Accomplishing Collaborative, Landscape-Scale Restoration on Forests without CFLRP or Joint Chiefs' Projects

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Executive summary

ver the last decade, the U.S. Forest Service has been implementing a series of new initiatives designed to accelerate crossboundary, collaborative, integrated restoration.¹ Many national forests have applied for and been awarded funding for projects under competitive funding initiatives, like the Collaborative Forest Landscape Restoration Program (CFLRP) and the Joint Chiefs' Landscape Restoration Partnership (Joint Chiefs'), which are represented on the majority of national forests. However, some forests have not had projects under these initiatives. Along with our prior research investigating the CFLRP and Joint Chiefs',² we were also interested in understanding how forests that have not participated in either of these initiatives conceptualized, planned for, and engaged in collaborative, landscape-scale restoration efforts. We identified forests that did not have CFLRP or Joint Chiefs' projects and randomly selected three from each region to contact for interviews. We conducted 29 interviews with 37 people, including Forest Service personnel and external collaborative partners, on 18 national forests. Our objectives were to:

- 1. Understand interviewees' perspectives about their eligibility for competitive funding and the effects of the CFLRP and Joint Chiefs' initiatives on their programs of work.
- 2. Describe how forests without either Joint Chiefs' or CFLRP funding approach collaborative, land-scape restoration projects and define restoration goals.

- 3. Examine the factors that facilitate and inhibit success of restoration projects and objectives on these forests.
- 4. Synthesize recommendations offered by interviewees for the agency to support future landscape-scale collaborative restoration projects and goals across Forest Service and adjacent lands.

Key findings

- A lack of forest capacity, lack of collaborative capacity, or lack of the "right" landscape were the main reported reasons that forests did not apply for or get funding from the Joint Chiefs' or CFLRP initiatives. On the 18 national forests we talked to, interviewees from half reported applying for the Joint Chiefs' or CFLRP funding in the past; the other half felt that these programs were not appropriate or worth the effort for the forests that they worked on.
- Interviewees were supportive of the intent and objectives of the Joint Chiefs' and CFLRP initiatives but were less supportive of how funding for them came from the existing agency budget (i.e. without significant new funding). They felt that valuable work was being completed under the initiatives, but that it came at a cost to other landscapes in both funded and unfunded forests, failing to address the fundamental issue of inadequate resources agency-wide for critical restoration needs.

- In the absence of Joint Chiefs' or CFLRP funding, state-level support provided key funding and capacity support for large-scale and collaborative restoration efforts. Eight of the 18 forests represented in interviews said that statelevel initiatives and support were key to their projects involving landscape-scale restoration and collaboration. Forest staff cited the 2014 Farm Bill Good Neighbor Authorization³ as a key policy measure facilitating cross-boundary collaborative efforts. Interviewees said that the state initiatives were important because they often deliberately funding collaborative processes, including the time for staff to participate in relationship-building, attend meetings, and adapt restoration plans to larger scales or with a variety of objectives.
- The scope and scale of "collaborative landscape-scale restoration" varied considerably between forests. Examples of collaborative landscape-scale restoration projects varied according to the particular geographies or land use and management histories of individual national forests, as well as the institutional preferences and capacities of the forest management units themselves. There was no consistent definition among interviewees on how to define each of the three terms, "collaborative," "landscape-scale," or "restoration," and examples of projects varied widely.
- Interviewees from different forests reported varying levels of collaborative activity. All Forest Service interviewees said that they have partnerships, but some said that either they or the public were not interested enough to support more formal collaboration on the forest. Most saw collaborative capacity as something they were currently trying to build in an ongoing process, often with assistance from state-level initiatives. Some described a collaborative process with regular meetings and formal collaborative groups (sometimes more than one) that worked with the forest on project planning, implementation, and monitoring.
- Interviewees said that consistent funding and staff capacity issues were the most substantial factors affecting collaborative, landscape-scale project accomplishments on their forests. Other

factors that influenced project success included state-level support, the historical context of working with the public on the forest, the structure of collaborative groups, the level of efficiency with required regulatory procedures, the level of public understanding, and existing social and ecological contexts and boundaries.

Recommendations from interviewees

- Consider more kinds of programs that guaranteed consistent funding to encourage larger- and longer-scaled projects. Although the forests we talked with did not feel competitive or did not have successful proposals for either Joint Chiefs' or CFLRP, they were often still interested in pursuing larger or longer-term projects with more funding certainty. Interviewees said that more kinds of multi-year awards under different mechanisms would encourage more forests to consider landscape scales and reduce some uncertainty around committing to larger projects.
- Offer more support for collaborative processes. Interviewees said that efforts to increase collaboration with stakeholders and support a formal collaborative group often require a lot of time, energy, and resources. Many interviewees said that their forest was interested in more collaboration, but that it just did not have the staff time or funding available to pursue new relationships and build the additional partnerships that they envisioned would be helpful. Forests with formal collaborative groups reportedly relied heavily on state and some local and non-profit resources to fund the work needed to build and maintain relationships with the collaborative. Interviewees suggested that if additional collaborative capacity is a goal of the agency, additional funds dedicated to the proccesses for building that capacity would be needed to accomplish the goal.
- Use a broader definition of what constitutes collaborative landscape restoration in funding initiatives, if the goal is to include a wider range of forests in these approaches. Many of the Forest Service interviewees said that although their forests had similar restoration

goals as forests with funding from Joint Chiefs' or CFLRP, the specific projects, needs, and landscapes did not completely align with the requirements for the initiatives. Some suggested that the Joint Chiefs' or CFLRP initiatives tended to prioritize forests with more timber, higher fire risk, or more WUI areas than they had. Other interviewees explained how factors such as forest contiguity, boundaries, or ecosystem type and size limited their ability to be competitive even though collaborative landscape restoration was an important goal for the forest. They suggested that more flexibility in defining collaborative landscape restoration would help funding initiatives be inclusive of different kinds of work on different forests.

- Reduce the amount of work involved or offer support to prepare competitive funding applications. Some agency interviewees said that the amount of work involved in preparing a proposal for the Joint Chiefs' or CFLRP initiatives was prohibitive, especially considering that the project may not be selected. Interviewees from forests that expressed substantial staffing shortages sometimes said that adding a proposal preparation to staff workloads was not feasible. They suggested that a shorter application process or additional agency support, including support from staff with experience in preparing applications, could help them overcome the barrier of application.
- Design initiatives to better complement the strengths of a diversity of forest types. Some interviewees said that ongoing innovation was needed at all levels of the agency to maximize accomplishments. These interviewees acknowledged recent efforts but suggested that more innovation was needed address some ongoing issues. Specific suggestions included to do the following: consider novel metrics for evaluating collaborative, landscape-scale accomplishments; continue to think of ways that initiative design complements the strengths of different kinds of forests; and hire staff who have a good understanding of different tools and who can help forests find innovative ways to do partnerships beyond traditional approaches.
- Look for ways to streamline regulatory processes for landscape-scale restoration. Agency interviewees frequently mentioned requirements from regulatory policies such as the Endangered Species Act or National Environmental Policy Act when describing projects and timelines. Some said that proceeding through legally required processes is challenging to accomplish at larger scales and that any efforts to make them more efficient would be helpful. Other interviewees explained recent efforts at the forest level to streamline the work of these requirements had been valuable and suggested that similar approaches might also be helpful for other forests.





Project overview and background

cological restoration on public lands is an increasingly important goal across the United States.⁴ Land management agencies continue to explore funding opportunities and programmatic mechanisms that encourage ecological restoration activities across a variety of ecosystems, conservation goals, and landowners. Collaborating with other landowners, partners, and stakeholders is important to achieving restoration goals and addressing concerns at a greater scale than has been accomplished in the past, particularly given the intermixed landownership patterns across the United States.⁵

In the last decade, the USDA Forest Service (Forest Service) has implemented new funding initiatives that promote cross-boundary and collaborative forest restoration. For instance, the Joint Chiefs Landscape Restoration Partnership (Joint Chiefs'), and the Collaborative Forest Landscape Restoration Program (CFLRP) have provided valuable support for many large-scale and cross-boundary collaborative

restoration projects on Forest Service and adjacent lands. The Joint Chiefs' initiative was established in 2014 and is a partnership between the Natural Resources Conservation Service and the Forest Service to provide up to three years of funding for restoration work that crosses public and private lands.⁶ The CFLRP was established by Congress in 2009 (CFLRP, P.L. 111-11) to support projects with 8- or 10- year funding on landscapes greater than 50,000 acres with ecological need, social agreement, and economic opportunities.⁷ Both of these initiatives allocate funding to priority projects through competitive processes where forests prepare proposals that are evaluated for funding. As of June 2017, 75 national forests had received funding awards in support of collaborative landscape-scale restoration from one of these initiatives.⁸

Some national forests did not apply for or receive targeted investments under the CFLRP or Joint Chiefs' funding initiatives. However, in the national forest system, forests without either of these funding sources are a minority. In total, 40 national forests had not received funding from either initiative as of 2017. No research to date has investigated this group of forests to understand how they view these competitive initiatives, if collaborative, landscape-scale restoration is still a goal on these forests, or if and how these forests are inherently not competitive for such programs.

As part of our cost-share agreement with the US Forest Service to independently investigate the CFLRP and Joint Chiefs' initiatives, we also investigated how forests that have not participated in either of these programs conceptualized, planned for, and engaged in collaborative, landscape-scale restoration efforts.⁹ As the Forest Service continues to explore mechanisms and programs to promote cross-boundary restoration, information about how these forests approach and accomplish these activities can help show not only the factors for successful projects that these forests may lack, but also how and what these programs exclude in terms of collaborative restoration activities on other forests. Our objectives for this study were to:

- 1. Understand interviewees' perspectives about their eligibility for competitive funding and the effects of the CFLRP and Joint Chiefs' initiatives on their programs of work.
- 2. Describe how forests without either Joint Chiefs' or CFLRP funding approach collaborative, land-scape restoration projects and define restoration goals.
- 3. Examine the factors that facilitate and inhibit success of restoration projects and objectives on these forests.
- 4. Synthesize recommendations offered by interviewees for the agency to support future landscape-scale collaborative restoration projects and goals across Forest Service and adjacent lands.

Approach

To understand the collaborative, landscape-scale restoration efforts and accomplishments outside of

Joint Chiefs' and CFLRP projects, we interviewed Forest Service leadership, staff, and external partners from national forests that had not been awarded funding from either initiative. We randomly selected up to three forests from each of the nine Forest Service regions that had no CFLRP or Joint Chiefs' projects. One region had no forests and two others had only one or two that met these criteria; in total we reached out to 21 different national forests, and staff from 18 national forests across eight Forest Service regions responded to our requests for interviews. We conducted a total of 29 confidential, semi-structured interviews with a total of 37 people (i.e. some interviews involved two people) involved in landscape restoration efforts on these forests. Of these interviews, 18 were with 26 different Forest Service personnel (forest supervisors, deputy forest supervisors, and/or natural resource staff officers from that forest). The other 11 interviews (one person each) were with external collaborative partners associated with eight national forests on which staff said they worked with formal collaborative groups.

We asked interviewees to describe the following: a) what collaborative landscape-scale restoration looked like on the forest they were associated with; b) how the scale and objectives of restoration projects on the forest had changed over the past couple of decades; c) how the forest collaborated with partners; and d) what factors facilitated and challenged collaborative and landscape-scale project success on the forest. Follow-up questions probed details concerning partnerships with public and private forest-adjacent landowners, and interviewees' perspectives on the Joint Chiefs', CFLRP, and any other competitive funding initiatives (e.g. intraregional competitions). Lastly, we asked interviewees for their recommendations for the U.S. Forest Service to help support collaborative landscape-scale restoration efforts. Interviews were digitally recorded and transcribed verbatim. Transcripts were analyzed and coded thematically according to the project objectives. We have removed identifying names, locations, or other identifiers from any quotes included in this paper.

Results

Perspectives on eligibility for the Joint Chiefs' and CFLRP initiatives

Interviewees on nine forests reported that their forests were either in the process of applying for the Joint Chiefs' program (N=1 national forest) or had applied in the past to either the Joint Chiefs Program (N=7) or the CFLRP (N=3). Interviewees on the other nine forests reported that their forests had never submitted a proposal for either initiative. The reasons that interviewees gave for not applying and the reasons they gave for their forest not being selected if it did apply were the same and generally fell into three categories. A lack of forest capacity, lack of collaborative capacity, or lack of the "right" landscape were the main reported reasons that forests did apply for or get funding from the Joint Chiefs' or CFLRP initiatives. Below, we expand on these three reasons.

Forest Service interviewees frequently explained how submitting and implementing a project under one of these programs required substantial staff capacity. Many interviewees explained that their forests did not have the staff capacity for the work involved in a Joint Chiefs' or CFLRP project. Specific areas that interviewees said their forests lacked capacity included: to prepare a competitive application, to implement a large or cross-boundary project, to conduct the additional analyses they felt such a project would require, or to address concerns related to ongoing litigation, which they felt might continue or even increase with additional funding. In particular, some discussed the challenge associated with dedicating capacity to compete for funding that might not materialize. After attempting and failing to obtain both Joint Chiefs and the CFLRP funding, one Forest Supervisor concluded: "We don't have the staff, or time, to devote to efforts that aren't going to produce fruit quickly. . . . Doing our regular budget process is enough work, rather than creating another [application] process." Interviewees on the forests that had never submitted a proposal also said that the uncertainty of a funding award that took limited staff capacity to prepare was a concern.

Interviewees on all of the national forests represented in our interviews reported partnerships in their work, but only some reported that they had collaborative groups with whom they worked on restoration efforts. Multiple interviewees said that their forest did not have an appropriate multistakeholder collaborative group that they felt was needed for a successful Joint Chiefs' or CFLRP project. One Forest Supervisor explained, for example, that there was limited controversy about management on their forest to drive the creation of a collaborative group that would consistently work with the forest. A few other Forest Service interviewees said that formal collaborative groups would not be relevant on their forests or projects due to a lack of stakeholders, or a general lack of public interest in what happens on the forest. Other interviewees described deliberate efforts to build more collaborative capacity, which they felt would enhance their forest's success in applying for funding. Regardless of whether their forests were interested in building collaborative capacity or not, the lack of an appropriate collaborative group was a common reason described by interviewees for not applying or receiving funding.

Finally, Forest Service staff members on multiple forests felt that their forests were inherently not funding priorities for the initiatives. Multiple interviewees said that their forest did not have the right landscape or restoration needs to be competitive for funding under the Joint Chiefs' or CFLRP initiatives. For example, Forest Service staff members from three different forests stated that their forests were too fragmented or distributed among various ecosystems or landownerships to fit program priorities. Conversely, a staff member from another forest suggested that their forest was too consolidated to fit the programs (not enough landownerships that bordered the forest). Staff members from two forests suggested that their forests were not fire-prone enough to merit CFLRP or Joint Chiefs' funding. Several forests said that they did not have a big timber program, which they felt made them less competitive. Interviewees from both forests that had not applied and from those that had applied unsuccessfully said that a lacking priority landscape or restoration need was a reason they did not have funding under the initiatives.

Perspectives on the CFLRP and Joint Chiefs' efforts

The Forest Service interviewees we talked to expressed mostly positive sentiments about the efforts of the CFLRP and the Joint Chiefs' but were somewhat critical of how these initiatives were funded. Even though their forests had not benefitted from investments under either, most agency interviewees agreed with the intent and objectives of the two initiatives, saying, "As an agency, they're helping us meet objectives in a broader scale, and that's good."

Most felt that these initiatives drew funding from the system as a whole, but they did not see Joint Chiefs' and CFLRP projects on other forests as taking money from their forests directly. Instead, they explained that, similar to fire funding, money for special programs is taken "off the top," indirectly affecting other forests. Thus, they felt that progress under the initiatives, though positive, comes at a cost to progress in other areas and projects, both on awarded forests and in non-awarded forests. Many also suggested that the promise of funding with the initiatives often was not financially additive and that key limitations around funding to get critical work done had not been addressed. One Forest Supervisor, while discussing the CFLRP, explained: "The program sounds great, but it really creates some tension within the system because the funding hasn't always been there, and it's really just drawn other money to try and meet those commitments. . . . so it doesn't bring more resources to a region, it often just pulls from one place to pay for work in another."

The perspective that the initiatives did not provide a net gain in funds was sometimes given as a secondary reason for not pursuing the funding. According to several interviewees, the forests would rather rely on the traditional allocation of funds across the region that did not require a separate application process, because they felt that the funds they would receive would be similar in the end.



Defining and engaging in collaborative landscape-scale restoration

Nearly all interviewees said that the forests they were associated with participated in collaborative, landscape-scale restoration efforts outside of the Joint Chiefs' and CFLRP; the scope and scale of these efforts varied considerably. Agency interviewees described collaborative landscape projects on their forests and pointed to the partners or programs that made those efforts possible. Most said that they relied on state-level support to help do this work, and interviewees from eight forests named state-level initiatives. They most commonly reported the 2014 Farm Bill's Good Neighbor Authority as a source of support for collaborative landscape-scale efforts, but they also noted other state, local, and federal efforts that were helpful in pursuing this type of restoration work. In some cases, staff members suggested that these programs were a better fit than the Joint Chiefs' or CFLRP for accomplishing forest-specific restoration goals.

When asked to describe what the term "collaborative, landscape-scale restoration" meant and what it looked like on their forests, forest supervisors and resource staff described projects with a wide range of objectives, activities, scales, partners, and outcomes. Indeed, each of the three main concepts embedded in the term (collaboration, landscapescale, and restoration) meant different things on different forests depending on social and ecological contexts, history, and geographic and political boundaries. In the following sections and table (see Table 1, page 9), we describe the range and diversity of definitions that interviewees provided for each of these concepts.

In discussing collaboration, the Forest Service staff and external partners we interviewed all recognized the importance of working towards more cooperative involvement with adjacent landowners and other stakeholders to some degree. Some suggested that embracing collaboration requires a paradigm shift compared to past approaches for making decisions on Forest Service lands. However, interviewees described different approaches to collaboration on different forests and many factors that affected their success or lack of success with collaboration.

The term "collaborative" was sometimes used to discuss special interest or stakeholder groups more so than an established multi-stakeholder collaborative group. A couple of Forest Service interviewees discussed working with collaborative groups more often in terms of recreation management and did not seem to have collaborative groups that focus on large-scale ecological restoration projects. However, some form of collaboration with other landowners and organizations, both formal and informal, was described on most forests.

Some interviewees discussed "landscape-scale" as any project that combines different land owners or resource benefits, while others offered specific numbers of acres to define the size of landscapescale projects. For example, one Forest Service employee said that landscape-scale on their forest generally meant "anything over 100,000 acres." Another said that although they first think about the entire forest and neighboring landowners, most landscape-scale projects "end up being around 30,000 to 50,000 acres." Some defined it simply as "larger projects" or projects that encompassed multiple objectives, such as watershed restoration, timber sales, thinning, prescribed fire, and habitat management.

It was very common for interviewees to discuss watersheds as the typical unit when thinking about landscape-scale projects, in addition to working across landownerships. Others, particularly those on forests with varied types of ecosystems across their forest, discussed landscape-scale in terms of specific "ecoregions" or vegetation communities on their forests. One interviewee spoke about landscapes as "firescapes" involving larger-scale projects with a particular focus on wildfire potential and behavior across the landscape. Across interviewees, there was a general theme that "landscape-scale" was something larger than the scale of what restoration projects traditionally were on the forest, but there was no consistent definition of the term specifically.

Table 1Example quotes of definitions given for "collaborative," "landscape-scale," and
"restoration"

Term	Definitional themes	Example quotes
"Collaborative"	A planning or proposal- focused group	"[The collaborative is] there to identify issues across boundaries, more of a planning group than an actual collaborative, for implementation or gathering money."
		"They [collaboratives] are place-based groups that tend to work together when you have project proposals."
	A county-led stakeholder group	"They [the collaboratives] are kind of from the counties and there's the county extension folk focusing on some projects across multiple agencies with stakeholders"
		"I have the county collaborative, so the county actually stood up their own collaborative to work with us."
	A state-wide network	"We have a state-wide collaborative network that we've actually worked with the governor's office to set up here."
	A multi-agency working group	"It is a working group of folks made up of all entities—forest service, city, state forestry, state lands, private individuals involved in the timber and wood industry."
	A group that connects communities and the agency	"By not having a collaborative we're saying we connect with our communities without the need for a collaborative group."
	A group that works on specific topics	"We also have other collaboratives related to issues we're having with use levels and parking and alternative transportation options."
	A restoration committee	"Yeah we do [have a collaborative] once upon a time the state did a state-wide committee. And then some local chapters sprung off of that so I have one of those local chapters."
"Landscape-scale"	10-15,000 Acres	"We select project areas that tend to be made up of anywhere from 10,000 to 15,000 acres."
	30-50,000 acres	"[Landscape-scale projects] end up being around 30,000 to 50,000 acres."
	~100,000 Acres	"They're on like 100,000-acre sort of scale Most of our projects are not that big."
	Over 100,000 acres	"Usually anything over, I would say, 100,000 acres."
	Watershed or larger	"A landscape typically, for us, is on or by watershed. A large landscape, to me, would be more than one watershed."
	Multiple landowners	"I often think of [landscape scale], means involving people other than national forest system land, so working with partners, whoever that might be to do work that may include some NFS land, but it stretches beyond our green boundaries, in some ways, so we're working with them to manage at a landscape level and it could be at almost any scale."
	Ecoregions	"Landscape restoration to our scales are driven by those ecoregions that we've identified."
	Firescapes	"[Landscape] scaling has to involve fire we have to come back to a natural fire. Managing natural fire is going to be a part of this, too, to actually make that scale big enough."
	Multiple resource benefits	"Another component of being a landscape scale in my view is just that it has multiple resource benefitsIt's not just for one purpose."
"Restoration"	Resilience	"In a broad sense, I guess it's managing for resilient forest and restoring it if it's not headed towards your trajectory of being resilient."
		"To make [the forest] more resilient to infective disease."
		"It is making [landscapes] a bit more resilient to some of the impacts of climate change that we're starting to see."
	Natural processes	"Restoration is looking at restoring natural processes on the landscape and what would be part of the vegetative condition that would result from that."
	Vegetation management	"We tend to have a focus on some key vegetation communities."
		"We talk about restoration in a very broad context before you start to take it down to the specifics of vegetation restoration and what the situation is with existing stand conditions."
	Ecological function	"It is understanding and maintaining and improving function; ecological function."
		"There are implied broader ecological function questions that we're trying to answer about whether or not the landscape is functioning."
	Fire adaptiveness	"For us, it's much more about fire used to restore certain small-scale ecological systems."
		"Landscape treatments so we can allow fire to play its historic, and potentially future, restoration role."
		"Restoration is to restore the natural vegetation and the natural fire regimes in an ecosystem."
		"Our idea of restoration is reintroducing fire, breaking up age classes, so that there is a mosaic across the landscape."
	Forest health	"Our goal is not just to cut trees, it's to get into watershed and healthy forest restoration wor.k"

Lastly, the concept of "restoration" itself was defined differently among interviewees. Interviewees from seven forests discussed restoration projects as promoting forest resiliency, and three of these interviewees mentioned that the goal should be to reduce forest vulnerability in the face of potential climate change impacts. Many participants discussed the goal of restoring fire regimes through either prescribed or natural fires in areas away from communities or with community members through fire mitigation projects in the WUI that could reduce wildfire hazard. Staff on some forests spoke about the importance of restoring habitat for specific wildlife species. Several interviewees indicated a general knowledge and practice of restoration ecology principles on forest lands but did not provide substantive details about projects they had on their forests that were built around these principles. The commonality was the restoration of either key ecological processes to promote resilience or of specific ecosystem components, such as individual species.



Prioritizing restoration work

Forest Service interviewees generally discussed prioritization of restoration in the larger context of planning activities on the forest and how restoration activities fit with projects focused on other goals and activities such as timber harvesting. Some interviewees described how restoration projects and goals also needed to align with larger management plans, laws, or policies (e.g., the Northwest Forest Plan, or the Endangered Species Act). Other common criteria for prioritizing restoration projects included focusing on areas with the greatest social and ecological needs, with the greatest risk of compromised ecological integrity (e.g., invasive species), or with the greatest risk to people's safety and property from disturbances like wildfire. Some also mentioned access, geography, partnership opportunities, fire regime class, and treatment cohesiveness. Most Forest Service interviewees described prioritization as a process that happened internally within the agency. However, some said that they also rely on partners and collaborators to influence decisions, especially when those partners had funding and compatible objectives.

Additional perspectives on collaboration

Forest Service interviewees, overall, recognized the importance of partnerships as a means to achieving restoration objectives on large landscapes. Many described how issues surrounding wildland fire necessitated working across boundaries, with partners, and with other stakeholders. Others described collaborative relationships that were driven by important habitat or endangered species restoration. Many interviewees noted the funding that partners brought to restoration projects on their forest. Partners included other federal agencies (e.g., the Bureau of Land Management, National Park Service, US Fish and Wildlife Service, Homeland Security, the Department of Defense, the Natural Resource Conservation Service), state agencies (e.g., departments of natural resources and agencies that focus on wildlife, forestry, or agriculture), non-governmental organizations at both local and national levels (e.g., Trout Unlimited, Rocky Mountain Elk Foundation, Wild Turkey Federation, National Forest Foundation, The Nature Conservancy), and other special interest and local groups, like ranching associations and small woodlands owners associations. Partnerships with county leaders and groups were also reported as important, and most of the collaborative groups represented in our interviews included current or former county commissioners on their leadership teams. Partnerships with tribal entities were highly valued on forests who shared boundaries with tribes, and interviewees said that tribal resource specialists and leaders contribute significantly to discussions and planning based on scientific information they collect and their substantial traditional and local ecological knowledge. Several Forest Service interviewees also noted the benefit of working with tribes in terms of access to funding for projects through the Bureau of Indian Affairs, allowing restoration work across tribal and national forest boundaries. A few interviewees talked about Resource Advisory Councils (RACs, chartered advisory committees maintained by the Bureau of Land Management)¹⁰ as collaborative partners.

Building collaborative partnerships was not reported to be a high priority on at least four of the forests. Interviewees on these forests suggested that active collaboration and formal collaborative groups do not exist or thrive because: (1) there was little controversy over management or (2) the public is largely ambivalent about or unaware of what happens on national forest land. For example, one Forest Supervisor explained: "What's kind of unique on this forest is that there isn't a lot of controversy. It's like 'Well, where do we get all this collaboration [for a proposal],' because we almost don't even have the interest at times." Interviewees on these forests described fewer issues that were salient to communities near the forest, such as wildfire risk or threats to local water sources, compared to many other forests. They described operating more or less as they had for decades with a focus on timber harvesting while providing recreation opportunities and general access to the forests. Restoration was also not necessarily perceived as a pressing need on these forests.

Interviewees from most of the forests we talked with described collaboration on the forest as a developing process. For example, one staff officer suggested: "I think this notion of collaborative is going to be evolving. . . . I think it's just going to be a sliding scale formality." Personnel on these forests recognized and accepted the need to work more collaboratively, but the process and partners for collaboration were not well-defined or consistent. Some Forest Service staff described recent efforts to actively build collaborative engagements or develop formal collaborative groups, often with the help of the Forest Service Collaboration Cadre¹¹ or state initiatives. The impetus behind many of these efforts was a perceived potential increase in eligibility for certain types of funding. Other interviewees discussed efforts to foster collaboration in more passive terms, saying they preferred to support an approach that was more organic or ground-up, where the public and stakeholders drive the process to form a collaborative group and work with the Forest Service.

Finally, Forest Service staff members on a few of the forests we talked to readily identified formal multi-stakeholder collaborative groups and described a consistent approach to collaboration. These interviewees said that forest personnel regularly attended, and sometimes organized, meetings with collaborative groups and partners to discuss restoration projects and other issues. One Forest Supervisor explained: "I think we have a great relationship with the collaborative. We participate in all of their meetings, provide support, but try to maintain that right balance that we're not directing the collaborative, we're sharing information and are kind of there as a resource." Some described multiple, established collaboratives comprised of a variety of stakeholders that engage directly in forest management, sometimes based in different parts of the forest, or based around different issues such as vegetation management or recreation concerns. These interviewees also described structured meetings and involvement from the group or groups in decision-making around aspects such as project planning, securing funds, joining Forest Service Interdisciplinary (ID) teams, implementing projects, and monitoring project success.



Factors that affect the success of collaborative landscape-scale restoration

Limited funding and funding security, staff capacity, relationships with partners, regulatory requirements, local political and historical contexts, and landscape-specific factors such as land ownership or vegetation type were factors interviewees said affected their success, similar to our findings for CFLRP/Joint Chiefs' forests.¹²

Interviewees said that the ability to secure consistent funding was the most essential factor for the success of landscape-scale restoration projects. In addition to a general shortage of funds for accomplishing needed work, interviewees described funding uncertainty as a prominent challenge to larger-scale restoration projects in particular, which require consistent funds for project planning, implementation, monitoring, and repeat treatments. They said they were keenly aware of funding opportunities to achieve cross-boundary restoration goals, even if funding was short-term and required piecing together over time. Interviewees gave many examples of how funding from external partners was critical for achieving cross-boundary and larger-scale objectives. A majority of the funding sources that interviewees mentioned were state-level, special funding sources, though federal and local resources were also essential for some forests.

Staff capacity affected forests' ability to accomplish landscape-scale and collaborative objectives. Staff shortages, overworked staff, or frequent turnover of staff were mentioned by nearly every interviewee as a barrier to successful projects. Interviewees explained that the capacity to do landscape restoration work and foster collaboration is constrained significantly by staff size and time. They said that even if funding were not an issue, their forests lacked the staff to first plan and then implement large-scale and collaborative projects. One Forest Supervisor said: "Those are concerns especially as we push further and further into, let's do more restoration, let's do more partnerships, let's bring in more partners— it's going to continually pressure a very limited staff here."

In particular, interviewees from a couple forests mentioned the need for more grants and agreements specialists because lacking capacity in this area slows down every aspect of projects from planning and implementation, to payments and reimbursements. Another said that high turnover among supervisors and rangers was especially challenging to collaborative success. Several partners and Forest Service staff mentioned the value of nonprofit organizations like the Nature Conservancy and the National Forest Foundation, the Forest Service's non-profit partner,¹³ who provide funding and other direct support like staffing to facilitate and coordinate collaborative groups and efforts with the Forest Service.

State-level support of collaborative efforts, for both funds and capacity, was critical for success on the forests we talked with. Many interviewees noted the importance of state-level support for collaborative efforts. Some explained how state support helped to fill in capacity gaps and to increase efficiencies by sharing land management responsibilities. Others said that working with state agencies allowed for more creative partnerships because of the ability to share funds and other resources. Interviewees noted many different partnerships with state agencies, and said that the partnerships were most fruitful when the state (often the governor) encouraged and supported collaboration around specific restoration goals. State-level initiatives and programs with special task forces or committees were reported to be especially helpful and most supportive of restoration program longevity because they often encouraged or required the Forest Service to identify and work directly with local and regional partners. Some examples of state-level programs that either directly funded or encouraged collaborative efforts included: the Governor's Catastrophic Fire Initiative in Utah,¹⁴ the Forests in Focus program in Montana,¹⁵ the Wyoming Governor's

Task Force on Forests,¹⁶ the Southern Nevada Public Land Management Act,¹⁷ and the Environmental Protection Agency's Great Lakes Restoration Initiative.¹⁸ Although state-level support was identified as vital for many collaborative restoration projects, interviewees on a couple forests mentioned challenges working with state agencies. One supervisor said that it could be hard to work with state agencies because their divisions did not talk to each other internally so it took more work to coordinate projects with them. Most forests did not note issues working with state agencies, but these issues on a few forests emphasize that the same types of partners do not necessarily work to the same degree across all forests or landscapes.

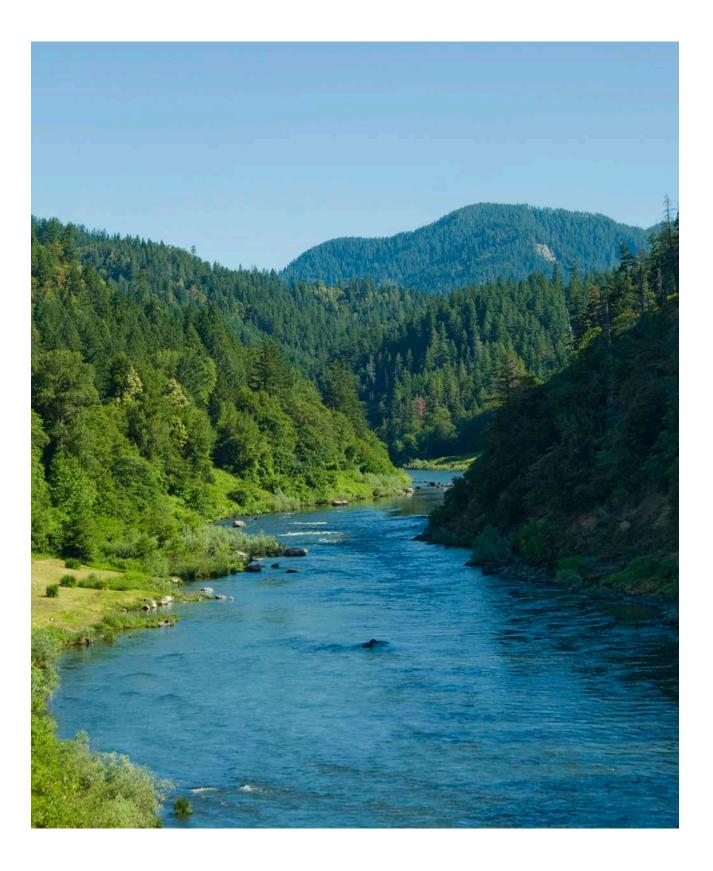
About a third of interviewees said historical or current conflicts between their forest and the public or stakeholders influenced success. Some interviewees described how the forests they work on have very sensitive relationships and a history of distrust with the public, which they explained was mostly related to timber litigation and disputes with conservationists, as well as access issues. On these forests, interviewees said that it takes a lot of time and effort to maintain trust with partners, and that projects presented in the wrong way can quickly get shut down and bring back mistrust. Interviewees also said that litigation took away resources that could otherwise be allocated to bigger restoration efforts. However, interviewees from some other forests noted that investments in collaborative partnerships had reduced conflict and litigation, making it easier to accomplish project objectives. For example, one interviewee stated: "I think just the fact that there's so many partners involved in almost everything we do, that folks look at litigation as probably not being very successful. There's a lot of peer pressure to work things out outside of court."

Procedural legal requirements were a limiting factor in some large-scale restoration projects, particularly alongside staff shortages. People most often discussed National Environmental Policy Act (NEPA) procedures or requirements associated with the Endangered Species Act (ESA), but many other laws and requirements tied to funding and operational procedures were also mentioned. One interviewee said that these requirements were a deterrent to potential partners in the area, explaining that such partners would prefer to work with other landowners, who do not have as many time-consuming policies and processes to follow. Most interviewees said that limited staff can make the time it takes to address administrative requirements "daunting," particularly in efforts to increase project scale. In describing NEPA requirements, one Forest Supervisor explained that "It's a lot of energy, and we don't have that much capacity on this forest. We don't have huge interdisciplinary teams for NEPA. . . . In fact, in some ways, I think it's amazing we've gotten some of these other projects done." There were a few interviewees who noted that this barrier had recently become less substantial on their forests. For example, one agency interviewee said that a recently developed "NEPA support team" had been extremely helpful on their forest, and another explained a recent helpful approach on their forest: "[With] the Good Neighbor [Authority], we actually can pay state employees to do NEPA or at least be on the ID teams and serve as specialists, and we've done that for several projects."

One key to success that was noted by many interviewees was to have a facilitator or coordinator to help organize a collaborative group and communicate with the Forest Service and other partners. Interviewees said that commitment, mutual agreement on project goals and processes, and accountability between partners were critical for success. Some suggested that the composition of the group was vital to success; for instance; one collaborative partner said: "The diversity of the group is essential and yet the fact that the group can work together is imperative if you're going to be successful."

Effective information exchange was a more pressing need than access to scientific information. When asked about information needs for accomplishing landscape-scale collaborative restoration work, interviewees said that agency access to scientific information needed for making decisions was generally not a limitation. Some interviewees described how, instead, the public's knowledge base can be a limiting factor in project success, and how providing the public with the same information the agency had to make informed decisions was often challenging. Some agency personnel described how their forest(s) helped with education, like offering to speak to collaborative groups and sharing scientific information and papers, but these interviewees also said that this level of informing the public takes significant time, effort, and balance.

Ecological, social, and geopolitical contexts and boundaries were pervasive limitations for some national forests in scaling up the size of restoration efforts. Interviewees on several forests said that fragmentation was a challenge, including of non-contiguous forests themselves, and of surrounding landscapes caused by checkerboard landownership patterns. Some interviewees mentioned that designated wilderness areas can be challenging to incorporate into restoration plans due to additional restrictions and limited access to those areas; these interviewees saw designated wilderness as fragmenting landscapes and affecting the potential scale of projects. Other interviewees, however, said that wilderness areas can be useful for accomplishing restoration goals across a larger landscape with the use of natural fire and restoring fire regimes. Different priorities and landscapes across adjacent landowners were challenges discussed by several interviewees. For example, one forest supervisor explained that the adjacent BLM land was mostly sagebrush, which typically has a different fire regime than the forest landscape, so large-scale planning around fuels and wildfire mitigation was difficult. Finally, a couple interviewees said that the lack of timber industry infrastructure (i.e., mills and contractors) near many forests also made it very difficult to accomplish projects and goals that involved timber removal.



Recommendations from interviewees

We asked interviewees for any recommendations they had for the Forest Service to encourage more successful collaborative landscape scale restoration in the future. Intervieweees offered recommendations focused on funding and prioritization within the agency, increasing agency capacity, removing administrative barriers, and being flexible and encouraging of innovation when it comes to restoration approaches.

Fix the wildfire funding approach so that it does not continue to take away from restoration programs. There were strong opinions and agreement that the Forest Service needed a different approach to funding fire management and suppression so that it does not inhibit forest restoration accomplishments. As one interviewee said, describing their most pressing suggestion: "Continue to search for ways to support those programs that aren't at the expense of the rest in what the agency does . . . fix the fire suppression issue." In the time since interviews were conducted, Congress passed an Omnibus spending package that included a "fire funding fix" from fiscal years 2020-2027, allowing Congress to appropriate federal disaster funding to the Forest Service for some wildfire suppression costs. The change is meant to stabilize the overall agency budget and reduce borrowing from non-fire programs as a result of suppression spending shortfalls, addressing the concerns that interviewees noted.¹⁹

Consider more kinds of programs that guarantee consistent funding to encourage larger- and longer-scaled projects. Although the forests we talked with did not feel competitive or did not have successful proposals for either Joint Chiefs' or CFLRP, they were often still interested in pursuing larger or longer-term projects associated with greater funding certainty. Interviewees said that more varieties of multi-year funding would encourage more forests to consider landscape scales and reduce some uncertainty around committing to larger projects. One resource officer explained: "I think the more that we can orient our funding, maybe to plan these larger efforts, the more we're going to get out of them.... They don't have to be a competitive thing, it's just how do we better utilize our appropriation at site? I would advocate for more [of a]: 'How to incorporate this into a regular program of work' [approach]."

Offer more support for collaborative processes. Interviewees said that efforts to improve collaboration with stakeholders and support a formal collaborative often require a lot of time, energy, and resources. Many interviewees suggested that their forests were interested in building more collaborative capacity, but that they had no resources to support that kind of work. Leadership from one national forest explained: "Collaboratives take a lot of time, a lot of energy, and a lot of manpower to provide information and data for that group to consider. As budgets dwindle and our personnel dwindle, it's going to be hard to keep up those collaboratives and be able to give them the attention they need." Forests with formal collaboratives reportedly relied heavily on state and some local or non-profit resources for help build and maintain this capacity. Some Forest Service interviewees suggested that if more collaborative capacity is a goal of the agency, additional funding and capacity are needed to accomplish that goal.

Include a broader definition of what constitutes collaborative landscape restoration in funding initiatives to engage more forests. Many of the Forest Service interviewees said that although their forests had similar restoration goals as forests with funding from Joint Chiefs' or CFLRP, their specific projects, restoration needs, and landscapes did not completely align with the requirements for those programs. Some suggested that the Joint Chiefs' or CFLRP initiatives tended to prioritize forests with more timber, higher fire risk, or more WUI areas than they had. Other interviewees explained how factors such as forest contiguity, boundaries, or ecosystem type and size limited their ability to be competitive even though collaborative landscape restoration was an important goal for the forest. They suggested that more flexibility in defining collaborative landscape restoration would help funding initiatives be inclusive of different kinds of work on different forests. One Forest Supervisor explained:

"I would just like to see this concept of restoration really start broadening that into what are the needs of the national forest. Now as American citizens, we've lived with the concept of national forests for more than 100 years, and I would suggest that there's a lot that's happened in those 100 years in terms of throwing forests off their natural game that has to do with many things other than fire. And so, I guess to just put it simply, we need to start thinking more broadly about restoration and how to bring that to forests and to communities, and not as narrowly as we've been focused."

Reduce the amount of work involved or offer support to prepare competitive funding applications. Some agency interviewees said that the amount of work involved in preparing a proposal for the Joint Chiefs' or CFLRP initiatives was prohibitive, especially considering that the project may not be selected. Interviewees from forests that expressed substantial staffing shortages sometimes said that adding a proposal preparation to staff workloads was not feasible. For example, one Deputy Forest Supervisor said: "If you ask somebody to put together a proposal, in addition to [our ongoing work] it's just kind of laughable. So, you know why don't we utilize the programs? Because the competitive nature takes a little thought and a little coordination, and we don't have the horsepower to lend to it. And it's a tragedy, because we're uniquely positioned to do so many of the things that those two programs are seeking to do." Multiple interviewees suggested that a more efficient application process would be needed for them to apply. Others suggested that support from staff that could help them prepare applications or even determine the program(s) best suited to their forest could help them reduce the barrier of application.

Continue to consider and encourage innovative approaches to collaborative landscape restoration work. Some agency interviewees urged the Forest Service to consider more and different options to help encourage collaborative landscape restoration, beginning with leadership in D.C., but also at the ground level. One staff officer explained: "It's not just about funding. Some of it's about some of our other processes. Like I said, sometimes we find the right people who are very willing to tweak where it makes sense to tweak. . . . But being open to innovation would be helpful." These interviewees acknowledged recent efforts but suggested that more innovation was needed address some ongoing issues. Specific suggestions included: consider novel metrics for evaluating collaborative, landscapescale accomplishments; continue to think of ways that funding initiative design can help augment the strengths of different kinds of forests; and hire staff who have a good understanding of different tools to help forests find new ways for partnerships beyond traditional approaches.

Look for ways to streamline legally required processes for landscape-scale restoration. Interviewees had suggestions for different processes and policies. Some recommended the agency provide clear interpretation of the Federal Advisory Committee Act (FACA) in terms of how to work with collaboratives, what a collaborative group can and cannot do, and what the Forests Service's role is in working with them. Others said that species requirements under various policies and guidelines conflicted with landscape-scale restoration. One resource officer explained: "From the agency level, they're saying, 'Do these landscape scale resilience efforts,' but then everything that really binds you and directs the work that you're doing is based on species and requirements and that type of thing." Interviewees overall suggested that support or approaches that could help to streamline legally required processes would be useful for accomplishing restoration at larger scales.



Our concluding observations

Our interviews with forest leadership and staff on forests that had not received CFLRP or Joint Chiefs' Program funding yielded information and perspectives from a unique group of forests. From an agency perspective, the Joint Chiefs' and CFLRP are relatively novel approaches to funding priority restoration work, and an understanding of how forests perceive the programs, both those funded and those unfunded under the initiatives, is valuable. The perspectives and recommendations from the interviewees in this study provide a more rounded view of the initiatives, their successes, and their challenges.

The forests we talked to said that they were either not competitive in proposals that they had submitted to these initiatives, or that they felt they could not be competitive enough to be worth the effort to apply. The reasons given for unsuccessful proposals and not applying at all were the same and included 1) a lack of capacity to plan an appropriate project, prepare an application, or implement a project, 2) a lack of an appropriate collaborative group, or 3) a landscape that was inherently not going to be a priority for funding.

Even though these forests had not benefited from either initiative, staff felt that the intent and objectives of the initiatives were valuable and a good focus for the agency; however, they were disappointed in how the initiatives were funded, with money coming from other parts of the agency. Because funding was not increased overall, they felt that accomplishments in some areas came at the expense of other places, without addressing the fundamental problem of insufficient resources agency-wide. People have broad definitions of collaborative, landscape-scale restoration; this implies that there may be a need to clarify these terms or conversely to embrace a wide range of definitions. There were no consistent definitions for "collaborative," "landscape-scale," or "restoration," and definitions for each term depended on the social, ecological, and geographic context of each forest. The diversity of these projects between forests suggests that in the absence of an official program such as Joint Chiefs' or CFLRP, there are innumerable ways to interpret the term and the activities that fall under it.

Interviewees said that consistent funding and staff capacity issues were the most critical factors affecting the success of collaborative landscape restoration projects on their forests. In this regard, forests that are overlooked in competitive funding initiatives may become less competitive over time. The factors affecting success that interviewees from unfunded forests reported were the same as those reported by interviewees on forests that had received funding under the initiatives.

The fact that forests without either Joint Chiefs' or CFLRP funding are a minority within the agency may speak more to the flexibility and inclusiveness of the programs than to any inherent flaws among either the unfunded forests or the programs' designs. If the Joint Chiefs' and CFLRP funding initiatives either continue or evolve, it is likely that some of the forests represented in these interviews may also be funded, and the tally of "unfunded" forests will continue to grow smaller. At least one forest was in the process of applying for the Joint Chiefs' initiative at the time of our interviews.

Interviewees from many of the forests we talked to suggested that the initiatives, despite not being awarded on their forests, had incentivized efforts to increase collaborative capacity. This collaborative capacity was often supported by other initiatives and funding sources. This support came primarily from state-level sources, but local agencies and non-profit organizations were also important for some forests. In this sense, the Joint Chiefs' and CFLRP initiatives were indirectly responsible for increasing collaboration even among forests that did not directly receive their funding. Although this kind of collaboration is relatively new and evolving on many of the forests we talked to, it has ongoing implications, including for their competitiveness for the CFLRP and Joint Chiefs' initiatives in the future if the initiatives continue.

As the Forest Service continues to explore mechanisms and programs to foster collaborative landscape restoration, information about how these forests operate and conduct restoration work can help demonstrate what these forests may need for successful projects and also how and what current programs exclude. In evaluating these initiatives from the perspective of unfunded forests, it is important to consider how and why these forests have not yet been successful for funding alongside the indirect impacts that the programs may have across forests. In this way, the perspectives, information, and recommendations from the interviewees in this research effort add depth and nuance to our original evaluation of the success under the initiatives.



Endnotes

- 1 https://www.fs.fed.us/sites/default/files/acceleratingrestoration-update-2015-508-compliant.pdf.
- 2 Schultz, C., K. McIntyre, L. Cyphers, A. Ellison, C. Kooistra, and C. Moseley. 2017. Strategies for Success Under Forest Service Restoration Initiatives. Ecosystem Workforce Program, University of Oregon.Working Paper #81. Available at http:// ewp.uoregon.edu/sites/ewp.uoregon.edu/files/WP_81.pdf.
- 3 For more information on the Good Neighbor Authority, see: https://www.fs.fed.us/managing-land/farm-bill/gna.
- 4 For example, the National Cohesive Wildland Fire Management Strategy is a a strategic push to work collaboratively among all stakeholders and across all landscapes. For more information see: https://www.forestsandrangelands.gov/strategy/ thestrategy.shtml.
- 5 https://www.fs.fed.us/sites/default/files/acceleratingrestoration-update-2015-508-compliant.pdf.
- 6 Joint Chiefs' Landscape Restoration Partnership. Natural Resources Conservation Service. https://www.nrcs. usda.gov/wps/portal/nrcs/detail/national/newsroom/ features/?cid=stelprdb1244394.
- 7 Collaborative Forest Landscape Restoration Program Overview. US Forest Service. https://www.fs.fed.us/ restoration/CFLRP/overview.shtml.
- 8 The total number of national forests varies depending on how they are counted. The U.S. Forest Service Land Area Report and other sources cite 154 national forests, but some of these, such as the Idaho Panhandle National Forests, or Alabama National Forests, are managed together by a single Forest Supervisor. The 154 number also considers merged forests (e.g. Wallowa-Whitman or Salmon-Challis) independently although these forests are administratively considered one. The numbers reported here come from the list of national forests listed at: https://www.fs.fed.us/recreation/map/state_list.shtml, with co-managed forests as listed counting as 1. We removed non-forests (e.g. national grasslands and national recreation areas) as well as the El Yunque forest in Puerto Rico. Of the 115 national forests on the list, we identified those that had either a CFLRP or Joint Chiefs' project (75) and those that had not (40) through the 2017 Joint Chiefs' funding awards.

- 9 Schultz, C., K. McIntyre, L. Cyphers, A. Ellison, C. Kooistra, and C. Moseley. 2017. Strategies for Success Under Forest Service Restoration Initiatives. Ecosystem Workforce Program, University of Oregon.Working Paper #81. Available at http:// ewp.uoregon.edu/sites/ewp.uoregon.edu/files/WP_81.pdf.
- 10 For more information on Resource Advisory Councils, see: https://www.blm.gov/get-involved/resource-advisory-council/ about-rac.
- 11 For more information on the U.S. Forest Service National Collaboration Cadre, see: https://www.fs.fed.us/emc/nfma/ collaborative processes/default.htm.
- 12 Schultz, C., K. McIntyre, L. Cyphers, A. Ellison, C. Kooistra, and C. Moseley. 2017. Strategies for Success Under Forest Service Restoration Initiatives. Ecosystem Workforce Program, University of Oregon.Working Paper #81. Available at http:// ewp.uoregon.edu/sites/ewp.uoregon.edu/files/WP 81.pdf.
- 13 For more information about the National Forest Foundation and their connection with the U.S. Forest Service, see: https:// www.nationalforests.org/who-we-are
- 14 See: https://ag.utah.gov/documents/ CatFireFinalReport120213.pdf
- 15 See: http://dnrc.mt.gov/divisions/forestry/forestry-assistance/ forest-in-focus.
- 16 See: http://www.uwyo.edu/haub/_files/_docs/ruckelshaus/ collaboration/2013-forests/2015-forest-task-force-final-report. pdf.
- 17 See: https://www.blm.gov/SNPLMA.
- 18 See: https://www.epa.gov/great-lakes-funding/great-lakesrestoration-initiative-glri.
- 19 For a basic overview of the wildfire funding omnibus bill, see: https://fireadaptednetwork.org/wildfire-funding-omnibus-billneed-know/.













