Monitoring Oregon's Investments in the Federal Forest Restoration Program

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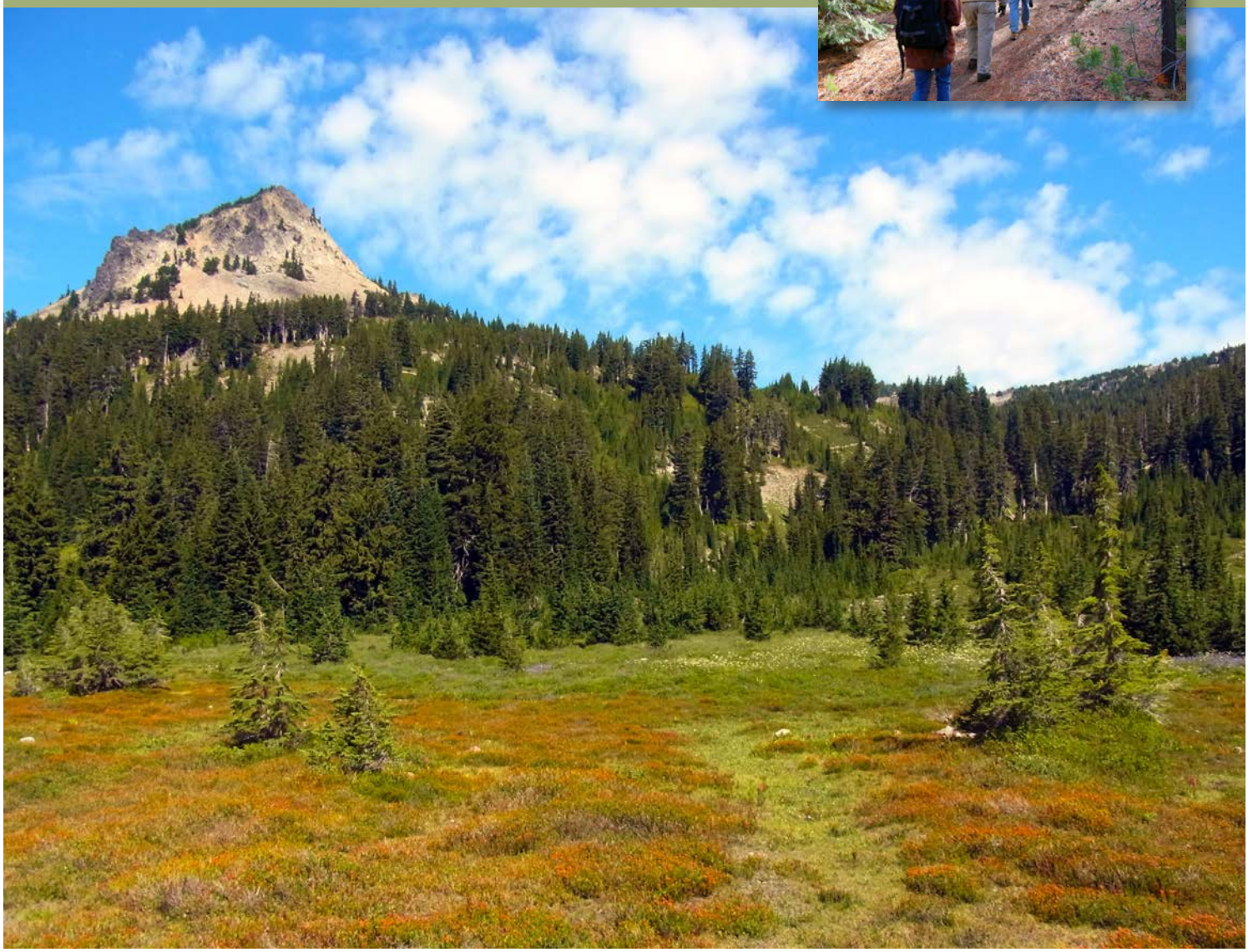

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Executive summary

Oregon's forest landscapes require active restoration to improve ecological health and to support livelihoods in rural communities. Targeting unmet need on federal forests, the State of Oregon initiated the Federal Forest Restoration Program (FFRP) in 2013 (first termed the Federal Forest Health Program). During the last two biennia over 2013-2017, the State's investments in the FFRP total $7.2 million. The FFRP is designed and managed through the Oregon Department of Forestry and implemented alongside other coordinated restoration efforts such as the Eastside Restoration Strategy of the U.S. Forest Service.

This working paper monitors the State's investments in the FFRP following an assessment design defined by ODF. ODF contracted the monitoring work through the Ecosystem Workforce Program at the University of Oregon. The information and outcomes reported here focus on the FFRP under the 2015-2017 biennium and track investments through the three FFRP strategies implemented by ODF and its partners. A second working paper reports trends in additional measures from FY 2009 to 2016 on the six national forests on the eastside of Oregon's Cascade Mountains.[1]

Summary findings from the 2015-2017 biennium include the following:

The 2015-2017 FFRP directed approximately $4.74 million through the three ODF strategies first established in 2013: (1) provide targeted investments through State-Federal Implementation Partnership; (2) support local forest collaboratives through competitively awarded Collaborative Capacity Grants; and (3) provide Technical Assistance and Science Support to collaboratives.

The State's investments under the three FFRP strategies funded projects in all 11 national forests in Oregon, along with four BLM districts. The activities represented an expansion from those under the first biennium (2013-2015), which were focused on Oregon's eastside forests.

The State-Federal Implementation Partnership constituted $3.62 million (76%) of the current FFRP budget. The strategy directed FFRP funds and seasonal ODF workforce to contribute to the backlog of work on all 11 of the State's federal forests. Projects facilitated the completion of contracts for data collection and planning in preparation for the National Environmental Policy Act process. Projects also put the ODF seasonal crews to work on layout, marking, and other sale preparation work. A key feature of the FFRP State-Federal Implementation Partnership is its use of the Good Neighbor Authority, which allows state and federal land managers to efficiently share funds and labor to complete approved work.

The FFRP awarded approximately $567,000 to forest collaboratives through competitive grants. Supporting collaboratives is central to state and federal strategies aimed at accelerating forest restoration. The FFRP Collaborative Capacity Grants funded 17 collaboratives across the state to pay staff and implement projects including soliciting expert scientific study and consultation, participating in learning fora, and advancing recommendations on forest service projects. Using the capacity grants, collaboratives leveraged an additional estimated $930,000 through in-kind and matching contributions.

Through partnership with ODF, five Technical Assistance and Science Support providers designed and implemented projects in support of collaboratives and restoration groups totaling approximately $559,000. Sustainable Northwest, The Nature Conservancy, the Ecosystem Workforce Program, Oregon Solutions, and Forestry and Natural Resources Extension at Oregon State University carried out programs and projects including large- and small-scale collaborative support workshops, scientific research and synthesis, needs assessments, and design and implementation of monitoring for collaborative projects and for the collaborative institutions themselves.

Beginning in 2013, the State of Oregon initiated a program to increase support for the ecological and economic recovery of Oregon's rural forest landscapes. The Oregon State Legislature funded the program in the 2013-2015 and 2015-2017 biennia, to be administrated by the Oregon Department of Forestry (ODF). Originally named the Federal Forest Health Program, the State's investments to coordinate restoration on public forest land continue as the current Federal Forest Restoration Program (FFRP).

The State's investments in FFRP aligned with the Eastside Restoration Strategy of the Pacific Northwest Region of the Forest Service. The Eastside Restoration Strategy included significant funding directed to the Blue Mountains planning team and the Malheur 10-year stewardship contract, with the goals of increasing the pace and scale of restoration on the forests of northeastern Oregon. Both the state and federal programs began either late 2012 or during 2013.

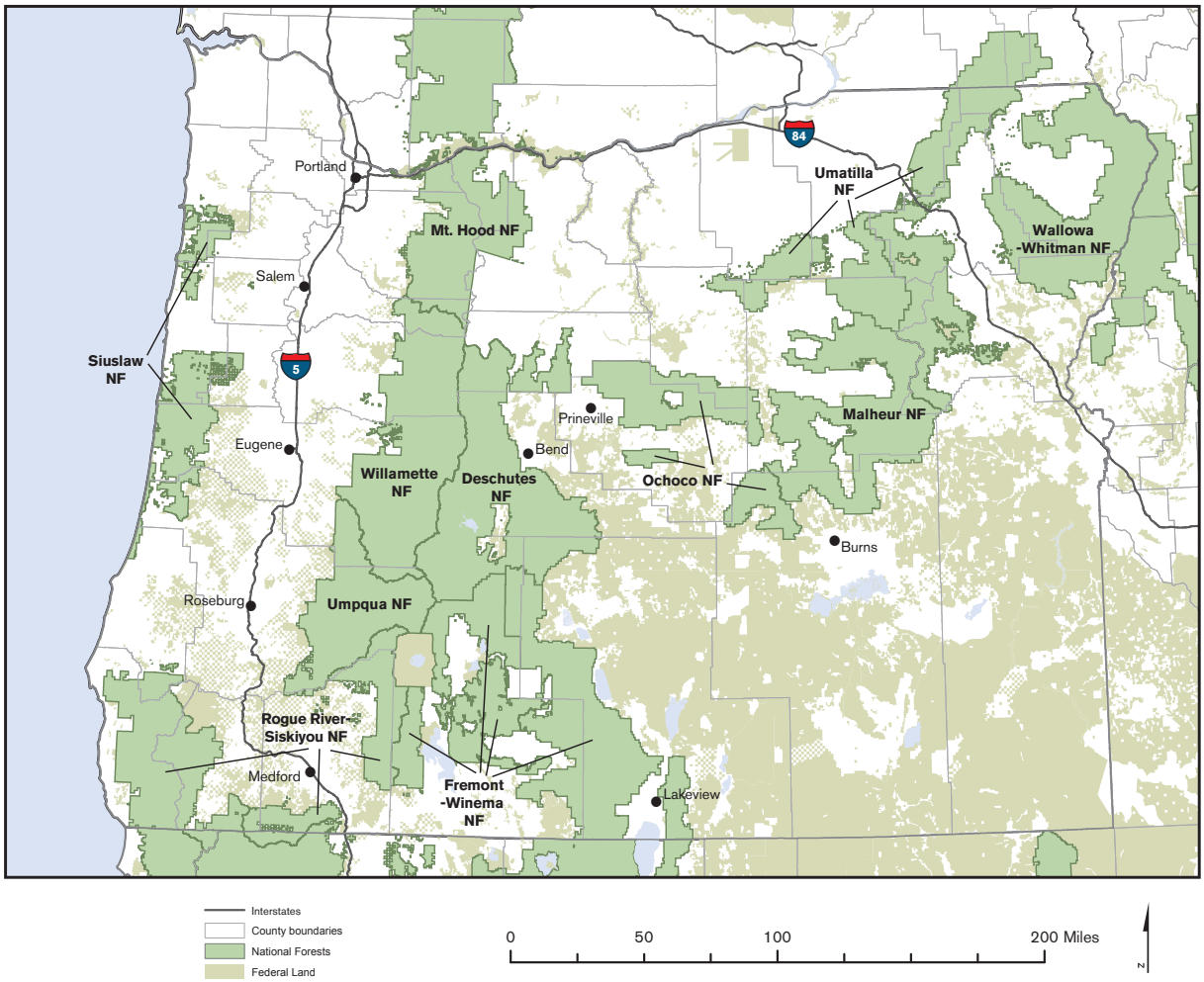
This working paper focuses on the FFRP, but it is important to note that the multiple restoration initiatives occur in concert and with similar goals. The FFRP is premised on the following understanding: federal forests require active restoration to improve ecological health and support economic benefit; restoring the state's approximately 30 million acres of forestlands requires significant coordination among multiple partners as well as significant financial investment; better engaging the state's timber workforce can benefit local economies; and, existing local forest collaborative groups can play a critical facilitative role in achieving restoration objectives. This understanding is shared among the Forest Service, Bureau of Land Management (BLM), ODF, and forest collaboratives, and it is operationalized into policy and practice as the "Oregon Model".[2]

The State's investments over the last two biennia total approximately $7.19 million.[3] During the 2013-2015 biennium, $2.45 million were allocated primarily to restoration in the Blue Mountains national forests east of Oregon's Cascade Crest (the Malheur, Ochoco, Umatilla, and Wallowa-Whitman National Forests; hereafter, "Blues forests"). During the current 2015-2017 biennium, approxi-

mately $4.74 million were made available across the state (see Figure 1, page 3). Similar to the previous biennium, the FFRP works through three main strategies to increase the pace, scale, and quality of forest restoration: (1) provide targeted investments through State-Federal Implementation Partnership (SFIP); (2) support local forest collaboratives through competitively awarded Collaborative Capacity Grants (CCGs); and (3) provide Technical Assistance and Science Support (TASS) to collaboratives.

As a component of the FFRP administrative activities during the current 2015-2017 biennium, ODF contracted with the Ecosystem Workforce Program (EWP) at the University of Oregon to monitor FFRP progress. EWP conducted a similar monitoring effort at the end of the 2013-2015 biennium.[4] For both the previous monitoring and this working paper, EWP partnered with ODF staff to design an approach that complements existing work, for example by the Federal Forest Working Group (FFWG), to evaluate restoration progress on Oregon's national forests. This working paper details the state's role in restoration on federal forests through the FFRP during the current 2015-2017 biennium. The monitoring work reported here is part of a larger effort to track the progress of state, federal, and partner programs targeting forest restoration in order to adapt management and policy practices for improved outcomes.

Figure 1 National forests in Oregon



Monitoring approach

We report on the three FFRP programs—SFIP, CCGs, and TASS—by compiling and reviewing administrative documents including collections agreements, funding proposals and reports, and work orders, and through conversations with ODF and Forest Service personnel, collaborative representatives, and technical assistance providers. Specifically, we assessed SFIP project spending and outcomes directly from ODF records and through information provided by ODF regional coordinators. We assessed CCG proposal and reporting documents from the Oregon Watershed Enhancement Board (OWEB) which administers grants, conducted checks on progress with collaboratives still working on active grants, and consulted with technical assistance providers working with collaboratives on CCG-funded projects. ODF provided all contracts with TASS providers along with completed deliverables. Because many TASS projects are not yet completed at the time of reporting, we communicated directly with TASS providers to assess information on the progress of ongoing work.

Data reported are current as of June 2017, although in some cases we report committed funds and so values may differ from expended funds at the time of publication. Note that for clarity, both State-funded programs conducted during the last two biennia are referred to as the FFRP, though this report discusses the investments of the 2015-2017 biennium specifically. Trends in Forest Service timber harvest, restoration activities, and economic impacts on eastside forests from FY 2009-2016 are detailed in a separate working paper.[5] Hereafter, all fiscal years refer to the State fiscal year (July-June), unless otherwise noted.

Federal Forest Restoration Program

The FFRP is one of multiple coordinated efforts promoting active restoration of Oregon's forest landscapes. The previous decade demonstrates increased state involvement in management of forestlands under Forest Service and BLM jurisdiction through, for example, actions of the Oregon Board of Forestry and the FFWG. Engaged parties include state and federal agencies, the state's public universities, local government bodies, nonprofit organizations, timber industry groups, and tribal representatives. Consensus around coordinated restoration among agencies and other parties has led to active steps to support the role of forest collaboratives in accelerating Forest Service decisions, to direct the ODF workforce to advance planning and pre-sale projects on National Forests, and to track the progress towards restoration goals through monitoring ongoing work.

As part of these active steps towards restoration, the initial FFRP in the 2013-2015 biennium directed $1.21 million to put the ODF workforce and resources to work on federal forests through SFIP, $520,000 to fund CCGs, and $718,578 to support collaboratives through TASS. This first iteration of the FFRP directed the majority of investment toward the Blues forests, along with additional smaller funds to the Deschutes, Fremont-Winema, and Rogue River-Siskiyou National Forests.[6] During this same time period, Congress permanently authorized the Good Neighbor Authority (GNA) giving state and federal land managers the ability to share funds and labor to complete approved work. The FFRP could thus utilize the GNA to more efficiently channel resources toward the

backlog of restoration work needed on federal forests. In 2015 the State signed a master agreement with the Forest Service and BLM to streamline the GNA process.

During the 2015-2017 biennium, the FFRP directed funding across the same three branches of the program with $3.62 million to SFIP, $567,043 to CCGs, and $559,110 to TASS providers (see Figure 2, page 5). An additional approximately $200,000 were allocated to project management. This second round of the FFRP was state-wide in scope, expanding beyond the previous biennium's focus on the Blues forests. Total funding allocation from the FFRP varied substantially across forests (see Figure 3, below), including SFIP funds spent on national forests as well as funds associated with collaborative support. Multiple FFRP projects were associated with 10 of the 11 national forests in the state, with the exception of the Umpqua National Forest, which received only SFIP funds. A large proportion of technical assistance funding was used for efforts across multiple forests such as through workshops and other events involving multiple collaboratives.

Figure 2 Total FFRP funding allocation during the two biennia, 2013-2017

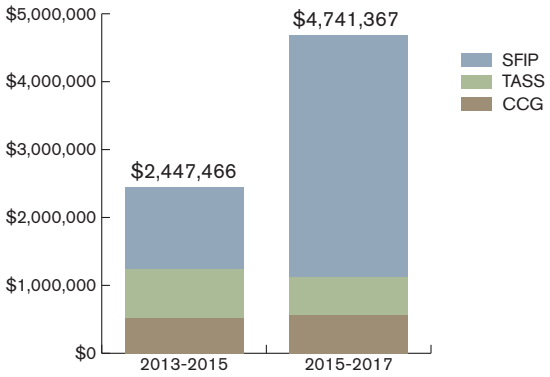
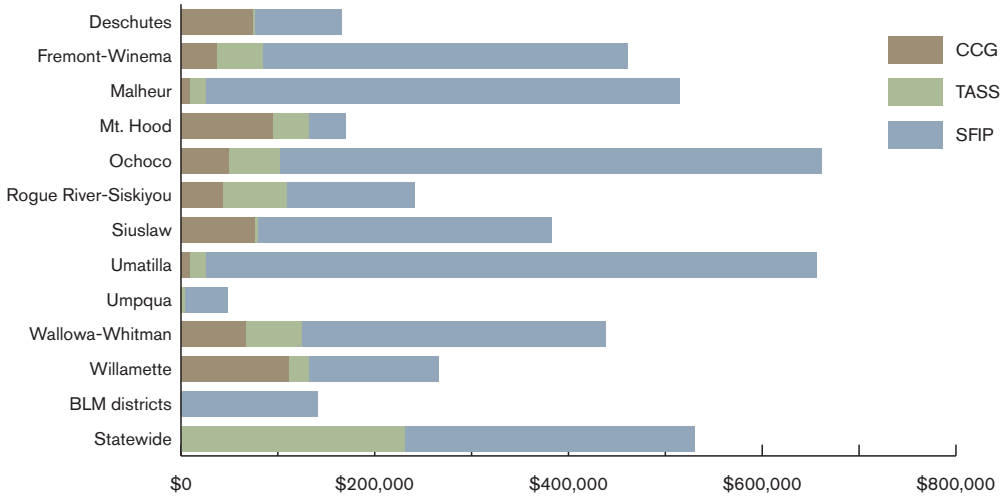


Figure 3 Forests receiving FFRP funding during the 2015-2017 biennium



Notes:

* Statewide projects include workshops open to all collaboratives and targeted towards a regional or state-level audience, as well as other projects and/or large-scale planning efforts under TASS.
* BLM districts also received funding through SFIP projects: Medford, Prineville, Roseburg, and Salem/Eugene (joint project).

State-Federal Implementation Partnership

The $3.62 million State-Federal Implementation Partnership (SFIP) investment during the 2015-2017 biennium constituted 76% of the total FFRP budget. As with the FFRP during the previous biennium, SFIP represents the main focus of the State's efforts on federal forests. ODF pursued two major strategies: (1) data collection and planning in preparation for the National Environmental Policy Act (NEPA) process and (2) pre-sale activities; a small proportion of total SFIP funds supported ODF project coordinators. During the current biennium, SFIP projects filled contracts and put ODF crews to work on all 11 federal forests in the state and four BLM districts (see Figure 4, page 7). These projects involved coordination with the U.S. Geological Survey (USGS), in addition to the Forest Service and BLM, and state-federal collaborations generated in-kind contributions to SFIP projects, primarily through staff time in facilitation of the pre-NEPA contract work. In this section we report examples and highlights of SFIP projects on federal forests.

SFIP funds for data collection and planning in support of the NEPA process in the 2015-2017 biennium totaled $1.62 million and were distributed to 10 national forests and four BLM districts. Pre-NEPA projects were largely structured as collections agreements between ODF and individual forests, funding contracts ranging from $38,048 to $210,800. One SFIP project directed $528,324 for restoration survey work across the four Blues forests. Similar intergovernmental agreements between ODF and the BLM, Oregon Department of Fish and Wildlife, and USGS funded additional contracts on national forest and BLM lands ranging from $16,000 to $80,000 per contract. At the time of publication, data on SFIP-supported NEPA projects are available for the Deschutes, Malheur, Ochoco, Umatilla, and Wallowa-Whitman National Forests, and ODF estimates that SFIP funding contributed to NEPA decisions on more than 372,000 acres on those forests. This estimate includes anticipated decisions on Deschutes, Malheur, and Umatilla National Forests. The incomplete reporting reflects challenges with tracking contributions to NEPA decisions due to the timescale of the NEPA process.

Pre-NEPA projects funded through SFIP included biological surveys, stand exams, and cultural heritage or archeological assessments. For example, biological surveys included red tree vole, marbled murrelet, and salmonid population and/or habitat assessments, as well as vegetation surveys. Contracts for stand exams accounted for the largest proportion of pre-NEPA project spending and included processing and ground truthing remotely sensed data (e.g., Light Detection and Ranging (LiDAR) data on over 80,000 acres on the Malheur National Forest) along with traditional field exams and surveys. Contractors conducted cultural heritage assessments as standard archeological surveys and through the application of LiDAR data. A project on the Umatilla and Wallowa-Whitman National Forests acquired LiDAR data covering 38,000 acres to allow for prioritization of ground-based sites, which reduces time and costs required to complete surveys. Individual projects were selected to primarily address such bottlenecks in the NEPA process.

SFIP funds for pre-sale work in the 2015-2017 biennium totaled $1.63 million. ODF crews contributed to layout and other sale preparation work on 53 sales on eight national forests (Mt. Hood, Rogue River-Siskiyou, and Umpqua National Forests did not directly receive SFIP pre-sale project funding), along with the Roseburg BLM district. ODF seasonal crews working in the off-season completed the majority of SFIP pre-sale work. Most projects involved pre-sale layout, thinning, and salvage. According to ODF records, SFIP crews contributed to sales covering over 42,000 acres, with an advertised total timber volume of approximately 275 mmbf.

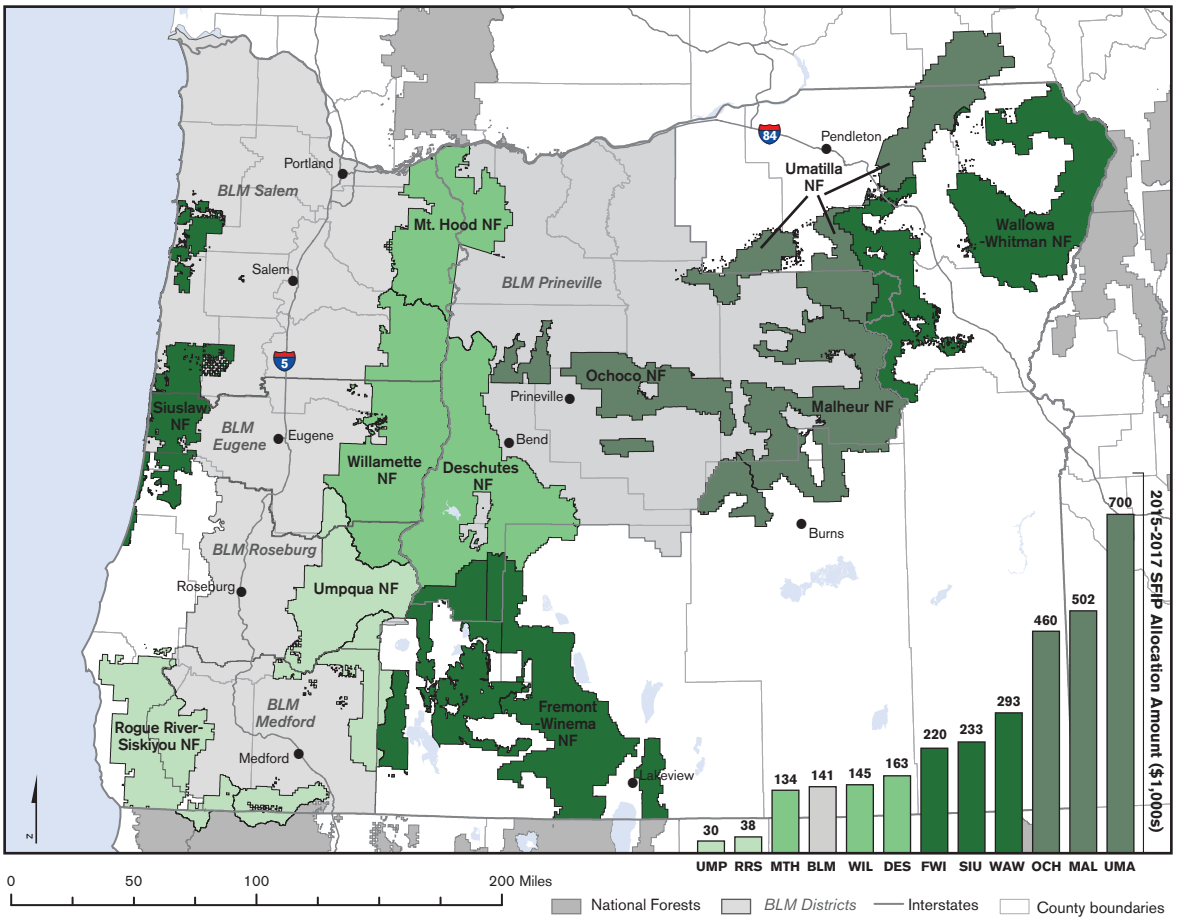
For instance, ODF crews worked approximately 9,000 hours on three pre-sale projects on the Malheur National Forest. ODF dedicated approximately $250,000 of SFIP funds to help meet the forest's new increased timber targets, which represent an

approximately three-fold increase over the last decade. Although the Malheur did not meet its timber target last year, ODF crews increased the number of sales the Malheur National Forest offered by contributing crew work on 10 timber sales.

An additional SFIP project targeted funds to support all stages of a GNA timber sale, the Paddock Butte sale on the Fremont-Winema National Forest, from layout to sale administration. In contrast to most pre-sale projects that sent ODF crews to work on layout for ongoing sale preparation, the Paddock Butte project involved a larger interagency coordination effort including ODF state foresters, field crews conducting layout, and national forest staff, along with development of the timber sale contract. This approach was unique among SFIP projects and utilized a wider range of actions enabled by the GNA, allowing ODF to manage a pilot sale.

SFIP projects also contributed to coordinated landscape restoration efforts. Federal programs, including the Collaborative Forest Landscape Restoration Program and the Joint Chiefs' Landscape Restoration Partnership, provide long-term financial support to federal management agencies and collaborative groups working on coordinated restoration projects. SFIP funds ($70,000) put ODF seasonal crews to work on the Joint Chiefs' Greater La Pine Basin Cohesive Strategy Project. Prior to the 2017 fire season, ODF fire crews conducted fuels reduction through hand thinning and prescribed fire on Deschutes National Forest lands. ODF implemented the SFIP project in response to the lack of workforce capacity to conduct mitigation activities, as identified by fire managers on the Deschutes National Forest. The work contributes to fuels reduction and prescribed burning accomplishments above what would otherwise be achieved.

Figure 4 Amount of SFIP funds received by national forests and the BLM, FY 2015-2017
(For SFIP projects including multiple forests, total project value was divided evenly among forests)



Collaborative Capacity Grants

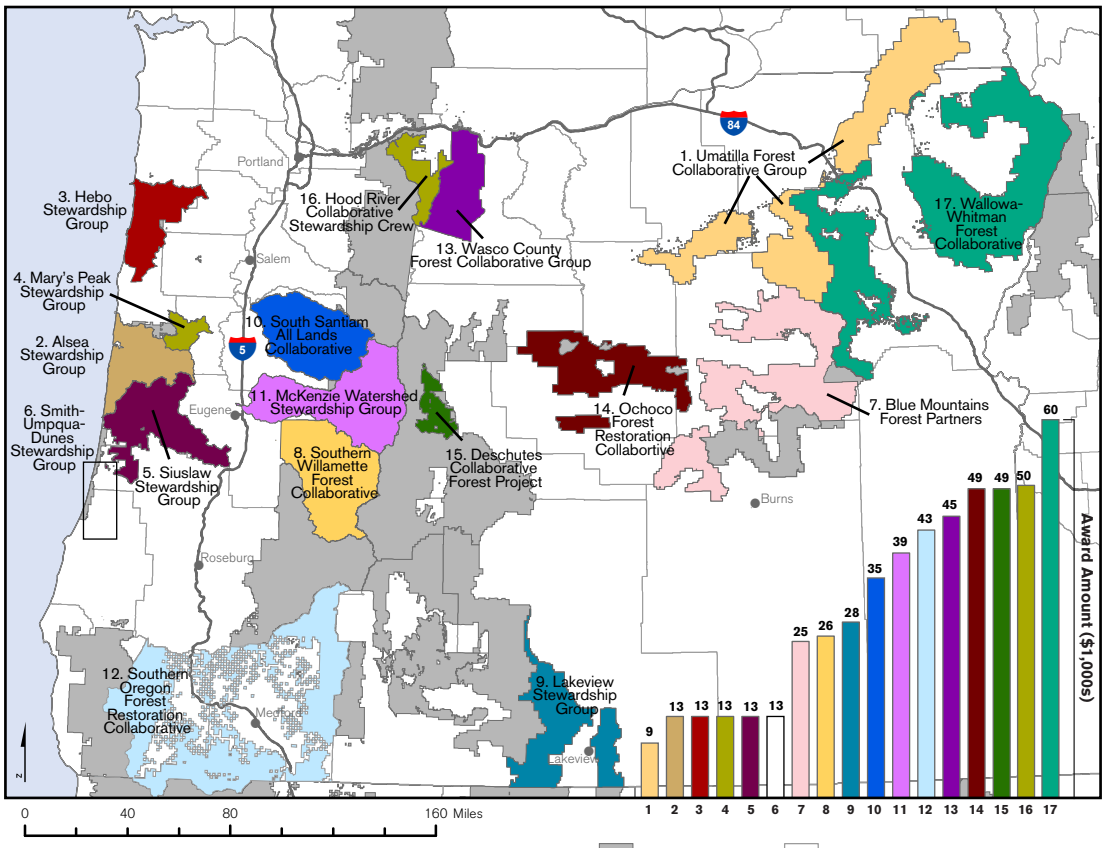
Supporting collaboratives engaged in forest restoration and public lands management is central to the Oregon Model, which guides the State's forest policy in support of restoration on federal forests. The FFRP supports collaboratives through CCGs, as well as TASS, and during the 2015-2017 biennium the FFRP funded $567,043 in competitively awarded CCGs.[7]

Public forest and lands collaboratives in Oregon date back to the 1990s, with the majority of collaboratives emerging in the past ten years. Oregon is unique in the large number, diversity, and high level of engagement of collaboratives in restoration on public lands. There are currently at least 27 collaboratives working on federal forest management in the state, 12 of which focus exclusively on public lands and 15 that work on "all lands" (both public and private lands) (see Figure 5, page 9). All 11 national forests in Oregon are linked to at least one collaborative.[8]

Forest collaboratives receiving support from the FFRP are multi-stakeholder groups with interests in natural resource and conservation management on federal forests. Typically, collaborative membership includes representatives from environmental groups, the timber industry, and local community government, as well as landowners and other interested parties. By bringing together multiple, and often divergent, interests, the collaborative process aims to facilitate compromise and consensus. Recommendations to the Forest Service resulting from this process may accelerate planning area decisions and limit objections and appeals under NEPA, to which all management actions on federal forests are subject.

The $567,043 in FFRP funding to CCGs during the 2015-2017 biennium was awarded through three cycles of competitive grants. Additional contributions augmented the initial FFRP investments by an estimated $493,024 pledged in-kind (e.g., Forest Service staff time) and $434,520 pledged in matching funds (e.g., from partner organizations or local governments), totaling approximately $1.50 million.[9]

Figure 5 Oregon forest collaboratives that received OWEB Collaborative Capacity Grants, FY 2015-2017



Note: We were unable to access boundary data for the Smith-Umpqua-Dunes Stewardship Group at the time of publication

The Oregon Watershed Enhancement Board administered the ODF funds designated for CCGs. For the 2015-2017 biennium, the program awarded 16 grants to 17 collaboratives. Grants ranged from approximately $10,000 to $50,000. Three collaboratives received two rounds of funding during the biennium: Deschutes Collaborative Forest Project, Siuslaw Stewardship Group, and the Southern Willamette Forest Collaborative; they each received funds during both the first (December 2015) and third (March 2017) cycles. Other grants funded multiple collaboratives working on adjacent landscapes. Examples include the five collaboratives forming the Siuslaw Collaborative Watershed Restoration Program, as well as the Wallowa-Whitman Forest Collaborative partnering with the Umatilla Forest Collaborative Group for coordinated work on their respective national forests.

The FFRP during the previous biennium (2013-2015) awarded the majority of CCGs to collaboratives on the Blues forests, but collaboratives on the Deschutes and Rogue River-Siskiyou National Forests also received grants. With the expansion of the FFRP in the 2015-2017 biennium, grants went to collaboratives linked to 10 of the state's 11 national forests (see Figure 5, above). No CCGs were associated with the Umpqua National Forest. Six western Oregon forest collaboratives received grants for activities on the Mt. Hood, Siuslaw, and Willamette National Forests. Three collaboratives received grants for work with the Deschutes, Fremont-Winema, and Rogue River-Siskiyou National Forests. Of the five Blues forests collaboratives previously funded during the 2013-2015 biennium, four received grants funding work across each of the four Blues forests (the Harney County Restoration Collaborative did not receive a grant during the current biennium).

Collaboratives funded through the CCGs in the 2015-2017 biennium engaged in partnerships with multiple external supporting groups as part of their proposed projects. The granting process through OWEB requires that recipients have 501(c)(3) nonprofit status, which many collaboratives lack and therefore require a fiscal sponsor to administer an award. The fiscal sponsor may not necessarily be directly involved in the collaborative projects. However, fiscal sponsors may also be engaged partners, as in the case of the Wallowa-Whitman Forest Collaborative in which Wallowa Resources administered CCG funds and directly participated in the grant as a collaborative partner. Additional partners on grants included respective National Forest offices, tribal governments, city and county governments, intergovernmental councils, watershed councils, and multiple nonprofit groups (e.g., Oregon Wild, McKenzie River Trust, National Forest Foundation, Rocky Mountain Elk Foundation). In addition to engagement with proposed projects, these partners pledged in-kind contributions totaling approximately $493,024 to fund activities including mapping and spatial analysis, ranger district staff-led field trips, and scientific presentations. Grants included matching funds pledged by partners totaling approximately $434,520 to fund services provided by, for example, meeting facilitators, university graduate student researchers, and scientific consultants.

The majority of CCG funds went to contracted services (60%), primarily contracted facilitators hired to conduct meetings. Other funds were allocated for collaborative staff (20%), which included coordinators and administrators, and also for indirect costs associated with the fiscal administration of the grants (10%), which was often conducted by the fiscal sponsors. Contracted facilitators are typically consultants paid to administer meetings and workshops, often when collaboratives do not have sufficient staff. Coordinators are typically full- or part-time staff who perform management and administrative roles within the collaborative. Remaining funds went to travel (3%), materials (1%), and less than 4% to miscellaneous expenses. These funding streams highlight the unmet need of most collaboratives to fund staff conducting the essential functions of the collaborative group including organizing stakeholder meetings and coordinating participatory events such as workshops and field trips.

The grants that funded contracted services and staff payroll were associated with a range of activities. For example, the Southern Willamette Forest Collaborative hired a full-time coordinator, who facilitated a partnership with a technical assistance provider to conduct a contractor capacity assessment (see below). The collaborative also pushed forward an agreement that resulted in recommendations submitted on the group's first stewardship contract. The McKenzie Watershed Stewardship Group used their CCG to hire an external facilitator, a need the group identified as critical to progressing on contentious issues and proposing monitoring activities to help work towards agreement.

Goalsetting and consensus building were common themes in proposals and progress reports, which included identifying shared ecological and social objectives, coming to agreement on the definition of restoration, and establishing criteria for selecting planning area projects. Many activities focused on completing specific planning objectives, which include providing management recommendations on specific projects, formalizing zones of agreement, and approving plans for wildlife habitat and riparian treatments. For example, the Wasco County Forest Collaborative, founded in 2015, used their CCG to host meetings and build partnerships among a particularly diverse membership, to write a charter, and to formalize recommendations with the Forest Service on the Rocky Burn Project. The Blue Mountains Forest Partners, a relatively long-standing group (founded in 2006), approved a zone of agreement across diverse dry mixed conifer and moist mixed conifer landscapes on the Malheur National Forest. They also made progress toward a riparian zone of agreement that includes removal of commercial byproducts, and funds were used to facilitate a National Marine Fisheries Service visit to support protected fish conservation. The

Wallowa-Whitman Forest Collaborative, founded in 2012, used CCG funds to facilitate meetings to work toward consensus leading to records of decision on the Lower Joseph Creek (100,000 acres) and East Face (47,000 acres) Projects and to the initial planning of the Sheep Creek Project (30,000 acres).

Nearly all grants supported focused meetings and field trips covering a range of topics such as project implementation efficiencies, climate change and fire disturbance, cooperation around issues of disagreement, ecological processes as restoration goals, and multiparty monitoring. For example, the Lakeview Stewardship Group directed CCG funds to reviewing and reassessing their Long-Range Strategy for the Lakeview Federal Stewardship Unit, with activities including convening a stakeholder meeting and planning a field tour. The Hood River Collaborative Stewardship Crew, working on the Waucoma Planning Area, hosted two regional experts for scientific presentations and field tours to gain an understanding of ecological conditions and restoration needs, an activity that led to written zones of agreement.

Grants supported the development of outreach and information tools including websites, brochures, t-shirts, conference calling capability, database management systems, and maps. For example, the Ochoco Forest Restoration Collaborative used CCG funds to contract a marketing consultant and update the group's website as an initial effort toward a more engaged public outreach campaign to build awareness and support. The Deschutes Collaborative Forest Project used CCG funds to pay for part of their dedicated public outreach coordinator. The group is prioritizing education and information around opposition to smoke and prescribed fire, which they see as a significant obstacle to restoration progress.

At the time of reporting, funded projects are still ongoing. Funds for the third cycle of grants were dispersed in May 2017, one month before the end of the FFRP in the current biennium. Information reported here is drawn primarily from available grant proposal and progress report documents, supplemented by conversations with collaborative representatives.

Technical Assistance and Science Support

TASS efforts complement CCGs under the FFRP's broader goals of increasing the pace, scale, and quality of restoration, primarily through supporting forest collaboratives. FFRP investment during the 2015-2017 biennium included $559,110 directed to five primary TASS providers: Sustainable Northwest ($198,176), The Nature Conservancy ($184,137), the EWP at the University of Oregon ($79,193), Oregon Solutions at Portland State University ($97,600), and Oregon State University ($20,300).

TASS providers working directly with collaborative groups conducted a total of 23 individual projects. Sixty-three percent of these TASS funds supported statewide or multi-group collaborative activities such as the annual Pacific Northwest Forest Collaborative Workshops organized and facilitated by Sustainable Northwest. Remaining funds ranging from approximately $8,000 to $43,000 supported smaller-scoped projects. TASS providers developed and implemented projects through partnerships with one to three collaboratives, and projects included collaboratives working on nine of the state's 11 national forests (projects were not conducted on the Siuslaw and Umpqua National Forests). The remainder of this section summarizes the activities of each of the TASS providers.

Sustainable Northwest

TASS funding supported 11 individual projects led by Sustainable Northwest (SNW) during the current biennium. SNW projects focused on facilitating collaborative decision-making and planning as a means to increase the pace, scale, and quality of forest restoration in Oregon.[10] SNW implemented work through three strategies: (1) facilitating decision-making and project planning by working with individual collaboratives or a few collaboratives on the same forest landscape or region, (2) developing communication and networking tools, and (3) hosting statewide and multi-state workshops for collaboratives and federal land management partners. To complement TASS funding, SNW leveraged additional funds through federal cooperative agreements, private donations, and foundations.

SNW facilitated decision making and project planning through four collaborative- or region-specific efforts. In northeast Oregon, SNW worked with the Wallowa-Whitman Forest Collaborative (WWFC) to design a monitoring plan on the Lower Joseph Creek Project (~100,000 acres) and lead post-implementation monitoring on East Face of the Elkhorns Project (46,412 acres; ROD signed July 2016). WWFC prioritized multi-party monitoring to build

social license by evaluating the effectiveness of project outcomes and adapting management strategies to improve future management.

In southwest Oregon, SNW worked with the Wild Rivers Coast Forest Collaborative on the Rogue River-Siskiyou National Forest to create a project selection protocol. This started with selecting the Shasta Agness 92,400-acre planning area as their first project; additional work included developing multiparty monitoring on the Shasta-Agness Oak Woodland Restoration Project,[11] conducting science and NEPA workshops, and coordinating a Forest Service-collaborative field tour.[12] This project enabled the collaborative to develop agreements on oak restoration strategies in response to sudden oak death, to identify opportunities for habitat restoration and treatments in oak woodlands with large diameter conifers, and to establish a field trip and meeting process for engagement with the Forest Service.

In north-central Oregon, SNW developed and implemented a series of trainings with the Wasco County Forest Collaborative (WCFC), also engaging the nearby Hood River Stewardship Crew (HRSC). WCFC and HRSC currently partner with a Forest Service NEPA interdisciplinary team on the east side of the Mount Hood National Forest to plan and implement forest restoration projects. The SNW trainings covered issues of goalsetting and consensus decision-making, Forest Service engagement, the NEPA process, and project planning. Project planning trainings incorporated multiple partners, including the National Policy Consensus Center and Oregon Solutions at Portland State University. As a result, the WCFC produced consensus-based, written recommendations on roads and trails, thinning prescriptions, large woody debris and snags, riparian buffers, and logging contracting best practices. The Forest Service included WCFC recommendations in the proposed action for the Rocky Restoration Project, an approximately 14,300-acre planning area. These actions suggest improved relationships with and confidence in land management agencies and among diverse partners.

In addition, SNW's partnership with WCFC and HRSC helped to leverage additional funding through a special initiative in USFS Region 6 to support a full-time collaborative coordinator to work directly with the WCFC and HRSC starting in summer 2017.

In eastern Oregon, SNW organized the Blues Network[13] across five forest collaboratives on the Blues forests. The goals include sharing science innovations, policy updates, and opportunities for peer-to-peer learning to enhance collaborative forest restoration work in eastern Oregon. The program hosted two science, management, and collaboration workshops with the five collaboratives on the Blues forests. The two workshops brought in outside experts on riparian and aquatic habitat[14] (60 participants, six collaboratives, four national forests) and prescribed fire and smoke management[15] (26 participants, five collaboratives, three national forests). Outcomes included feedback to Oregon Department of Forestry and the State of Oregon's smoke management review committee.

To enhance communication and networking among collaborative members and other forest stakeholders, SNW produced two monthly newsletters for the Blue forests region. The first newsletter highlighted the Forest Service Blues Resiliency Team's efforts[16] to create landscape-level resiliency and restoration on over 500,000 acres on the Ochoco, Umatilla, and Wallowa-Whitman National Forests. SNW sent the newsletter to an average of 2,751 contacts each month from July 2016 to June 2017. The average opening rate was 21%, which matches the national average for non-profit sector newsletters. The second newsletter was part of the Blues Network initiative and focused on collaborative innovations among the five Blues Forest Collaboratives on the four national forests. The newsletter was sent to an average of 150 contacts each month from February to June 2017. The average open rate was 35%.

SNW created a website and other communications materials for the Wallowa-Whitman Forest Collaborative.[17] The website template acts as a generaliz-

able tool to be adapted in the future and used by other collaboratives. An additional project provided technical assistance for database development and the application of data for planning and monitoring in the Blues region. The project included development of a Forest Service Project, Appeals, and Litigation (PALS) database to package information in more accessible and useful forms for collaborative planning. The database contributed to the FFWG Federal Forest Dashboard.[18]

Finally, SNW hosted statewide and multi-state workshops for collaboratives and federal land manager partners during the FY 2015-2017 biennium for 320 attendees. The Oregon Network of Forest Collaboratives Workshop in 2015[19] (85 people; 11 Oregon collaboratives) and the Pacific Northwest Forest Collaborative Workshops in 2016[20] (125 people; 13 Oregon collaboratives) and 2017[21] (110 people; 15 Oregon collaboratives) included speakers from the timber industry, research institutions, conservation organizations, collaboratives, and land management agencies. Post-workshop surveys conducted after each training indicated that participants learned new skills and ideas applicable to collaborative projects on their forests.

In support of the above technical assistance program during the FY 2015-2017 biennium, SNW leveraged an additional $271,500 to support forest collaboration and accelerated restoration strategies in Oregon.

The Nature Conservancy

TASS funding supported six projects in the 2015-2017 biennium directed through The Nature Conservancy (TNC), including five led by TNC and one led by the Forest Service Pacific Northwest Research Station. TNC projects focused primarily on addressing science needs of individual collaboratives and as well as needs relevant across the state. The deliverables helped collaboratives access and utilize scientific information and research results to facilitate the development, planning, implementation, and monitoring of Forest Service projects.[22]

First, TNC implemented a project to disseminate information about support opportunities available through the FFRP TASS providers to collaboratives and to survey their science needs. TNC utilized their field staff and a contractor to communicate with all 27 collaboratives in Oregon through 44 collaborative representatives. The outreach informed design of projects funded through other task orders with ODF, as well as additional workshops, trainings, and field trips (see below). Collaboratives identified the need for additional scientific information, for example regarding the ecological function of old trees (e.g., ponderosa pine >150 years), fire history and stand reconstruction in northeast Oregon, and landscape scale ecological analysis to inform restoration strategies and project implementation as well as to inform meaningful measures with which to monitor outcomes.[23]

Second, TNC contracted a forest ecologist to review available science regarding the ecological function of spatial patterning of landscapes specific to dry forests. The work resulted from a need expressed by the Deschutes Collaborative Forest Project, the Lakeview Stewardship Group, and other collaboratives in central, eastern, and southern Oregon. Although forest ecologists and managers generally appreciate the need to incorporate landscape heterogeneity into previously fire-adapted forests, questions remain regarding how stand-scale variation affects ecological processes and how active restoration can best restore ecological function. The review addressed how stand structure and landscape pattern affect fire behavior, disease and insect risk, snow retention, understory, wildlife habitat, and forest succession. With a focus on understanding processes rather than identifying ideal states, the goals of the project include helping collaboratives and the Forest Service consider tradeoffs with stand-level management. TNC presented the preliminary science review through a presentation at the Pacific Northwest Forest Collaborative Workshop in March 2017 (to 110 attendees from 15 Oregon collaboratives) and through workshops and field tours with the Deschutes Collaborative Forest Project (39 participants) and to Blue Mountains Forest Partners in June 2017 (31 participants). Findings will be published in a briefing paper written for collaboratives and partners and in a peer-reviewed scientific paper that can be cited by the Forest Service during the NEPA process.[24]

Third, TNC supported a workshop on forest restoration implementation efficiencies hosted by the Central Oregon Forest Stewardship Foundation (held 1-3 November 2016, 150 participants).[25] The workshop convened industry representatives and leaders in implementation along with collaboratives, partners, and specialists. Through 31 presentations,[26] discussions, and break-out sessions, the workshop focused on technological innovations in logging and on the implementation of restoration activities. The overall goal was to share experiences across different forests and groups about ways to reduce the per-acre cost of active restoration. The outcomes of the workshop will be published in a proceedings document to be distributed to participants along with other collaboratives.[27]

Fourth, TNC contracted a professional photographer to compile a photographic atlas of historical images taken between 1929 and 1944 from every fire lookout on the national forests of Oregon. The project involved reviewing over 2,000 images at the National Archives in Seattle, selecting and scanning 1,167 images, and prioritizing a subset of 170 images from 85 sites that offered the best comparative opportunity to identify changes in forest and rangeland conditions over the past 80 years with the goal of informing discussions about the potential need for restoration. The photos depict burn patterns, logged areas, unlogged stands on steeper slopes and in more remote areas, and glaciers on Mt. Hood for comparison to modern forest composition and pattern. Plans are ongoing to publicly share the atlas and to re-take present-day reference photos.[28]

Fifth, TNC contracted an aquatic ecologist to conduct watershed monitoring for the Ashland Forest Resiliency Stewardship Project (AFRSP) within their current 22,000-acre restoration project. AFRSP oversaw an initial water quality assessment in 2010 at the start of the project, prior to thinning and prescribed burning treatments on 5,000 acres, and then resampled in 2016. TNC funded the analysis to assess any changes in the aquatic biota that would identify changes in water quality. Findings indicate no increase or decrease in water quality and that the treatment areas exhibit characteristics of a healthy watershed. Findings were shared with the City of Ashland and made public through a technical report and summary.[29]

Additionally, in support of these TASS activities, six TNC field staff living in eastern and southwest Oregon communities participated regularly in the activities of 10 collaboratives. TNC efforts leveraged an additional $425,000 of in-kind support for these collaboratives, and TNC directed $60,000 to conduct two 10-day training workshops for approximately 70 participants that provided classroom and field opportunities on the science and practice of prescribed fire as a management tool.

Ecosystem Workforce Program, University of Oregon

TASS funding supported four main projects led by EWP during the 2015-2017 biennium. EWP focused on assisting forest collaboratives to define, evaluate, and measure progress on social and economic objectives, as well as on helping land management agencies to understand social and economic impacts of restoration contracts across the state.

First, EWP partnered with the University of Oregon's Environmental and Natural Resource Law Center to examine differences between traditional federal contracting pathways versus the contracting regulations that would apply if the GNA was used to implement restoration projects and timber sales. Differences between these two pathways included the GNA allowing lower worker wage and fringe benefit rates, the GNA relaxing the mandate that small contracts be awarded only to small business, and the varied bonding provisions between the GNA and traditional pathways applied to service contracts, timber sales, and construction work.[30] These differences are relevant in terms of local impacts associated with forest management decisions.

Second, EWP worked with Wallowa Resources in northeast Oregon to explore the capacity of the local restoration workforce to expand in response to accelerated restoration efforts in the Blue Mountains region. Interviews with 32 local contractors showed a general willingness to take on additional local restoration work so long as the opportunities provided some lasting stability and that the agencies offering the contracts were cognizant of local timber markets, equipment needs, and hauling costs.[31] The work with Wallowa Resources contributed to a larger effort to create a "restoration implementation capacity assessment" model, which could be used by other groups or organizations elsewhere in the state.

Third, EWP worked with the Ochoco Forest Restoration Collaborative (OFRC) to assess federal investments in restoration contracts, timber sales, and contractor capacity and to identify barriers to contracting on the Ochoco National Forest. This work sought to answer the OFRC's questions about how much restoration work on the Ochoco National Forest was going to local contractors, as well as where the key barriers for contractors exist. To answer these questions EWP conducted an assessment of 10 years of contractor data to identify where contracts were going (i.e., to what businesses) and for what types of work. EWP then interviewed local contractors to identify key barriers they faced in contracting on the Ochoco National Forest. The assessment found that while nearly half of the restoration work was awarded to local contractors over the 10-year period, only 12 percent of timber sales went to local purchasers. The lack of local mills and high haul costs is a significant challenge for increasing local capture of timber and stewardship sales.[321] EWP shared this information with the OFRC through facilitated discussions about potential next steps to help inform future OFRC strategy.

Fourth, EWP worked with the Southern Willamette Forest Collaborative (SWFC) to assess local capture of restoration contracts and timber sales on the Willamette National Forest and to develop social and economic monitoring questions. As a new collaborative, the SWFC wanted to understand what businesses typically bid on and received restoration contracts and timber sales. The intent was to use this understanding of local work in their recommendations to the Forest Service on stewardship contracting. EWP analyzed five years of restoration contracts and timber sales on the Willamette National Forest, specifically those awarded to contractors located in a six-county area surrounding the forest and in the Middle Fork Willamette River Watershed.[33] During the five-year assessment period, 71 percent of restoration work and 95 percent of timber sales went to local communities. EWP also worked with collaborative members to develop social and economic monitoring questions to be used in SWFC's future monitoring plan. Finally, EWP helped SWFC to conduct its first collaborative self-assessment and to design an assessment tool the collaborative could use in future years.[34]

Oregon Solutions, Portland State University

ODF directed $97,600 through Oregon Solutions at Portland State University to fund the FFWG. Oregon Solutions has been supporting the FFWG since it convened in 2009 with goals of implementing recommendations put forward by Oregon's Board of Forestry. FFWG activities involve guiding the state's partnership in restoration on federal forests, with participation from management agencies and multiple stakeholder interests. During the 2015-2017 biennium, FFRP funding to Oregon Solutions enabled work session planning and logistics, facilitation, materials development, and necessary follow-up with stakeholders. Funds also contributed to staffing the FFWG convener position with the Governor's Natural Resources Office.

Specifically, the main topics addressed in FFWG work sessions included planning and implementing the FFRP in 2015-2017 and expanding the program from the previous focus on eastern Oregon to federal forests across the state; use of 2014 Farm Bill partnership authorities, including the GNA, stewardship contracting, and insect and disease provisions; review of prescribed burning and smoke management considerations; support of collaboratives including funding needs, the development of data management and web-based capacity, and training in consensus building for specific collaboratives; and identifying emerging policy issues that are relevant to the stakeholder network and that should be incorporated into future FFWG activities.

A key outcome from the FFWG work sessions was the development of the Federal Forest Dashboard. The Dashboard resulted from the need to better track trends in progress towards accelerating pace, scale, and quality of forest restoration. The Dashboard established a concise list of indicators of forest health for consistent measurement and dissemination to a broad audience of stakeholders. Oregon Solutions provided facilitation of an FFWG subcommittee to develop the dashboard, including the design and publication of the initial version.

Forestry and Natural Resources Extension, Oregon State University

ODF directed $20,300 of TASS funds to Oregon State University for an assessment of collaboration and restoration priorities on the Mt. Hood, Siuslaw, and Willamette National Forests. Motivation for the assessment resulted from the differences in social and biophysical context of restoration in western as compared to eastern Oregon and the relative lack of information on collaboratives in the west. The assessment found that western Oregon collaboratives focus on a diversity of interests and goals, including both rural and urban stakeholders, and they engage in issues such as plantation thinning, drinking water, wildlife habitat, road networks, and recreation.

The assessment produced recommendations for future support. Due to the unique context of restoration on western Oregon forests, support for collaboratives should be flexible and potentially redesigned around multiple models. For example, models must account for different stages of maturity, diverse member interests, and the multiple scales at which collaboratives work. This may include rethinking what constitutes a collaborative project in the context of federal forests. In addition, different monitoring measures may be required to track the pace and scale of restoration generally and to track the impact of FFRP support on collaboratives specifically, along with measures used to track restoration on the eastside (e.g., fuels reduction activities, timber supply, jobs created). In addition, the assessment resulted in increased awareness of western Oregon forest collaboratives and restoration priorities among FFRP staff and state-level stakeholders. Oregon State University faculty conducted multiple presentations on project findings to Forest Service staff aimed at informing their westside restoration efforts in Region 6.

Conclusions

During the 2015-2017 biennium, the State of Oregon invested nearly $5 million in supporting increased pace, scale, and quality of forest restoration on federal forests. ODF directed this support through three strategies of the FFRP: (1) contribute to multiple stages of the timber sale and restoration contract planning process on national forests through SFIP; (2) support collaborative group-designed projects through competitively awarded CCGs; and (3) provide science and technical expertise to collaboratives through TASS.

- The current FFRP represents an expansion of the program over the State's initial investment during the 2013-2015 biennium. Funding nearly doubled, and the program extended its activities from the previous focus on northeastern Oregon to include forests across the state.

- Approximately three-quarters of the 2015-2017 biennium FFRP budget funded activities under SFIP. These included contractors completing data collection required for the NEPA process and ODF crews working on timber sale preparation. SFIP completed projects in on all 11 national forests and four BLM districts, as well as on 53 in-process and completed timber sales. Tracking SFIP contribution to ongoing restoration, particularly the contribution to the NEPA process, requires further research.

- Forest collaboratives received nearly $567,000 in grants to 17 separate collaboratives, with which they leveraged an additional $925,000 in matching contributions. Reports and comments from recipient collaboratives highlight the importance of CCGs due a lack of available operational resources (e.g., other grant sources). Some collaboratives attribute measurable restoration outcomes to CCGs (e.g., the Wallowa-Whitman Forest Collaborative progressing toward and securing records of decision on three projects), while others cite CCGs as important for early stages of institutional development (e.g., trust-building, defining shared restoration goals).

- Five TASS providers conducted FFRP-funded projects totaling $559,000, primarily in support of collaboratives. Projects ranged from TASS providers working directly with single collaboratives to providers conducting state- and region-wide workshops. Work also went beyond direct support to collaboratives such as through funds directed to maintain the FFWG (in the absence of other funding) and scientific and historical syntheses of changing patterns in forest landscapes. TASS funds remain a flexible means to deliver support, but transparency of planning or intention behind distribution of projects may improve future strategy.

The goal of this monitoring work was to track FFRP activities across the three program strategies in the current biennium. Although the FFRP made significant contributions to the forest restoration process at multiple levels (e.g., funding contracts to conduct work required for NEPA project planning, putting ODF crews to work on layout of timber sale projects, and providing capacity to under-resourced collaboratives), it remains challenging to attribute restoration accomplishments to the FFRP alone.

Over the last two biennia, the FFRP progressed in parallel with other substantial investments in restoration, primarily under the Eastside Restoration Strategy of the Forest Service. In total, these efforts are likely positively impacting forests and local communities.[35] Yet in order to achieve sustained, long-term impact, the FFRP and other programs must invest in continued research to understand the mechanisms of how policies and management result in observable changes. Such priorities represent necessary components of adapting programs for greater efficiencies and outcomes.

Endnotes

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