through this process, we derived our key findings according to the perceptions of our interview participants. We also selected quotes from our interviewees that were particularly telling and that efficiently demonstrated key concepts through our participants' own words. Quotes were labeled with a project affiliation and a number (e.g., WAM 1) to provide context while maintaining confidentiality.

## Results

Here, we present findings synthesized from all interviews across the six projects. They are organized into three primary categories based on our research questions: partner roles, prioritization processes, and institutional constraints and facilitators. Project-specific examples are included to help demonstrate the range of themes and factors, but these examples should not be considered an exhaustive list. More details on individual projects can be found in Appendix A.

### 1. What partners were involved with prioritization, planning, and implementation?

Project landscapes in the Beaver River, Craggy, and WAM cases were primarily determined by the USFS before collaborative partners were engaged. In other words, USFS personnel took the lead on advancing larger-than-usual projects and then brought in partners to augment capacity and work across boundaries. For these three projects, the USFS managed the vast majority of the landscape, and interviewees said it made sense for the agency to assume a prominent leadership role.

At the same time, interviewees were clear that the landscapes in which these projects occurred and the associated management needs were well known by stakeholders before the USFS engaged them. They also said that partners had some say in the project's eventual boundaries. Interviewees said that this general understanding and agreement about management needs and priority areas set the stage for future work.

In some cases, such as Chiloquin, some interviewees noted that there could have been more intentional collaboration by the USFS to co-identify project landscapes. One partner said,

*"[the USFS said] 'We're going to do this [project] or we already did this [project]'... [Partner organizations] didn't actually feed into [choosing a project]. The [USFS] just considered it and made their own decisions. The net benefit was there, but it may have been a little more rewarding to have more collaboration in the planning, not just notification of what they were going to do....We were telling each other, but we weren't necessarily planning together."* [Chiloquin 1]

In all cases, various agencies, organizations, and stakeholders worked together to influence the placement and priority of management actions across identified landscapes to varying degrees. The partners involved in

these discussions varied, but they often included other federal agencies, state agencies, local collaborative groups, and NGOs. The USFS played a leading role in most cases. For example, for the Beaver River project, the USFS engaged local governments and prioritized treatments that abutted forested subdivisions or protected vulnerable hydropower infrastructure. In the Chiloquin project, partners mapped forest health and fire risk across private lands and worked with the Fremont-Winema National Forest to identify what lands the agency would be treating first, to coordinate where private lands treatments could be done later. This project's partners included the Klamath Lake Forest Health Partnership, Oregon State University Extension, and Oregon Department of Forestry. For the Craggy project, early collaboration between the USFS and Yreka Area Fire Safe Council on the area's Community Wildfire Protection Plan (CWPP) produced a basic blueprint of priority treatment areas that influenced USFS treatment locations. On the SERAL project, the collaborative organization Yosemite Stanislaus Solutions (YSS) was central in identifying a priority landscape and working closely with Stanislaus National Forest staff to define boundaries, priorities, and management approaches. In the WAM project, the Missoula Ranger District engaged with the Missoula County Fire Protection Association to determine general locational parameters and strategies. For all projects, interviewees made it clear that dialogue continued throughout the course of each project and was not limited to prioritization, although it was during prioritization that collaborative discussions had the greatest impact.



Existing collaborative forums and networks facilitated prioritization discussions. While the makeup of partners varied across cases, past collaborative relationships clearly influenced the structure and eventual results of prioritization processes. The Beaver River, Chiloquin, Craggy, and WAM projects used relationships that were developed through fire response activities to discuss initial priorities. For example:

- The Beaver River project's prioritization discussions grew from the Beaver Ranger District fuels specialists' working relationships with other stakeholders, such as the local fire warden, city manager, and county commissioners.
- The Chiloquin project built off an educational outreach, diagnostic, and funding tool that had been collaboratively built and refined in two prior nearby all-lands efforts to identify necessary steps for work on high-priority landscapes.
- The Craggy project benefited from the Klamath National Forest Supervisor's existing connections with CAL FIRE and the Yreka Area Fire Safe Council to inform prioritization decisions.
- The Scattered Lands project benefited from established inter-organizational relationships, although actors for this project sought to forge a new collaborative paradigm under the banner of Shared Stewardship. As a result, the USFS and the Idaho Department of Lands (IDL) deployed their new North Idaho Shared Stewardship coordinator to gather relevant players and discuss prioritization strategies.
- The SERAL project benefited from prior collaborative capacity within YSS, as well as from constructive working relationships between YSS and Tuolumne County.

Interviewees said that the USFS collaborated during and after the NEPA process with partners to determine project parameters, sometimes including partners on NEPA teams or integrating additional land treatments into existing NEPA design parameters. Interviewees associated with the Beaver River Project said that the USFS worked with state agencies to make treatments on non-federal land fit into parameters set by already-completed NEPA analyses, working to minimize discrepancies in treatment prescriptions. With Scattered Lands, several interviewees said that IDL provided resource specialists to fill the USFS NEPA team, and state employees were heavily involved with environmental analyses completed for federal parcels in the project area. In the WAM project, the USFS utilized a Bureau of Land Management (BLM) employee as their NEPA coordinator;

the two agencies signed an inter-agency agreement to overcome USFS internal hiring barriers. Interviewees did not indicate that this altered the NEPA process.

Across most projects, NRCS was an essential player for implementing hazardous fuels reduction treatments on private lands through their EQIP program, and they often worked with county-level organizations to augment funding and outreach. Within the Scattered Lands project, Bonner County's BonFire program provided an additional funding source beyond EQIP to treat private lands and closely coordinated with NRCS to maximize the efficiency of these dollars across the project area. In Chiloquin, the Oregon Department of Forestry was identified as a critical partner for conducting landowner outreach, creating forest management plans, and serving as a clearinghouse of sorts for multiple funding sources. As one interviewee explained,

*"[The Oregon Department of Forestry (ODF) has] some funding through a couple of different programs, where they do defensible space treatments. Chiloquin has a lot of smaller landowners...needing small, less-than-five-acre things. That was a good fit [for ODF work]. Also, ODF is the technical liaison for NRCS. So, in terms of the Joint Chiefs, they were doing all of the landowner contacts and prescription development, forest management plan development, and now certifications and things like that. ODF is that critical piece."* [Chiloquin 2]

In both the Beaver River and WAM projects, county governments played critical roles in assisting private landowners with hazardous fuels reduction through community outreach and coordination. On the WAM project, United Way of Missoula County, an NGO, provided wildfire hazard mitigation funding and limited home hardening assistance on small properties.

All projects used private contractors to implement treatments, but interviewees noted a general lack of industrial capacity. Interviewees from both the Beaver River and Craggy projects mentioned difficulties related to the capacity of their contractor base. They stated that the small profit margins associated with hazardous fuels reduction constrained industry and affected the treatment types they could contract out. Additional comments:

- One Beaver River interviewee believed that the project had maximized its potential pace because it already utilized most of the available contractors, and this capacity constraint placed an upper ceiling on the project's scale.

- The Chiloquin project worked with a private contractor and experienced challenges with having marketable timber from the projects. Cost-share funding options for private landowners through ODF and the Oregon Watershed Enhancement Board helped to provide financial support that offset some of this risk.
- One of the Craggy project's initial challenges was a lack of potential funding. A proposed mill temporarily alleviated those concerns and allowed the project to move forward, although in the end the mill was not constructed.
- The SERAL project benefited from an existing Master Stewardship Agreement that allowed Tuolumne County to administer forest treatment contracts both on and off the Stanislaus National Forest. The NGO Tuolumne River Trust led much of the contractor hiring and oversight for project implementation. Local mill and contractor capacity were also benefits that allowed the SERAL project to be implemented efficiently and effectively.

## **2. What specific prioritization processes were used?**

Interviewees from all projects stated that collaborative processes were used to prioritize projects. Partners shared past, present, and future project locations and timetables to identify opportunities to expand treatments across boundaries. As one Scattered Lands Project interviewee said,

*"The Forest Service, they're planning to treat every acre that needs treatment as part of the project, but how they're prioritizing it is by working really closely with our partners that represent private landowners, or private industry, and tying into some recently completed work, collectively identifying what those joint priorities are, and where we all can put resources as quickly as possible."* [Scattered Lands 3]

Beaver River Project interviewees said that local district employees routinely coordinated meetings with potential partners to discuss management activities. On the Scattered Lands project, multiple partner agencies compiled project locations onto ArcGIS databases and used that information to strategize future actions. Most commonly, this took the form of semi-intuitive judgements relying primarily on the knowledge of local land managers and partners, though interviewees suggested that this was bolstered by fire modeling exercises. Interviewees connected to the WAM project said that elected officials in Missoula County disagreed with WAM's landscape focus. Instead, they wished that

the USFS would focus more specifically on the “Home Ignition Zone” when discussing community protection and planning hazardous fuels reduction activities. Interviewees were quick to note, however, that these officials supported the project overall and that this disagreement was unlikely to impact the project’s long-term trajectory and strategy due to the USFS’s jurisdictional limitations.

Four projects used modeling and mapping exercises to inform their prioritization processes:

- In Chiloquin, a 2017 statewide risk assessment used high-resolution aerial imagery and field validation on public roads and on private properties (with permission). Chiloquin Fire and Rescue added their data on population density, ingress/egress, and other community variables. Project partners conducted door-to-door outreach to hundreds of landowners in the identified high-priority areas. The project used spatial analysis throughout, including creating a database of values at risk, structure risk assessments, and other Extension work, all overlaid onto maps to inform decision making.
- Craggy project interviews said the Yreka Area Fire Safe Council used CWPP modeling, and the Klamath National Forest’s internal mapping exercises facilitated communication between partners and the public but highlighted it to a lesser degree.
- On the SERAL project, Stanislaus National Forest staff engaged in potential operational delineation (POD) planning with the support of experts from Oregon State University and the USFS Rocky Mountain Research Station. The resulting PODs were later reviewed and prioritized in collaboration with the YSS leadership team.
- For the WAM project, interviewees discussed detailed hazard and vulnerability mapping produced by the Rocky Mountain Research Station’s Fire Modeling Institute. Interviewees said that the mapping exercise provided a common language for partners and increased the credibility of the Missoula Ranger District in the eyes of local communities, allowing partners to effectively present a united front to a skeptical public.
- The Beaver River and Scattered Lands projects also utilized hazard mapping; however, interviewees for these two projects said that this did not appear to vary from outside the normal scope of project planning and said that these mapping exercises remained internal to the USFS.

Projects involved local landowners in prioritization to various extents. In the Scattered Lands and WAM projects, interviewees discussed efforts in which partners conducted community meetings to assess local landowner and stakeholder priorities while communicating general project objectives. Though interviewees on both the Beaver River and Craggy projects discussed private landowner engagement, this outreach appeared less formal and did not influence prioritization decisions to the same extent. Direct private landowner outreach and coordination were also largely absent from SERAL planning.

### 3. What formal institutions and informal factors influenced these projects?

The following is a cross-section of relevant factors, such as leadership, funding mechanisms, internal agency policies, and other influences that impacted the projects under investigation. They are organized by theme and ordered within each theme by general importance.

**Cross-boundary authorities** | The Good Neighbor Authority was frequently mentioned as one of the most essential tools the USFS has to complete these projects. In the words of one interviewee,

*“I think the most important [tool] is the Good Neighbor Authority. I mean, that’s really the one that allows us to do cross-boundary work... it allows us to move money back and forth, so that [the state] can do contracting with our money. It allows us to actually work on each other’s property.”* [Beaver River 2]

Some Scattered Lands interviewees discussed how USFS decision makers involved with the project opted to harness GNA to execute nearly all their planned timber sales and hazardous fuels reduction activities. Interviewees routinely cited the simplicity of state contracting processes compared with USFS contracting processes as a rationale for this decision. Some interviewees involved with the Craggy project said that learning GNA processes was a challenge, but that this was only a temporary issue. They pointed out that the Craggy project included the first timber sale done via an integrated resource service contract through GNA in California. They were not surprised that there was an initial learning curve and added that they would use the authority again because of its capacity-expanding benefits. Interviewees cautioned, however, that it may not be a sustainable strategy to rely on state capacity

because state agencies themselves are capacity constrained.

Interviewees on both the Craggy and WAM projects discussed using agreements under the Wyden Authority<sup>2</sup> to work across boundaries. While interviewees said that these agreements were beneficial, they often remarked on how difficult the agreements were to execute due to bureaucratic requirements. For example, within the WAM project, interviewees said that the USFS attempted to sign a Wyden agreement with The Nature Conservancy to meet a Joint Chiefs' Partnership implementation target. The time-intensive process could not be completed before the target's deadline, however, due to the complexity of the process, according to interviewees. Craggy project interviewees offered that Wyden agreements were less appealing after CAL FIRE began to provide funding for private land treatments through California Climate Investment (CCI) grants. They said that CAL FIRE's less-complex requirements made it much more efficient to use these funds than to funnel USFS funds to partners through the Wyden process.

**Funding sources** | Interviewees agreed that regular appropriations were insufficient and that they depended on additional funding sources to scale up. One Craggy project interviewee shared the following sentiment:

*"The problem was that it was going to take a boatload of money to get done. There really was very minimal commercial component up there that we could rely on some product removal during the thinning operations that would help kind of pay for things. They [the USFS and other landowners] needed to make some other big investments, really significant investments to change the trajectory of the fuels situation."* [Craggy 8]



In some cases, interviewees felt that their project was well-positioned to receive these other funding sources, as with the Beaver River project, where partners applied for Utah's Watershed Restoration Initiative (WRI) grants. Interviewees said that they felt confident about future funding after WRI designated the entire watershed as a high priority for treatment, given the initiative's perceived longevity. The SERAL project was part of one of the first 10 priority landscapes identified for additional federal funding under the Infrastructure Investment and Jobs Act and benefited from state-level funding as well. In other cases, however, interviewees thought a funding shortfall was looming. Some interviewees were unsure how they would maintain the WAM project's scale once its three years of Joint Chiefs' funding ran out. Although the project was awarded a substantial amount of money from the State of Montana the previous year, interviewees said they were unsure whether similar opportunities would arise in the future.

The Joint Chiefs' Partnership was a crucial source of funding for the Chiloquin, Craggy, and WAM projects. Scattered Lands project partners also had recently applied to the program. Chiloquin, Craggy, and WAM project interviewees noted that Joint Chiefs' awards not only increased the total amount of funds available for disbursement to private landowners through EQIP but also allowed the NRCS to target a specific landscape, making landowners more competitive for EQIP funding in that area. Interviewees in the Craggy and WAM projects explained that this was crucial when prioritizing a specific geographic extent of privately owned land for treatment, because local NRCS offices are otherwise discouraged from favoring one area over another. Joint Chiefs' applications, however, require a significant investment of time from both the NRCS and USFS. In Chiloquin, interviewees noted the time lag and staffing challenges (i.e., turnover) in NRCS and stated that the timeline for NRCS' implementation of their portion of the Joint Chiefs work was far behind the other partners, causing some mismatches in funding and recruitment of private landowners. WAM interviewees said that capacity constraints with the NRCS prevented them from completing a second application.

Interviewees in both the Beaver River and Scattered Lands projects said that the projects benefited from their states' respective Shared Stewardship programs. Some Beaver River interviewees believed that an influx of state and federal implementation funding from Utah's Shared Stewardship program was a significant reason for an

increase in partners and expansion in project scale. While Idaho's program did not appear to provide the same level of funding to the Scattered Lands project, interviewees said that state funding from this program still provided funds for some treatments and facilitated the creation of the Shared Stewardship Coordinator position responsible for leading the project. Interviewees in both projects thought that these funding sources were key reasons for each project's success. State funding was also important in supporting forest management in and near the Chiloquin and SERAL projects, although coordinating this with federal funding and timelines was sometimes challenging. One SERAL interviewee described the situation:

*"In our MSA [master stewardship agreement], we've gotten some funding from the state of California through CAL FIRE. And the funding has to be used within a year, or maybe two years. But usually in a year, well, a lot of what we do can't get planned and implemented in a year. So timeframes around when the funding starts, and then implementation of the project, and then the project's done, needs to be looked at a little bit more realistically when funding streams are mixed. The federal government gives a longer time usually to do projects; the state doesn't. Those two things need to be melded together a little bit. And that should be pretty simple, but it hasn't been really well addressed yet."* [SERAL 8]

Chiloquin interviewees noted that having state and federal funding to conduct this work brought great flexibility to their efforts and abilities to leverage. One agency interviewee explained how this helped the USFS:

*"Through...the Klamath Forest Lake Health Partnership, what we found is NRCS had access to monies that we didn't, that ODF had access to monies, to equipment, or they could do certain things on certain pieces of the landscape that we could not do. So, any time that we seemed to hit a roadblock, we'd bring it to the table, we'd kick it around, and nine times out of ten, if not ten out of ten, we were able to find a way to accomplish what we wanted to accomplish. We found ways around those limitations."* [Chiloquin 7]

Stevens Hazardous Fuels Grants<sup>3</sup> from the State and Private Forestry branch of the USFS were essential funding sources for several projects' private land and ingress/egress treatments. These grants were either directly administered by state agencies or administered by county-level organizations for ingress, egress, and hazardous fuels reduction on private lands. Because these funds are grants awarded by the federal government and

then disbursed by state agencies, interviewees said that yearly dollar amounts relied on state-level employees and their grant application proficiency. Unlike EQIP funds, these grants did not have a landowner funding match or a forest management plan requirement. Interviewees said that these grants were valuable funds to access, though they could only be used on projects within 1.5 miles of ongoing USFS work. However, one interviewee said that by adding an appendix detailing an overarching large-scale project boundary to local CWPPs these funds could be used freely within the designated polygon.

**Administrative and staffing capacity** | Interviewees across projects noted that USFS grants and agreements capacity is insufficient to scale up management actions. People said that this was a matter of understaffing, which interfered with operations, and frequent turnover. Several interviewees noted that staff from other departments sometimes filled these roles to bolster capacity when needed, but said that this solution was not sustainable because employees from other agency departments could only partially fill these roles in addition to their assigned duties. As one interviewee put it:

*"We've had high turnover in the grants and agreements arena and contracting officers. It's a hard place to keep filled. I'm sure it's not the most exciting job... So that's part of it. That's probably been one of the biggest headaches for us."* [Beaver River 4]

Interviewees frequently mentioned yearly fire season disturbances that stretched capacity and slowed the pace of NEPA work. Fire season was often described as an "all hands on deck" period for land management agencies; during this time, fire management and suppression takes precedence over other activities. Many agency employees involved with project NEPA processes also have fire qualifications. These employees were called to fire-related duties during the summer months and sent to incidents off-forest, stifling progress on environmental analyses until later in the year. The severity and duration of these workflow disturbances varied, and interviewees said that they could not predict how much this might impact NEPA work, though they expected this problem to worsen as fire seasons increase in length.

**Other miscellaneous factors** | Participants said that leadership and unwavering commitment from specific individuals knitted collaborative efforts together and maintained momentum. For the Beaver River, Chiloquin,

Craggy, and WAM projects, interviewees spoke about long-serving USFS employees who leveraged their existing relationships to patch together each project's network of partners. Chiloquin partners also highlighted the key role of the Klamath-Lake Forest Health Partnership for maintaining the network of interested partners, including, for example, the Oregon State University Extension program in developing and testing the mapping and landowner outreach, ODF for managing multiple funding opportunities to conduct the wildfire risk reduction for their own land, and the local Chiloquin Fire and Rescue for being a trusted local partner, especially during landowner recruitment. Within the more nascent Scattered Lands project, a majority of interviewees praised the leadership and organization of the jointly funded USFS/IDL North Idaho Shared Stewardship coordinator. In the SERAL project, strong commitment from a relatively new forest supervisor in the context of longstanding collaborative capacity within YSS was a key to success. The YSS collaborative organization included representation from numerous local and regional interests, yet it was able to work efficiently and effectively through the efforts of a much smaller number of individuals associated with the YSS leadership team.

Interviewees also described instances when members of state agencies, county governments, and local nonprofit organizations provided crucial leadership and support. For example, interviewees connected to the Beaver River project credited the local fire warden for coordinating private landowners. Tuolumne County and the NGO Tuolumne River Trust were key entities in the implementation of SERAL; the Master Stewardship Agreement under which they worked helped to address at least some of the missing USFS capacity. Within the WAM project, interviewees discussed how the county wildfire preparedness coordinator organized Missoula County Fire Protection Association meetings and worked to align private land treatments with ongoing USFS projects. One interviewee said:

*"The big take-homes...have been that personalities really matter. You know, things like Shared Stewardship can be meaningful. It's sort of encouraging agencies to collaborate. But if you don't have collaborative people or people who value collaboration in positions of leadership, it just doesn't happen."* [WAM 9]

Some interviewees discussed concerns with USFS budget modernization efforts. They said that the split of "implementation" funds from "salary" funds constricted

the ways that line officers could boost capacity. However, one interviewee said it simplified how money was allocated to units. In the WAM project, the advent of budget modernization prevented district leadership from hiring a NEPA coordinator with funds from the project's final year of Joint Chiefs' funding and further strained already-limited contracting capacity by increasing the number of bureaucratic steps required to issue contracts in certain situations. However, all interviewees who discussed budget modernization said it is always a challenge to adjust to a new way of doing things and that they remained unsure of the long-term outcomes of the process.

Interviewees across projects said that revenues from GNA timber sales were a significant incentive for states to collaborate with the USFS. One WAM interviewee cautioned that USFS reliance on the authority for unprofitable hazardous fuels reduction would likely reduce the motivation of a state to enter into those agreements:

*"We've been doing more commercial timber sales with GNA, with some non-commercial, but primarily commercial it adds funds to the pool. We've been trying to get those funds built up. This project is on mostly non-commercial acres. And so that would be a drain on the GNA budget. It would be service work rather than revenue, and so that may constrain motivation for doing a lot of it because it's just going to cost money."* [WAM 3]



While interviewees agreed that hazardous fuels reduction is typically a shared goal, states have their own objectives they need to address, and cannot simply serve as the USFS's workforce. Craggy project interviewees said that partners addressed this issue by crafting integrated resource service contracts to help fund the state where low timber values were not conducive to a merchantable timber sale.

Another important element relates to the latitude for national forest managers and project partners to innovate. Shared Stewardship-type projects typically involve the use of new authorities, new funding streams, and new experiments in cross-boundary and landscape-scale planning and management, all of which may require experimentation and innovation to be successful in individual social and ecological contexts. Trust and positive working relationships built up over several years of collaboration and mutual problem-solving were important for allowing some USFS staff to try new approaches, and, in some cases, minimizing formal objections and legal challenges to projects. For example, the SERAL project incorporated new elements, including changes to California spotted owl protected activity center (PAC) guidelines that originated with the Regional Office. According to interviewees, this potentially controversial change would likely have led to extensive controversy and possible administrative and legal objections, were it not for the close involvement of YSS and some of its constituent groups in negotiating the details of proposed treatments.



## Recommendations

Our findings from investigating the prioritization, planning, and implementation processes on these case-study cross-boundary projects reflected the complex dynamics between and within agencies, organizations, and local communities. Although each project varied, our interview data yielded five key recommendations that should help natural resource managers execute large-scale cross-boundary work:

**1. Identify and provide access to stable, multi-year funding.** Interviewees were clear that the existing capacity and funding available to individual management units through regular appropriations were not sufficient to drastically scale up forest management actions. All the projects relied on shared capacity through GNA, or additional funding sources such as Joint Chiefs' or other federal and/or state sources to scale up and out from federal lands. Funding encourages partners to engage in multi-year projects by eliminating some of the uncertainty that makes it difficult to engage partners to plan and implement cross-boundary work. At the same time, obtaining funding awards and opportunities requires a considerable collaborative effort. For cross-boundary projects, involved partners must commit their time to the effort, so it can be a gamble for agencies and organizations with limited capacity. Other research has also identified the importance of stable multi-year funding and collaborative history, and has also raised questions about how to build collaborative capacity where it does not already exist (e.g., Schultz et al. 2018).

**2. Land management agencies should invest time in building relationships with local communities.** Interviewees recommended that agencies increase their efforts to build relationships with their local communities. Collaboration with community partners can streamline planning and prioritization processes, support innovation with community support, and facilitate cross-boundary project work to meet fuel management objectives. Creating incentives to engage community members often and over extended periods of time will likely increase the overall success of future cross-boundary work.

**3. Hire a project coordinator for cross-boundary projects to manage complexity and provide consistency.** Having a long-term coordinator for projects is key to their longevity and success. Cross-boundary work requires the coordinated efforts of a diverse set of

actors with competing timeframes and organizational objectives. Coordinator positions provide leadership and help keep projects on track to meet their objectives, organizing project tasks and strategically leveraging resources and relationships. At the time of our study, these positions were often informally filled by line officers or specialists who did this work in addition to their regular duties. One project, Scattered Lands, benefited from a coordinator position that was specifically created through Idaho's Shared Stewardship program. Funding boundary-spanning positions like these would allow a coordinator to focus exclusively on project work and provide continuity for a project's duration. Other research on CFLRP projects also identified coordinators as critical to success (McIntyre and Schultz 2020).

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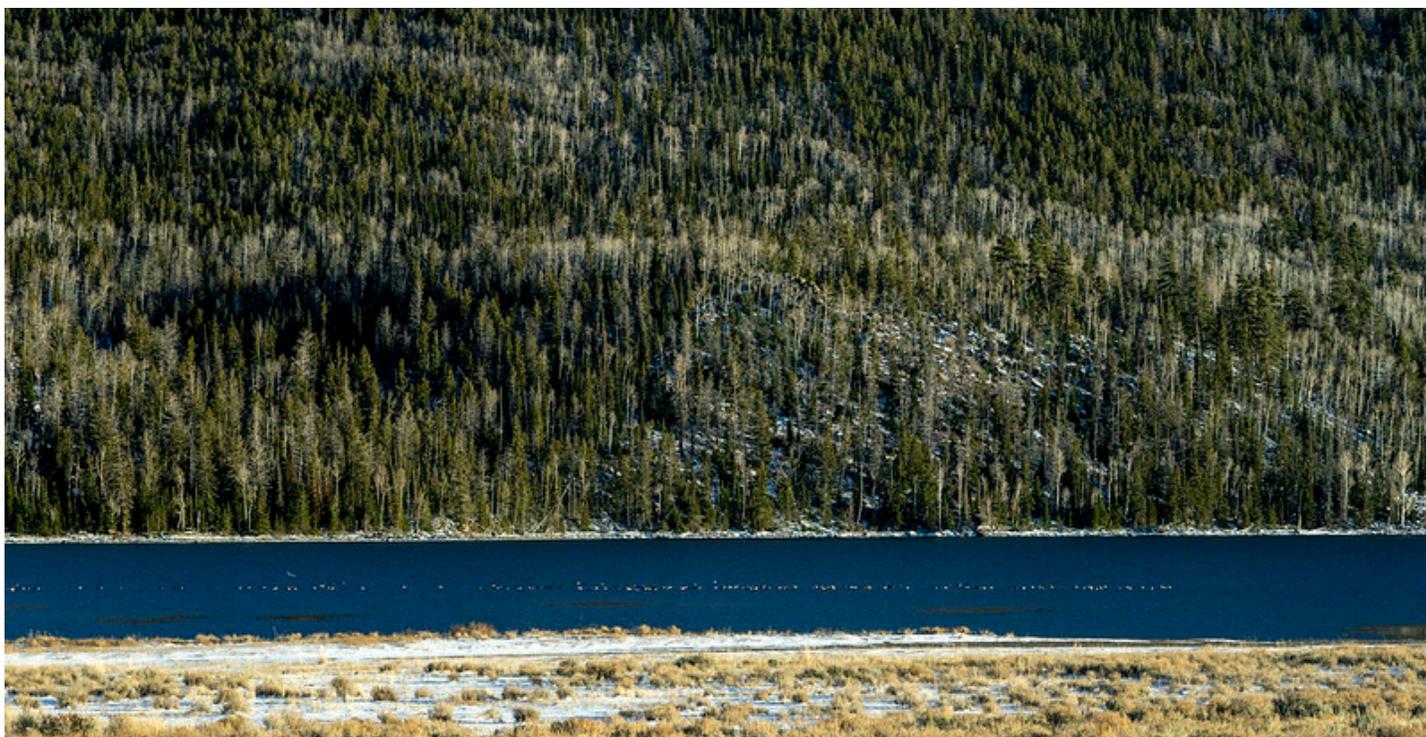
## END NOTES

<sup>1</sup> The Infrastructure Investment and Jobs Act of 2021 [Pub. L. 117-58, No. 135 Stat. 1097 (2021)] invested \$1.2 trillion into a variety of federal programs aimed at repairing and improving the infrastructure and economic outlook of the United States.

<sup>2</sup> The Wyden Authority (16 U.S.C. §§ 1011 & 1011a) allows the U.S. Departments of Agriculture and Interior to enter into "cooperative agreements" with other federal agencies, tribal, state, and local governments, and private and nonprofit entities/landowners for the protection, restoration, or enhancement of fish and wildlife habitat "and other resources on public or private land" and for "the reduction of risk from natural disaster where public safety is threatened."

**4. Create forums where information can be shared between agencies and organizations.** Creating forums where information can be shared between agencies and organizations helps to ensure that investments over a project's lifespan are indeed in "the right place at the right time." Information sharing is critical to strategically prioritizing treatments and resources. Significant hurdles exist for sharing private land information, and creative approaches like the Scattered Lands ArcGIS database and associated mailers were key to success. Other data-sharing platforms were also important for project success, including the Chiloquin project database of values at risk, structure risk assessments, and other Oregon State University Extension work—all overlaid onto maps to inform decision making. Finding ways to share information fluidly between agencies and organizations is a key step in facilitating cross-boundary work.

<sup>3</sup> Stevens Hazardous Fuels Grants (Pub. L. 107-63, 115 STAT. 446) (also known as Community Assistance Funds Adjacent to National Forest System lands or CAFA funds) provide funding for hazardous fuels reduction treatments on "adjacent non-federal lands for the purpose of protecting communities when hazard reduction activities are planned on national forest lands." These grants are administered by the State and Private Forestry Deputy Area of the USFS, which funnels funds to states, local government, cooperative, and nonprofit organizations, or to small businesses (i.e., contractors) to complete hazardous fuels reduction work.



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## **Appendix A: Forest Management Projects**

### **Beaver River Improvement Project**

#### **What is the Beaver River Watershed Improvement Project?**

The Beaver River Watershed Improvement Project is a 60,000-acre hazardous fuels reduction project located east of Beaver, Utah, on the Beaver Ranger District (BRD) of the Fishlake National Forest. Key partners initially included the BRD; Utah Division of Forestry, Fire, and State Lands; Beaver City; and Beaver County. The project recently grew to include the State Institutional Trust Lands Administration (SITLA), Rocky Mountain Power, the Elk Meadows Special Service District, the Utah Department of Transportation, NRCS, local homeowners' associations, and the Eagle Point Ski Resort. The USFS manages most of the watershed, with a small number of state and private inholdings within the project footprint. The forest type ranges from low-elevation ponderosa pine and juniper to subalpine spruce-fir.

#### **How was the landscape identified, and what were the project prioritization processes?**

The USFS considered the Beaver River Watershed, with its hydropower infrastructure, drinking water supply, and wildland urban interface (WUI) communities an area of concern for over a decade. Although funding was not available to treat at the scale necessary to mitigate fire hazard, the BRD completed three hazardous fuels reduction NEPA analyses throughout the 2010s. After the Shared Stewardship agreement was signed, a joint mapping exercise through Utah's State Forest Action Plan revision highlighted the watershed as a top priority for the state. Interviewees said that NEPA-readiness, along with this alignment between the USFS and state government, made the project a natural choice to receive initial Shared Stewardship dollars that were available in Utah.

Operating through informal collaborative networks that they had developed over nearly two decades, district personnel identified areas near or adjacent to state and private land where treatment was planned or had already occurred to maximize impact across boundaries. Projects protecting hydropower and drinking water infrastructure were also prioritized due to their importance to Beaver City. Interviewees involved in the planning process stressed that the first thinning projects were strategically placed to reduce the cost of future management actions and that the sequence of treatments would eventually allow the BRD to treat acres through larger prescribed burns.

#### **How did partners collaborate, and how were private landowners involved?**

Most interviewees discussed the network of collaborative relationships that the BRD and partners developed over the preceding decades and their importance to the success of the project. Some interviewees credited long-serving district employees with fostering relationships that allowed project partners to collaborate effectively. For example, the district fuels specialist was praised as a leader who brought the initial suite of partners together over the last few decades, and who reached out to new partners once Shared Stewardship dollars became available. Some interviewees also commended the leadership of the local fire warden, whose work with homeowners' associations led to a culture of fire risk mitigation that also provided opportunities for private landowners to build relationships with state and federal agency staff members. Specifically, interviewees discussed mastication events coordinated by the fire warden and members of the USFS where private landowners could chip biomass from fuel mitigation efforts and then attend a Department of Forestry, Fire, and State Lands barbecue to mingle with personnel from both agencies.

#### **What cross-boundary authorities, mechanisms, and associated funding streams were in play?**

All interviewees familiar with Shared Stewardship funding from the State of Utah spoke positively about its impact. Many interviewees focused their discussions on how Shared Stewardship dollars led to an expanded number of partners. Once the project became a top priority for both the USFS and the State of Utah, BRD employees began to leverage newly awarded federal and state Shared Stewardship funds by meeting with other stakeholders in the area and brainstorming shared projects. In one instance, Shared Stewardship dollars provided the USFS with an opportunity to reduce fuels adjacent to a SITLA parcel that was slated for treatment, facilitating cross-boundary work with an agency that was not initially a part of the larger project. Interviewees said that the momentum generated by this funding brought the total number of partners from under five to over a dozen.

Most interviewees said that GNA permitted the USFS and the state to share contracting capacity and funding to make progress on shared objectives. Some interviewees believed that GNA increased the pace and scale of work by eliminating traditional hurdles to working across boundaries, while others stated that GNA allowed the USFS to bypass internal bureaucratic requirements.

Interviewees also said that funding from WRI helped bolster regular USFS allocations and state funding associated with Shared Stewardship. They said that Fishlake National Forest staff members exhibited great skill in applying for this type of funding, and the abundance of NEPA-ready watershed improvement projects in the Beaver River Drainage made it an attractive place to award those funds.

Interviewees relayed that the project utilized Utah Catastrophic Wildfire Risk Reduction funds to support much of the work in private subdivisions within the larger project boundary. To award these funds, regional fire councils review proposals and refer exceptional candidates to the state level for consideration. Once the state selects awardees, the legislature allocates money and divides it to cover those projects. Crucially for the Beaver River project, a significant portion of this money was designated for Shared Stewardship priority areas, and interviewees said that this gave the project an intrinsic advantage over other proposals.

Interviewees within the USFS spoke of how Indefinite Delivery/Indefinite Quantity contracts allowed Fishlake to nimbly spend money at the end of the fiscal year. They said that the USFS could keep their limited supply of private contractors on call and expand projects as opportunities arose by utilizing these contracts. Interviewees said that budget modernization made it easier to allocate this money but likely reduced the overall amount of funds available due to the separation of salary costs from implementation.

### **What were the key challenges?**

Interviewees said that differences in funding timelines between the USFS and other organizations often resulted in missed deadlines and opportunities. To realize opportunities, interviewees said that district employees must complete substantial amounts of extra paperwork and need extra time from forest and regional leadership to be successful. Interviewees cautioned that district-level efforts to capitalize on time-intensive opportunities would be futile without supportive leaders at these higher levels who are willing to prioritize work on the Beaver River project over other responsibilities.

Interviewees in both the USFS and state agencies believed that inadequate contracting and grants and agreements capacity within the USFS inhibited projects from increasing in pace and scale. Some interviewees also discussed the complexity of the USFS's contracting and grants and agreements systems and commented that staff turnover made it difficult to improve the process's efficiency. Interviewees added that the lack of capacity increased the workload of agency personnel outside these departments.

Multiple interviewees said that the lack of industrial capacity in the area restricted the type and amount of work possible. They noted that the one mill in the area did not show interest in the project and, to date, was not involved. They discussed the lack of log buyers in the area and the small number of contractors available to complete hazardous fuels reduction work. One interviewee specifically said that they believed the project had reached its apex in scale because no additional contractors were available to take on thinning contracts.

## ***Chiloquin Community Forest and Fire Project (CCFFP)***

### **What is the Chiloquin Community Forest and Fire Project (CCFFP)?**

The CCFFP is a partnership between the U.S. Forest Service Fremont-Winema National Forest, Natural Resources Conservation Service (NRCS), Klamath-Lake Forest Health Partnership, Oregon Department of Forestry, Chiloquin Fire and Rescue, Oregon State University Extension, Klamath Watershed Partnership, and private landowners (mostly non-industrial forestland owners).

The CCFFP encompasses over 100,000 acres of public and 38,800 acres of private land around Chiloquin. Its purpose is to “*achieve fire resistance, fire response, forest health, wildlife habitat, and grazing objectives on private lands on a landscape-level scale, across boundaries, with Fremont-Winema National Forest. Planning and implementing forest health and defensible space treatments across ownership boundaries will result in a landscape resilient to natural and human-caused disturbance.*” (<https://www.klfhp.org/chiloquin>)

The project is coordinated by the Klamath-Lake Forest Health Partnership (KLFHP), a network of diverse local and regional partners addressing forestland management in Klamath and Lake Counties. The KLFHP completed a local Klamath and Lake Counties Shared Stewardship Memorandum of Understanding (tiered to the state-level MOU) explaining how they are implementing shared stewardship in practice in Klamath and Lake Counties (<https://www.klfhp.org/partners>).

The prioritization process for the CCFFP began in 2018 with mapping forest health and fire risks (including structure assessments and resident ingress and egress conditions) on private lands in the CCFFP area. The information was used to generate recommended treatments to reduce wildfire risk and to inform a larger land management plan. There is a clear need for improved fire resistance and forest resilience in the area, especially in the private, mostly residential lands to the west and east of the town of Chiloquin. These lands rate as high risk within both Klamath County and Chiloquin Community Wildfire Protection Plans and contain a complex WUI that includes limited fire suppression access. Both the public and private lands in this area are susceptible to fire, insect pests, disease outbreaks, and drought events (<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/or/programs/financial/?cid=nrcseprd1833829>). The Chiloquin area has a unique set of risks due to its landownership patterns and landowner diversity, stemming from a 1970s subdivision of land into small parcels. Approximately 70% of the 2,800 landowners are absentee, and many parcels have a long history of insufficient forest management activities.

### **How was the landscape identified, and what were the project prioritization processes?**

The project has conducted multiple rounds of prioritization and risk assessments. For years, this landscape has been considered critical from a wildfire risk perspective; a recent statewide risk assessment (which included fire safety as ingress and egress of residents) finally highlighted the risks to this area, particularly given the numerous small private landholdings in the area. In 2017, forest stands on private lands were classified as high, moderate, and low priority for forest health and fire risk through a preliminary analysis using high-resolution aerial imagery, followed by field validation conducted on public roads and on private properties with permission. These priority maps were expanded in partnership with Chiloquin Fire and Rescue to include population density, ingress/egress, and other community variables, to better inform areas of greatest concern for wildfire risk (<https://www.klfhp.org/chiloquin>). Project partners conducted door-to-door outreach to hundreds of landowners in the identified high-priority areas, while forestry crews conducted additional wildfire risk assessments. By the end of 2018, Klamath Watershed Partnership (KWP) and ODF were working with landowners and some subdivisions on identifying and implementing recommended forest treatments and informing the creation of longer-term land management plans. The project used spatial analysis throughout, including creating a database of values at risk, structure risk assessments, and other Oregon State Extension work—all overlaid onto maps to inform decision making.

### **How did partners collaborate, and how were private landowners involved?**

The outreach process was heavily informed by local knowledge of the communities and knowledge that landowners would likely be receptive to working with the federal and state governments and NGOs. At the same time, the KLFHP and partners coordinated with the Fremont-Winema National Forest’s prioritization of lands where NEPA had been done, to identify adjacent high-priority private lands and to take a more cohesive approach to prioritization across the project area. The CCFFP built off an educational outreach, diagnostic, and funding tool that had been collaboratively built and refined in a previous nearby all-lands effort to identify necessary steps for work on high-priority landscapes. KLFHP partners played key roles in the development and implementation of the project; for example, Oregon State University Extension developed and piloted the mapping and landowner outreach, ODF provided forestry expertise and completed forest and structure assessments, KWP handled partner coordination and managing multiple funding opportunities to conduct the wildfire risk reduction projects on private land, and Chiloquin Fire and Rescue served as a

trusted local partner, especially during landowner recruitment. KLFHP also led several workshops on educational topics, landowner engagement, and grant writing to bring in funding for public and private lands, including writing the Joint Chiefs proposal.

ODF also helped with landowner recruitment, including working with landowners enrolled in the project to use their lands as demonstration projects and to recruit their neighbors. Private landowners motivated by this work engaged in many recruitment strategies: word of mouth, signs in their yard about their wildfire risk reduction project, forest health meetings for neighborhoods, and personal letters to all their neighbors about why they should consider working with ODF on their own lands. As some interviewees noted, not everyone implementing these projects lived in Chiloquin and had personal connections to that community, so residents who could serve as a trusted information source for their neighbors were critical. Chiloquin partners also noted that having several key individuals deeply involved in this work over the long term has been foundational to their success for the CCFFP and other projects across Klamath and Lake Counties.

### **What cross-boundary authorities, mechanisms, and associated funding streams were in play?**

GNA was used in the CCFFP by the ODF to work on Fremont-Winema lands. As of 2022, the partnership had obtained nearly \$4 million in grant funds for wildfire risk reduction forest treatments on private property. This included \$2.7 million from Joint Chiefs and a series of funds managed by ODF, Oregon State University Extension, and KWP, including \$90,000 for outreach and mapping, \$500,000 for implementation from the Oregon Watershed Enhancement Board, and \$300,000 as a community assistance grant from Western States Fire Managers. Other funding to support CCFFP private lands efforts came from American Forest Foundation, Oregon Forest Resources Institute, and a grant from Coalitions and Collaboratives that was used to purchase a walk-behind rotary brush cutter to increase treatment efficiencies on small lots. Other partners like Chiloquin Fire and Rescue have supported landowner outreach and assistance, as well as implementation, such as through funding from a FEMA grant and field support from the Keno Fire District to implement thinning and brush removal to reduce fire hazard and fire behavior intensity. For public lands, Fremont-Winema has contributed \$3.3 million for treatments on their forest through Joint Chiefs, as well as an additional \$400,000 from the Pacific Northwest Region 6 and State and Private Forestry to prioritize this Shared Stewardship work.

### **What were the key challenges?**

The most prominent challenge that partners raised was sequencing and timing funding between different sources to complete implementation within this project area. In particular, COVID restrictions delayed the work of the ODF fuels crew, and NRCS' funding and completion of their portion of this work were slower than anticipated. Other partners completed their respective work and moved on to work on other landscapes outside the CCFFP, while NRCS continues to address a backlog of private lands work. Some interviewees were concerned that the opportunities to engage larger landowners (>20 acres) had dried up given the delay in funding. However, most noted that there is a long list of smaller landowners (<10 acres) who are interested in working with ODF to conduct fuels reduction work.

In some wildfire risk high-priority places in Klamath and Lake County, communities were not as receptive to engaging with federal and state agencies, so they were not prioritized for investment. By choosing more receptive areas, going door to door, and using local or trusted sources for outreach, the CCFFP was able to realize a high level of landowner engagement. Some interviewees also noted the importance of the Oregon Watershed Enhancement Board and NRCS cost share as critical in bridging the funding gap to get acres treated for properties that had little merchantable timber and/or were faced with an unfavorable timber market.

Project participants had different understandings of Shared Stewardship as a concept and described its implementation differently, but they agreed that working across landownerships to collectively address wildfire risk concern is the way that this area does business.

## **Craggy Vegetation Management Project**

### **What is the Craggy Vegetation Management Project?**

The Craggy Vegetation Management Project is a 29,500-acre hazardous fuels reduction treatment project to the west of Yreka, California, on the Salmon/Scott River Ranger District of the Klamath National Forest. Key partners included the USFS, CAL FIRE, Yreka Area Fire Safe Council, the National Fish and Wildlife Foundation (NFWF), NRCS, the Shasta Resource Conservation District, and the Northern California Resource Center. The project polygon is entirely within the 1955 Haystack Fire scar, which was planted with ponderosa pine after that fire, and is primarily USFS land with adjacent parcels of private property. Notably, after we completed data collection the 2022 McKinney Fire interacted with some of the Craggy Project's implemented treatments. The fire's eastward progression was halted within the overall project footprint; however, it is unclear at the time of this publication what impact Craggy Project treatments had on incident outcomes.

### **How was the landscape identified, and what were the project prioritization processes?**

Interviewees said that in the early 2010s, the Klamath National Forest conducted a modeling and budget prioritization exercise that identified this area as a high priority for hazardous fuels reduction. While litigation surrounding management actions on the Klamath is not uncommon, nearly all stakeholders agreed that hazardous fuels reduction should be a priority in the Craggy area, especially given the "non-natural" characteristics of the forest. The low value of the timber and lack of available funds, however, precluded a plan from taking shape until a timber company decided to build a pallet mill in the area. Though the mill plan fell through almost immediately due to outside factors, the prospect of the mill led the USFS to complete NEPA analyses for the Craggy area. The State of California began to offer CCI grants in the late 2010s that could be used for hazardous fuels reduction, effectively bridging the funding shortage that occurred when the mill fell through. Because the USFS had gone through their NEPA process, interviewees said that the project was a strong candidate for CCI funding.

To prioritize and plan treatments within the identified landscape, the USFS modeled fire behavior across the Craggy area and overlaid it with values-at-risk to determine areas of highest vulnerability. The Yreka Area Fire Safe Council, a state-funded organization, also completed modeling that informed project design, with the assistance of the USFS and a private data science firm. Interviewees said that the USFS frequently communicated with CAL FIRE regarding each of their protection responsibilities and capacities to further determine treatment locations.

### **How did partners collaborate, and how were private landowners involved?**

Interviewees said the Yreka CWPP of 2016 brought the USFS and members of the Yreka Area Fire Safe Council together to discuss hazardous fuels treatments in the Craggy area. The Fire Safe Council took the lead on private landowner outreach and developed a local campaign with print and audio media to advertise wildfire risk mitigation strategies and connect property owners to funding sources.

Interviewees said that new funding opportunities increased the number of willing partners in recent years. At the outset, anticipated timber receipts led the USFS to begin the NEPA process and work with stakeholders such as the Yreka Area Fire Safe Council. Later, new funding opportunities such as California's CCI grants in 2018 and then a Joint Chiefs award in 2019 brought in CAL FIRE and NRCS, respectively. Interviewees in government agencies said that the prospect of funding was a powerful motivator that had been lacking in the past.

Multiple interviewees credited the leadership of the Klamath National Forest for stitching together the network of partners involved with Craggy. Early on, interviewees said that the former Forest Supervisor actively prioritized building relationships with CAL FIRE and Yreka Area Fire Safe Council members. This individual moved on to a different job, and at a later stage, interviewees praised the forest's fire ecologist for coordinating partners and maintaining relationships. Some interviewees were concerned that future turnover in these central positions would become a challenge.

### **What cross-boundary authorities, mechanisms, and associated funding streams were in play?**

Interviewees stated that GNA was important for Craggy and allowed the USFS to utilize state capacity to complete treatments; some noted that it resulted in a direct positive effect on the local community. Interviewees said it allowed

experience and capacity to be built locally by employing community members through the state. Employees of the Shasta Resource Conservation District helped write integrated resource restoration contracts that fit with GNA due to the potential of negative-value timber sales; interviewees said these were likely the first of their kind in California.

Funding under the Joint Chiefs' Partnership, received in 2019, provided significant support for hazardous fuels treatment on federal and private land. One interviewee said that it was an ideal pot of money to utilize for projects in the WUI that abut USFS land because it provides additional EQIP funding separate from regular allocations, allowing the NRCS to increase treatments within a priority area rather than forcing landowners to compete against applications submitted outside the Craggy footprint.

Interviewees said that Stevens Hazardous Fuels Grants have been significant for treating private lands and ingress and egress routes throughout the Craggy footprint and that the Northern California Resource Center had been primarily responsible for procuring these funds. Interviewees also said that these grants are preferable to many landowners over EQIP dollars due to the lack of a landowner funding match requirement.

Interviewees said that California Climate Investment (CCI) grants provided a second chance to fund projects tied to Craggy after the mill in Yreka closed. The completed NEPA work allowed the area to be competitive for these grants, though interviewees described some growing pains learning how to apply for them effectively; nonetheless, they believed that partners had developed successful strategies. Interviewees said that NFWF was the primary organization pursuing this type of funding, but the USFS frequently assisted the organization due to NFWF's own capacity constraints.

### **What were the key challenges?**

Multiple capacity constraints impacted the project. First, the local NRCS did not employ a forester until mid-2020, which made it challenging to complete forest plans for private landowners who wanted EQIP funding. Second, the NEPA planning process slowed significantly during the fire season due to USFS personnel leaving on fire assignments. Finally, interviewees said that while GNA has helped increase the scale of the project, CAL FIRE also has capacity limitations that may negatively impact future GNA efforts. They emphasized that GNA alone is not a viable strategy for further increasing the pace and scale of management actions without first bolstering the capacity of CAL FIRE.

Many interviewees commented that the lack of consistent funding commitments made it difficult to plan projects at a landscape scale. When projects do not have funding attached, potential partners are less motivated to join with the USFS in the planning and implementation of projects.

While interviewees believed that having a core group of partners in more recent stages of the project helped foster success, some said they still felt in the dark about the effort's progression. Specifically, some partners said they felt siloed from the USFS and would like increased communication about where projects were planned and when they were likely to be implemented.

## **Scattered Lands Project**

### **What is the Scattered Lands Project?**

The Scattered Lands Project is a 173,942-acre project in southwest Bonner County, Idaho, on the Sandpoint Ranger District of the Idaho Panhandle National Forests. The project is primarily oriented toward hazardous fuels reduction to protect communities and natural resources. Key partners include the USFS, the Idaho Department of Lands (IDL), NRCS, and Bonner County. The land ownership pattern is intermixed with small parcels of USFS- and IDL-managed land scattered amongst industrial and non-industrial private acreages. The landscape consists of high-density lodgepole pine alongside ponderosa pine, western white pine, Douglas fir, and western larch.

**How was the landscape identified, and what were the project prioritization processes?**

Interviewees said that the project originated after the USFS and State of Idaho identified the North Idaho Shared Stewardship Priority area in 2019. Once this landscape was identified, a state-level Shared Stewardship coordinator began to engage field-level officials of the USFS, IDL, NRCS, and other organizations to determine where collaborative efforts could maximize impact across boundaries within this priority area. Partners sought to identify areas where treatment already existed and where USFS NEPA analysis was completed. This working group of local partners settled on southwestern Bonner County. Not only did this landscape meet the essential criteria, but, due to its complex land ownership pattern, interviewees said it fit the spirit of the Shared Stewardship Strategy and was well suited to be one of Idaho's flagship Shared Stewardship projects.

To prioritize projects within the landscape, partners held community meetings in the western part of the landscape to communicate the intent of the Scattered Lands Project. These meetings began building connections among people in places where communities were historically distrustful of government organizations. Then, IDL sent out mailings providing information on funding opportunities for hazardous fuels reduction on private lands. They said this outreach campaign began on the west end of the project landscape because the area's 2020 Hunter 2 fire appeared to galvanize local landowners. Also, the terrain is relatively level; therefore, focusing treatments west to east would take advantage of the prevailing winds and reduce fire risk across the landscape more efficiently.

**How did partners collaborate, and how were private landowners involved?**

Most interviewees credited the leadership of the North Idaho Shared Stewardship Coordinator for much of the project's success. This individual generally facilitated communication among partners and was responsible for organizing the local prioritization workgroup and community meetings. This position, jointly funded by the USFS and IDL, was created to organize and lead Shared Stewardship projects.

Interviewees spoke positively about how project partners communicated with one another, with private landowners, and with community stakeholders. Several highlighted new, public-facing ArcGIS databases that showed planned and completed treatments and helped individual agencies determine where to treat next. However, interviewees said that NRCS's personal and private information rules prohibited the agency from sharing which treatment locations they funded. As a result, these databases were incomplete, and interviewees said that actors were in the process of finding workarounds. Many interviewees also said that holding community meetings as a united group of partners built trust between agencies and private landowners and boosted acceptance of fuels reduction projects.

Most interviewees believed that the targeted mailings after community meetings were highly effective. These prepaid bi-fold postcards sent by IDL provided a brief overview of the Scattered Lands Project. They included a return mailer to enable landowners to initiate contact with IDL foresters or request more information. Also attached was a QR survey code link where landowners could optionally provide information about themselves—included in an attempt to overcome NRCS personal and private information rules.

Interviewees also said that NRCS and Bonner County's BonFire program coordinated actions to maximize scale and efficiency. Both entities fund private landowner treatments. Interviewees said that the NRCS and BonFire program managers routinely communicated from the time of initial landowner contact through treatment completion to help landowners find the best funding source for their needs and combine projects where possible. Interviewees said it was common to refer applicants between programs after government-funded service foresters inspected their property and determined which program was a better fit.

**What cross-boundary authorities, mechanisms, and associated funding streams were in play?**

Interviewees from both the state and the USFS spoke about the importance of GNA. They said that seed money provided by the timber industry funded early GNA efforts and helped build some of the relationships that have been crucial to Scattered Lands. Interviewees said that IDL would implement all of the projects on USFS land within the Scattered Lands area through GNA, and interviewees from both the USFS and IDL said it allowed partners to bridge capacity gaps to increase the pace and extent of management actions.

Interviewees said that the state had authorized recurring funding to implement Shared Stewardship projects, but these funds could not support salaries. As a result, partners used this money to pay for implementation on private lands. In addition, interviewees said that the USFS and NRCS were able to use some of these funds to help write a Joint Chiefs application that was under review at the time of our interviews.

Two primary sources of money funded fuels treatments on private land, and interviewees said these sources played a much more significant role than state Shared Stewardship allocations. The first was NRCS's EQIP program, a 50/50 federally funded cost-share program for agricultural improvement (including fuels reduction and forest stand treatments) on parcels of land that are at least five acres. People said that EQIP is a better fit for larger properties where contractors can remove merchantable timber, which can then be used to meet the required landowner match. The second was the Bonner County BonFire program, which provides funding to treat private lands without a cost-share requirement and is better suited to treating subdivisions with small lots where fuel breaks are the primary treatment type. At the time of our interviews, EQIP funding for Scattered Lands stemmed from regular congressional appropriations, while BonFire dollars came from Stevens Hazardous Fuels Grants provided by the State and Private Forestry deputy area of the USFS, which must be spent near ongoing USFS projects. One interviewee said that Bonner County was working to incorporate the Scattered Lands Project area into its Community Wildfire Protection Plan to meet this requirement. Interviewees noted that, given the large amount of private land within the landscape, having both programs was crucial to the project's ability to treat lands across a larger, mixed-ownership landscape.

### **What were the key challenges?**

Multiple interviewees said that NRCS rules about the sharing of personal and private information complicated the development of ArcGIS databases that are used to inform prioritization decisions. They said that these rules made it difficult to determine where private land treatments had already occurred and where partners could tie in treatments to maximize impact across boundaries. Multiple interviewees expressed optimism that mailers sent by IDL would help alleviate this challenge by providing an avenue for landowners to volunteer information for the database.

Many interviewees discussed challenges related to inter-agency communication. Some non-USFS interviewees described difficulties learning the USFS's policies, practices, and timetables. They said that this factor was particularly challenging during the NEPA process for Scattered Lands. In addition, some interviewees felt that there was not enough communication between agencies and felt "left in the dark" about what other agencies and organizations were doing. Interviewees tended to stress that as relationships strengthened between partners, these challenges were likely to lessen.

## ***Social and Ecological Resilience Across the Landscape (SERAL)***

### **What is the SERAL Project?**

Implementation of the Social and Ecological Resilience Across the Landscape (SERAL) project on the Stanislaus National Forest started in 2022. The objectives of the project are to reduce the likelihood of uncharacteristically severe wildfire and associated impacts on human communities, watersheds, infrastructure, wildlife habitat, and other values at risk. The project includes multiple activities across 118,795 total acres (including 94,779 acres of national forestland): thinning, removal of woody material suitable for commercial processing, mastication of unmerchantable material, application of prescribed fire (initial entry and maintenance), construction and maintenance of linear firebreaks, and salvage harvesting of areas affected by wildfires.

### **How was the landscape identified, and what were the prioritization processes?**

Most interviewees trace the origin of SERAL to an earlier project in development (MOTOR M2K) that was shelved due to insufficient support from collaboratives and other stakeholders. The Region subsequently asked the forest supervisors and collaborative organizations to submit acceptable plans within their own areas of focus, and YSS responded with a draft project design. The Stanislaus National Forest supervisor and forest staff were motivated to accomplish a large landscape-scale project and worked closely with YSS on project planning. The SERAL footprint was chosen in large part due to its prior identification by YSS members as a priority landscape. It contains numerous California spotted owl protected activity centers as well as water infrastructure serving local and downstream communities.

Early in the SERAL planning process, the USFS leadership decided to use potential (wildland fire) operational delineations (PODs) as a key planning tool. Scientists from Oregon State University and USFS Research and Development were contracted to conduct PODs workshops and process data specific to the SERAL project area. The PODs workshops were conducted remotely due to the onset of the COVID-19 pandemic, and workshop participants were limited to USFS staff. Members of the YSS leadership team reviewed the POD boundaries following these workshops and were largely supportive. A separate set of USFS scientists was brought in to develop a treatment planning and optimization support tool known as ForSys. This tool was informed by the collection and processing of original LiDAR data for the forest.

### **How did partners collaborate, and how were private landowners involved?**

YSS has been a part of SERAL design and planning leadership since the beginning. The collaborative was founded in 2010 and many interviewees described the 2013 Rim Fire as a transformative event. Not only did it lead to YSS reorganizing as a more independent body outside of the direct oversight of the U.S. Forest Service, it generated additional urgency to conduct restoration over large scales. YSS includes dozens of organizations and businesses as participating members, and the most active individuals are included in a leadership team made up of timber industry and conservation group representatives. Interviewees described very high levels of trust among members of the leadership team, as well as high levels of trust in the leadership team from other YSS members. They also described broad agreement among YSS members on the need to rapidly move forest restoration management forward on the Stanislaus National Forest. Among other activities, YSS was instrumental in establishing the Master Stewardship Agreement with Tuolumne County described below. Interviewees described frequent and ongoing collaboration between YSS and the Stanislaus National Forest, including during the definition of POD boundaries, during the prioritization of PODs, and at key decision points regarding the NEPA process.

Despite the large-landscape approach of the SERAL project (and the inclusion of non-federal lands within the planning footprint), direct planning coordination with private and other non-federal landowners was extremely limited during the NEPA process. For example, POD boundaries were designed to fall within national forest lands to the maximum extent possible. Some interviewees described this as a missed opportunity for cross-boundary planning—one potentially exacerbated by the lack of non-USFS participants in the workshops. The active participation of Sierra Pacific Industries in YSS and SERAL implementation planning is expected to allow for some cross-boundary coordination to occur, and the varied funding streams available (described below) could help to support these kinds of activities.

### **What cross-boundary authorities, mechanisms, and associated funding streams were in play?**

Tuolumne County entered into a Master Stewardship Agreement with the Stanislaus National Forest in December 2017. This agreement is expected to play a central role in the implementation of SERAL. Through this agreement, the county acts as a fiscal agent and project administrator for various activities on the national forest, ranging from surveys and layout work to implementation of activities like thinning and mastication. Tuolumne River Trust, one of the conservation organizations represented in the YSS leadership team, is overseeing the hiring and supervision of contractors for these activities. This unique arrangement has led to increased trust between YSS and Tuolumne County; the county formally committed to using the Master Stewardship Agreement to implement only activities that have the full consensus support of YSS. The existence of Sierra Pacific Industries' mills in Tuolumne County, and the potential construction of major new biomass power plants, provides nearby options for adding value to removed material.

Stanislaus National Forest staff analyzed the impacts of the SERAL project and alternatives via a standard Environmental Impact Statement (EIS), but the process of signing the records of decision (RODs) included some deviations from standard practice. The Forest Supervisor is using three separate RODs. The first focuses on the installation of linear fuel breaks in the priority areas as identified via the PODs delineation process; the second ROD focuses on thinning, prescribed fire, and related fuel reduction activities across the broader SERAL landscape; the third ROD, still to be signed as of the date of this writing, incorporates condition-based NEPA approaches that will allow the Stanislaus National Forest to implement salvage harvest, hazard tree removal, and herbicide application as needed in response to future fires or invasive plant outbreaks. The SERAL EIS also included forest plan amendments based on the recent California spotted

owl conservation strategy that allow for more active management within civil society organization (CSO) PACs and territories compared with earlier guidance. These changes originated at the Regional level and are being implemented beginning with the second signed ROD.

The SERAL landscape was included as a priority landscape under the federal restoration investments stemming from the Infrastructure Investment and Jobs Act (IIJA, also called the Bipartisan Infrastructure Law), which provided additional infusions of federal dollars to help accomplish work. Interviewees pointed to the multiple funding streams that together appear poised to help accomplish work on SERAL: baseline federal dollars for the Stanislaus National Forest, IIJA funding, state grant dollars from CAL FIRE associated with carbon reduction initiatives, and other state grant monies via the Sierra Nevada Conservancy.

### **What were the key challenges?**

Interviewees identified several persistent challenges to the ultimate success of SERAL. Many spoke about the ongoing challenges posed by limited USFS staff capacity—a problem that was not entirely addressed through the use of the Master Stewardship Agreement and contracting out of agency duties. In part this is because USFS staff capacity is needed for contract administration and oversight, and in part because key forest staff (including, at times, the Forest Supervisor himself) have been detailed to other positions, thereby taking their focus away from SERAL. Many interviewees also pointed to the continued opposition to SERAL activities from some organizations, especially certain environmental advocacy groups that are opposed to the use of logging as a management tool, especially in California spotted owl PACs.

## ***Wildfire Adapted Missoula Project***

### **What is the Wildfire Adapted Missoula Project?**

Wildfire Adapted Missoula (WAM) is a 455,787-acre project encircling the city of Missoula, Montana, on the Missoula Ranger District (MRD) of the Lolo National Forest. Key partners include the MRD, the BLM's Missoula Field Office, the Montana Department of Natural Resources and Conservation (DNRC), Missoula County, the Rocky Mountain Research Station (RMRS), NRCS, The Nature Conservancy, The United Way of Missoula County, The National Forest Foundation (NFF), and the Lolo Restoration Committee (LRC) collaborative group. The landscape contains dry mixed-conifer forests of western larch, Douglas fir, and ponderosa pine. The USFS manages most of the area's landscape, but there are sections of land managed by the BLM, DNRC, TNC, and private landowners.

### **How was this landscape identified and what were the project prioritization processes?**

The MRD initially conceived of a landscape-scale project in the mid-2010s after the publication of the 2014 National Cohesive Wildland Fire Management Strategy. District leadership engaged with the Missoula County Fire Protection Association (MCFPA) to discuss what a hazardous fuels reduction project around Missoula would entail and determine the project's footprint.

The MRD completed hazard mapping for the WAM area, breaking it into over 30 focal treatment areas (FTAs) with associated hazard ratings. Four FTAs emerged with the highest hazard: the Blue Mountain area, the Rattlesnake Creek drainage, the Grant Creek drainage, and the Schwartz Creek drainage. The MRD then met with RMRS's Fire Modeling Institute to add additional layers to the hazard mapping and produce a more refined modeling summary for each of these FTAs.

The MRD, NFF, and Missoula County then held a series of community meetings to gauge support for a landscape-scale project. This group sought to determine which of the four high-hazard FTAs had the most robust community support for: 1) home hardening activities and hazardous fuels treatments on private lands, and 2) hazardous fuels treatments on nearby public lands. Blue Mountain community members appeared to show the greatest enthusiasm for treatment on private and public land, and the MRD opted to prioritize treatment in this location.

During our interviews, the project was commonly referred to as a landscape-scale multi-decadal “vision.” Most interviewees gave examples where the MRD actively collaborated with partners on hazardous fuels reduction and other forest restoration activities outside of FTA priority areas.

### **How did partners collaborate, and how were private landowners involved?**

Interviewees said that due to the complexity of the USFS’s permanent employee hiring process, the MRD could not hire a long-term coordinator for the WAM NEPA process. After utilizing one 120-day detailer for the role, the MRD entered into an agreement with the BLM that allowed a BLM employee to serve as WAM’s NEPA coordinator for one year. Most interviewees familiar with this arrangement praised its effectiveness in preventing the typical disruption that turnover causes. They acknowledged, however, that the solution was not permanent and that the BLM employee eventually returned to their previous post.

During identification and prioritization discussions that took place during MCFPA meetings, members of the MCFPA decided that a Wildfire Preparedness Coordinator (WPC) position was necessary to coordinate activities between land managers and private landowners. They agreed that this position should be housed in the county government, and that Missoula County, the DNRC, and the MRD should jointly fund the position. At the time of our interviews, this position coordinated and organized fuels treatments and home hardening activities on private land near USFS projects and helped coordinate MCFPA meetings.

Interviewees said that MRD leadership saw a need to engage the Missoula community after pushback from a previous fuels reduction project. The MRD partnered with the NFF and the WPC to facilitate 11 community meetings within high-hazard FTAs. These meetings included presentations from local land managers and forestry professionals, site visits, and opportunities for open dialogue regarding the project. In addition, the MRD created a public-facing ArcGIS story map detailing project objectives and local forest ecology that community members could access instead of attending meetings. Interviewees said that these tools were instrumental in building support for the project and saw value in continuing this type of outreach for the duration of the WAM Project.

### **What cross-boundary authorities, mechanisms, and associated funding streams were in play?**

Multiple interviewees said that GNA was an important tool that allowed the USFS and BLM to streamline their contracting process when working with the DNRC. In one instance, the use of GNA facilitated a three-partner project focusing on land managed by the USFS and BLM, with implementation entirely carried out by the DNRC. One interviewee expressed concern that a lack of timber sales associated with hazardous fuels reduction could constrain the state’s motivation to engage with the federal government on future GNA arrangements, because projects without merchantable volume used DNRC’s limited capacity without boosting the organization’s revenue stream.

Interviewees said that the Joint Chiefs’ Partnership was an essential source of funding for the project. It allowed the MRD to detail in a project manager during the NEPA analysis, provided an influx of funding for private land treatments, and presented an opportunity to fund biomass removal through biochar production. However, interviewees noted that this funding, awarded in FY 2019, was set to expire after FY 2021. They said that the USFS and the NRCS did not complete a second application due to NRCS capacity constraints that prevented them from meeting the application deadline.

Other interorganizational agreements provided opportunities for project partners to collaborate. Interagency agreements allowed the MRD to fund the WPC coordinator with the DNRC and Missoula County and permitted a BLM employee to serve as a NEPA coordinator. Interviewees also said that Wyden Authority agreements were necessary to implement work adjacent to USFS land and to secure access over private roads, but were challenging to put in place.

### **What were key challenges?**

Many interviewees discussed funding and capacity challenges that were specific to the USFS. Interviewees who were familiar with the USFS budgetary process discussed how budget modernization impacted the final year of Joint Chiefs’ funding. They said that the separation of salary and implementation funds prohibited the MRD from bringing on additional detailers or seasonal workers to implement project work. Most interviewees also expressed uncertainty

concerning future funding and whether the project would continue long-term. They highlighted the expiration of Joint Chiefs' funding as a primary concern due to the insufficiency of regular budgetary allocations to complete landscape-scale work. Interviewees also said the number of bureaucratic steps in the USFS contracting, and grants and agreements processes, along with limited staff capacity in those areas, constrained cross-boundary work and their ability to find innovative solutions.

Many interviewees also noted that budgetary timelines made it difficult for organizations to work across boundaries. They said that mismatched deadlines shrank windows in which funding could be contracted out to partners and that learning other partners' deadlines was an often-overlooked collaboration step.

Most funding for private land treatments came from NRCS's Joint Chiefs' EQIP allocation, a cost-share program operated by the United Way of Missoula County, or Stevens Hazardous Fuels Grants stemming from the State and Private Forestry deputy area of the USFS. Multiple interviewees discussed the challenges of funding treatments under five acres in size. Some interviewees also mentioned the lack of funding for home hardening activities such as flammable roof and deck replacement and said this funding gap left the community vulnerable.

## Appendix B: Interview Guide

### Background, project goals, landowner context

1. Briefly describe your current position or role with your agency or organization, as well as your **specific role** regarding this project.
2. What are the **primary objectives** of this project?
3. What **different jurisdictions or landowners** are involved?

### Prioritization/Partnerships

1. How was this landscape **identified or prioritized**?
2. What processes were used to identify this project and to plan it?
3. Collaborative prioritization or dialogue?
4. Scientific process?
5. Leadership directives (state, USFS etc)
6. How does this fit into **other management plans or prioritization** (e.g. State Forest Action Plan, forest plans, regional prioritization or 5 year plans for the forest)?
7. Any connection with Shared Stewardship conversations that started **after 2018**? Would this project have happened **regardless** of Shared Stewardship MOUs or the Strategy?
8. What partners have been involved with the **planning** of this project?
9. Are there collaborative groups that are **tracking, coordinating, or monitoring** this project?
10. (e.g. local collaborative group or state-level advisory groups)
11. Are there partners or places that you wanted to involve or **should be involved and aren't yet**? (e.g. tribes, specific landowners, other agencies)
12. *specific landowners, other agencies*
13. Are there other **key benefits** or **drawbacks** of working together?

### Policies/Funding/Capacities and Specific Benefits and Challenges

1. Other than the usual policies you always comply with, can you talk about the different cross-boundary authorities and **policies** that you're using for this project? (e.g. GNA, Wyden, Joint Chiefs, CFLRP, or any CA specific policies; these would be CCI, GGRF, SB whatever)
2. What **funding sources**, including different agency funding streams, are contributing to the project? Any other "in-kind" sources?
3. Have you found any challenges or lessons learned in **mixing** policies or funding streams?
4. Any challenges specifically working across jurisdictions or combining State and Private and National Forest funding?
5. What would make it easier in an ideal world to work across boundaries? What's the next step in improving this process.
6. What have been some of your other **primary challenges**? (e.g. capacity, communication, key people)
  1. Are there **policy, capacity, or other gaps/challenges or needs** in order to better facilitate cross-boundary work? What will success look like? (e.g. outcomes, performance measures)
7. What have been **factors that have facilitated success**? (e.g. key people, media attention, funding sources, willing participants, past collaboration)
8. *participants, past collaboration*
9. Any message for agency leadership or key partners about ways they could **better support success** (e.g. partner roles, performance measures, policies - and at what level would these be helpful)?
10. *roles, performance measures, policies - and at what level would these be helpful?*
11. Were there any **new processes or approaches** that you haven't used before? (e.g. mapping, use of science, creative planning, new ways to use policy, new types of agreements)
12. *creative planning, new ways to use policy, new types of agreements*
13. Are there resource areas or project objectives that aren't included in this project but should be? (I.e. because of funding structures)

**Follow Up**

1. Is there anything about this project or these efforts that we have not discussed yet that would be helpful for us to know?
2. Do you have any recommendations of other people or organizations we should be sure to contact?

**Additional/potential interview questions if time allows**

1. What is the historical context of the forest service to public/stakeholders in this area?
2. What is the local collaborative context for this project area?
3. What have they learned so far that they have or can apply to future SS efforts?

**Research Objectives/Questions for Case Studies**

*Research Objective 1: Understand the nature of cross-boundary, landscape-scale project partnerships, project identification, and project implementation within the United States Forest Service's Shared Stewardship Initiative.*

1. What partners are involved in identifying, prioritizing, and implementing projects?
2. What prioritization processes are used to identify and plan projects?
3. What collaborative forums, policies, mechanisms, authorities, funding tools, and other institutions are used to
4. implement them?

*Research Objective 2: Understand the factors that are shaping the design and implementation of Shared Stewardship projects.*

1. What is the role of top-down factors, such as incentives, agency leadership direction, and capacity?
2. What is the role of bottom-up factors, local (i.e. project-level), leadership, local collaborative history and goals,
3. and local landscape conditions?
4. How and why are people innovating from existing activities and governance institutions to overcome various
5. barriers?